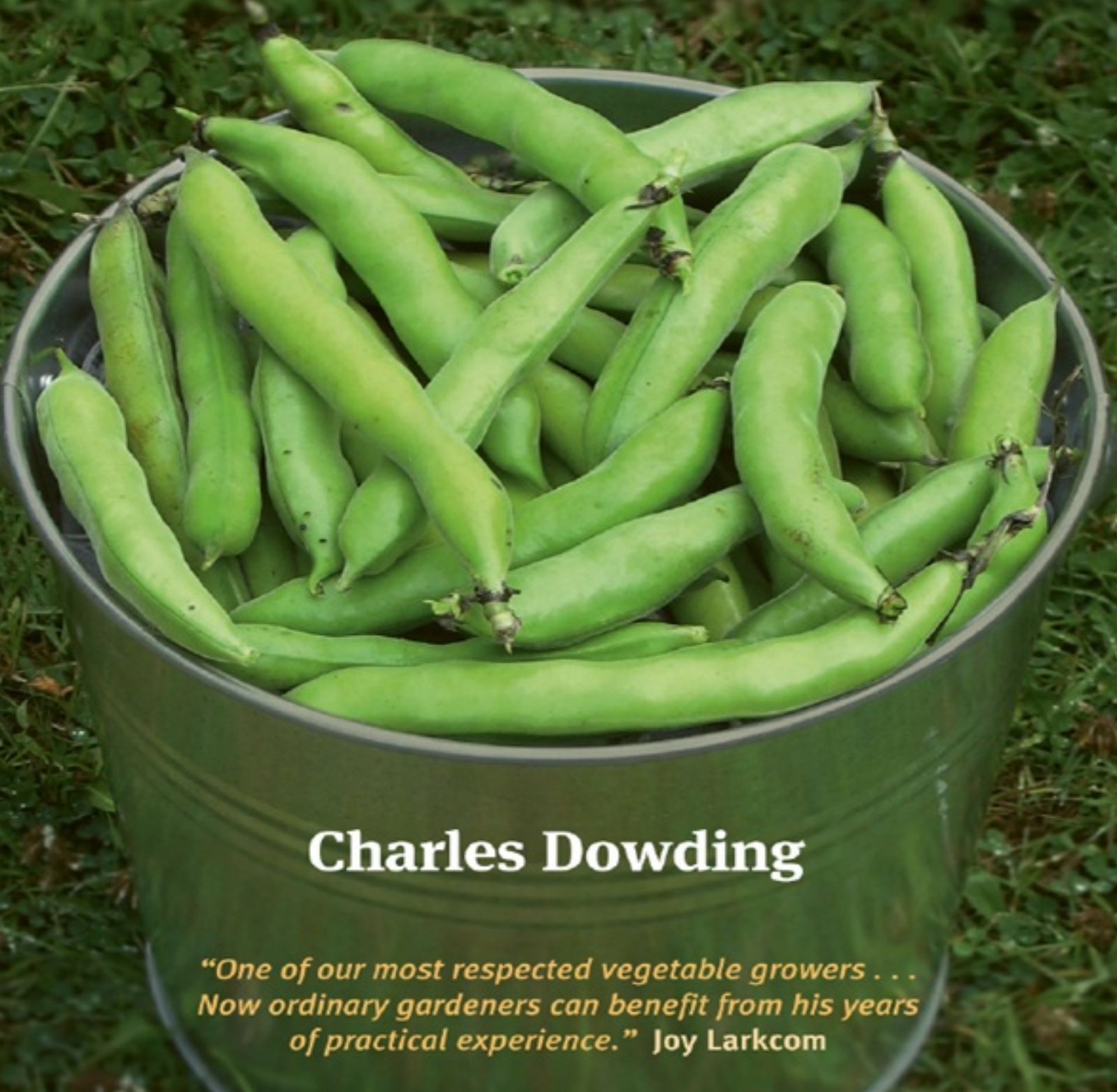


ORGANIC GARDENING

THE NATURAL NO-DIG WAY



Charles Dowding

*"One of our most respected vegetable growers . . .
Now ordinary gardeners can benefit from his years
of practical experience." Joy Larkcom*

Reviews of the first edition

“I first met Charles in the 1980s when Geoff Hamilton and I presented an entire Gardeners World programme from his organic vegetable farm in Somerset. The crops grew on beds that were never dug, but dressed with compost or well-rotted manure. Now Charles has set up another vegetable garden on a smaller scale. A visit to Charles’s garden was all I needed to convince me to hang up my spade ... the secrets lie in Charles’s new book.”
– Ann Swithinbank, *Western Morning News*

“This book is now my first port of call when looking for a gardening solution. As a beginner and non-scientist, I found his style easy to understand, packed with useful tips and coherent in that it took me from an uninformed start to considering quite complicated seasonal planning without losing the plot or throwing my hands up in confused despair. I hope Charles sees this as the start of a writing career as I will be eagerly awaiting the next.” – Peter Shield, www.naturalchoices.co.uk

“It wasn’t the variety of salad leaf shape, texture and colour that impressed me most. It was the plants’ health. If ever there was vindication of Dowding’s theories, here it was. The leaves seemed to burst from the ground, glossy and exuberant.” – Matthew Fort, *The Guardian Weekend*

“Charles Dowding thinks the received wisdom is wrong, and he can prove it. Personally I’m paying this book the ultimate compliment and converting my allotment into a no-dig zone. It feels better already.” – Paul Kingsnorth, *The Ecologist*

“The exceptional health and taste of the crops growing at Lower Farm bears witness to the methods employed in their cultivation. The only way to be truly convinced, of course, is to lay down your spade and fork and try the no-dig method for yourself. As Charles would say: “The answer is in the soil.” – Rebecca Pow, *Amateur Gardening*

“Charles Dowding is no stranger to hard graft and at least metaphorical spadework. And now he has picked up a pen or perhaps an organic mouse and keyboard to put his hard-won wisdom into print... . this book is a must and should be in every school in the South West. If kids learnt this sort of thing at school, perhaps they would not turn into couch potatoes.” – James Crowden, *NFU British Farmer and Grower*

“This is a blockbuster of a book. It should be recognised as one of the all-time great gardening books. Those who know little about no-dig gardening will find the general principles and methodology explained clearly. Those who are just interested in finding out how to grow particular vegetables and fruit will find a mine of information. The author has been generous ... Charles has given away his trade secrets ... knowledge which comes from personal experience rather than just repeating what earlier authors have said, and the book is easy to read ... definitely a best buy.” – Mike Mason, Good Gardeners Association

“If anyone can convince gardeners that vegetable plots do not need digging, it is this author ... his methods are at times contrary to standard advice, but he is not dogmatic and has a gift for clear explanation.” Sue Stickland, RHS Book reviews in *The Garden*

“Charles’s growing ground is a model of order and beauty, he’s a passionate soil man. On a recent visit, two things struck me about his Somerset place. First, there isn’t a weed to be seen, even though Dowding is cultivating an acre and a quarter of ground single-handed. And second, that thought has been given to the way plants are set out ... the plot looks good, as well as being productive.” – Anna Pavord, *The Independent* magazine

“Charles’s crops positively glow with health in testament to his methods ... he conveys a deep reverence for the soil, which has fuelled his no-dig ethos.” – Rebecca Pow, *The Kitchen Garden*

“This book is a superb introduction from Green Books to a tried-and-tested organic gardening technique perfected by Charles Dowding over 25 years of hands-on experience.” – www.ethicalreading.com

“The pioneer of veg box schemes offers some unconventional tips for a low-maintenance plot.” – BBC *Gardens Illustrated*

Organic Gardening

The natural no-dig way



Charles Dowding

with drawings by Jane Hassall

Second edition



This revised edition published in 2010 by Green Books Ltd, Foxhole, Dartington, Totnes, Devon TQ9 6EB

First edition published in 2007, reprinted 2007, 2008, 2009

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Front cover image and design by Stephen Prior

Back cover: middle image by Lucy Pope, left and right images by Charles Dowding

Illustrations © Jane Hassall

Photographs are by Charles Dowding except the following, by Lucy Pope:
second colour section, Plates 17, 20, 21, 34, 35, 36

British Library Cataloguing in Publication Data available on request

Print edition ISBN 978 1 900322 81 2

PDF format ISBN 978 0 85784 010 3

ePub format ISBN 978 0 85784 011 0

Acknowledgements

To my father, who amazingly tolerated my untried skills in his old orchard.

To my mother, who was always there and cooked so many fine meals.

To the Argyll Hotel Iona, in whose gardens I was introduced to organic vegetables.

To Charlie Wachter, who encouraged me to believe I could be an organic market gardener.

To many friends in the organic movement for camaraderie and inspiration.

To Mary Langman and Elisabeth Montgomery for help and wisdom.

To Fanny Charles for being such a champion of local, well-grown food.

To Alex Baulkwill and Tim Sandall for their enthusiasm.

To Lucy Pope for photographic help and inspiration.

To Phil Butler, 'Bill the Butcher', for so much encouragement of my salad leaves.

To Lawrence Woodward and Zizi Montgomery for setting me on the path towards this book.

To Amanda Cuthbert for invaluable help and advice in constructing this book.

To Susie for her deep reserves of love and support.

To Rosalie, Jack and Edward for just being themselves.

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Preface to the second edition

It has been an exciting few years since this book was first published in 2007. Large numbers of people, in Britain and beyond, have been growing some of their own food for the first time, or in a more committed way, and many are interested in growing without digging.

So this new edition has much more detail on how to begin and to manage an undug plot. The first year involves the most work, to lessen the weed burden and improve soil health. There are many new photos, which tell stories of mulching plots of weedy old pasture with cardboard and compost or manure, and the vegetables that were then grown on them; also of a new bed created on top of grass without any digging, and how it was then sown and planted straight away.

The appendix has details of my four-year-old dig/no-dig experiment, which is always a great hit with visitors to the garden. One of the revelations of the experiment has been the much faster growth of plants on undug soil in the spring and early summer, followed by a catching up of growth on the dug beds in the autumn. This suggests that soil cultivation does have a negative effect, but that soil eventually recovers and rebounds – just before, in many cases, being dug again.

I have updated many other parts of the book, especially the recommendations of vegetable cultivars, and remind readers that my website, www.charlesdowding.co.uk, has much up-to-date information on, for example, what to sow this month, and a forum where advice may be sought and views exchanged. Also there is a list of forthcoming day courses at Lower Farm, where I explain what is growing here, and how, with advice to participants on the best ways to improve results in their gardens.

A key message of my courses is to be prepared to experiment in the garden. I like to give participants the key knowledge, beyond which they can work out the details of beds and cropping that are most suitable for them. I also explain how a lot of gardening advice that is given elsewhere – such as the need to dig, to rotate strictly, never to spread compost or manures before sowing carrots and parsnips, to burn blight-infected foliage – is plain wrong, and life is much easier when you know the simple truth.

So I hope this book opens new avenues to better harvests in your vegetable growing, and ultimately for less effort.

Charles Dowding
Lower Farm, September 2010

Foreword

I am quite sure that this book will play an important role in reconnecting us with our food through instinctive contact with nature in the vegetable garden.

I first became aware of Charles Dowding's existence in the early 1980s through stories of his extraordinary vegetable garden in Somerset. Visitors spoke of his pioneering 'French intensive biodynamic method' raised vegetable beds and of how he expected his 'volunteer' workers to work extraordinary hours, only exceeded by his own total commitment to his garden. I was also told that his vegetables were large, beautiful, delicious, and much sought after!

When I subsequently met Charles, my image of this man of imposing strength was softened by the reality of his kind and benevolent presence. However, it became clear that I only needed to adjust my imaginary picture of the man, not his vegetables!

Charles is a brilliant gardener, a thoughtful and natural communicator, and he has emerged as one of the leading pioneer growers in the UK organic movement and a frequenter of the conferences, farm walks, seminars and other gatherings that came to dominate the lives of the hundred or so people whose work laid the foundations of the UK organic movement.

One of the fascinating aspects of organic growing is that it represents a bridge between farming and gardening. In an era where most citizens have become estranged from agriculture, I can think of no better person than Charles to forge new links through a better understanding of the vegetable kingdom. As he explains in this book, the secret is to be creative, and to garden by nature's rhythms as they work in your garden rather than by textbook rules. All one needs is a basic understanding of the seasons and relationships to make a success of your garden. Above all, the aim is to create a healthy environment.

Health is more than absence of disease. It is a positive, glowing state, and the best fruit and vegetables grow in healthy soil. Healthy soil is defined by soil life more than by chemical nutrients. A really fertile soil needs no digging or cultivation – in fact it does better without it! Compost is the magic potion to bring extra life and health to soil and crops – simply spread it on the surface.

I do hope that you derive inspiration from this book, whose author is a man who truly practises what he preaches!

Patrick Holden CBE
Director, The Soil Association

Introduction

Organic is ... simple, natural practices

What does it mean, 'to garden organically'?

It means understanding enough about your locality, your soil, your climate and your plants to work with them all in a way that ensures your garden, its produce and you yourself are bursting with health.

The actual methods you use can be chosen from thousands of possibilities, some of which are suggested in this book. When you get it right, which takes practice, your garden will bloom and yield and be a fun place to work in and enjoy. You will love being in it, and that will help the garden to be even more special, because you will be there enough to really understand what needs doing next.

One aim of this book is to suggest the general underlying principles, so that you can adapt them to your garden, allotment or patio, and make creative choices about what to do next.

Many gardening books give advice without justification: for example that compost and manure should be 'dug in'. I never do that, having found that it works brilliantly to spread it on top and let worms take it in, with many advantages accruing that will become apparent as you read this book.

I advise you to forget the 'rules'. Instead, understand better what is going on in the soil and with your plants, in your own garden, and work out your own methods instead. You may even invent some new ones or make an interesting discovery.

DIGGING

Most books suggest that a vegetable plot needs digging over every year. This is simply Not True. I have not dug, except to clear perennial weeds and turf, for 28 years, and my crops are better than ever. I use a system of permanent slightly raised beds and permanent paths of soil between them (see Chapter 2). Worms and other soil life do the 'digging' and keep the soil open. There are few weeds, because the soil is not panicked by being disturbed into 're-covering' itself, which happens when the reservoir of

weed seeds lying dormant in every soil are exposed to light, when soil is disturbed.

Introduction

WEEDS

I have little time for weeding, so I manage my garden in a way that discourages weeds. Not digging (see Chapter 1), avoiding weedy compost, and doing a little hoeing or hand weeding every ten days in the summer – and much less in the cold times – are the simple keys to a clean and healthy plot (see Chapter 2).

AN ART, NOT A SCIENCE

The world of gardening is full of chemical ideas. It is vital to ignore most of these and cultivate instead an approach that is based on Life, specifically the life in all soil, the essence of organic gardening. Respect and encourage Life as much as you can, chiefly by spreading good compost or manure. Up to 5cm (2”) of compost a year will make fantastic differences to plant health and size. Just spread it on top and then notice how over the following months it gradually disappears from view, in the same way as leaves falling to the forest floor are taken in by worms.

Organic gardeners used to worry that their composts contained too few nutrients as compared with chemical fertilisers, whose only ingredient is lots of nutrients. This concern is now being reversed, as appreciation grows that artificial fertilisers are lacking in the ‘humus’ of compost that brings vitality and health to the soil, as well as helping to hold moisture, give structure and reduce soil erosion.

Which brings us to a most important issue – our very own:

HEALTH

Health is often implicitly assumed to be an absence of disease. My gardening experience suggests that in fact it is a state in itself. As well as being free of pest and disease, plants can have a lustre to their leaves and a pattern of growth that says ‘I am growing very happily, just full of exuberance’. In the case of such fruit and vegetables, the flavour is also impressive, and I am convinced that the nutritional content must be as well. Analyses of home-grown produce are rare, but it is known, for example, that vitamin contents of leaves diminishes after picking, so growing your own fresh vegetables affords great opportunities to improve your own and

your family's health. If you take mineral supplements, try remineralising your soil instead (see box in Chapter 2, page 23).

ORGANIC GARDENING

NEIGHBOURS

You will learn more from the garden or allotment next door than from many books or articles. The soil and climate will be very similar, so if it works for him or her, it will work for you. You can learn even more from their mistakes, and your own! Don't worry about buying a soil testing kit or any fancy gadgetry. Talking to the neighbour or fellow allotment holder is often a great start for ideas. I never trained in a horticultural college, and am utterly grateful not to have done so, because it kept my mind clear of preconceptions and allowed me to base my gardening on simple, natural ideas that work, through decades of watching and learning. That is organic gardening.

SUSIE'S RECIPES

Since I married Susie my vegetables have come to know a powerful creative force! A first meal together at our small farm in Gascony was stuffed cabbage leaves with a memorably rich garlic flavour, as Susie took readily to the French way of creating a fine midday meal. She has an ability to fashion tasty meals from whatever is to hand, since we both dislike shopping and like to live off our own produce as much as possible. Her recipes are delicious combinations of healthy ingredients, and I hope you enjoy them.

The measurements given are not precise, and Susie encourages you to experiment with them, just as I hope you will enjoy adapting my ideas to your plot.

PART 1
LETTING NATURE
NURTURE YOUR GARDEN

Chapter 1

The art of not digging



The popularity of soil cultivation, and the common conviction that digging is absolutely necessary to grow vegetables and many other plants, shows how habits can become powerfully ingrained. Let us ask what digging and rotovating are supposed to do:

- loosen the soil so that roots can more easily travel through as plants grow
- incorporate manures and compost
- remove and / or bury weeds to clean the soil
- create a tilth for sowing.

I now consider each point in turn from the perspective of a confirmed, long standing no-digger, who finds these arguments very puzzling and somewhat contradictory, as well as causing some damage to the soil.

Soil loosening

If your soil really is so hard that plant roots cannot penetrate, then something has gone so badly wrong that mere digging will probably be a temporary solution. It would be more productive to ask: Why is my soil so hard?

A possible answer could be that you live in a new house and the garden was recently a building site, so that it is full of rubble underneath and has some dubious topsoil above. The clear solution in this case is to import a large quantity of compost – up to 15cm (6") initially – which will serve to create a much softer, more fertile, lively and true topsoil above the existing topsoil, which should probably have been classed as subsoil anyway. The word ‘topsoil’ is often inaccurate and much of it is pretty dead, for instance if it has been kept

for too long in a heap so that worms have disappeared. Soil is not a commodity that can be stacked, stored and shipped around. Soil can also suffer from being walked on in wet weather – a sound reason for having permanent beds and pathways.

It is worms and their lively allies in a living soil who are going to do your digging, on a permanent and ongoing basis, far more thoroughly and productively than any spading or forking can achieve. Worms need food: normally decaying organic matter which they turn into humus, another name for which is ‘black gold’ because it is the source of all that is best in plant growth. Even the worst soils have a few worms in there somewhere, so annual mulches of 5cm (2") of compost above them will provide the cool, dark, moist humus-potential that they thrive in and on. Quite soon your worm population will be increasing, and plants will start to grow – including weeds, but they should be easy to pull out of the crumbly compost.

Be aware that we are talking reasonably long-term here. Results in the first season of using compost on very poor subsoil may be only fair, yet all the time you are building for the future. Each year’s crops are an increasingly interesting dividend while the real wealth is in your soil, a balance of health and fertility that increases all the time.

In terms of fertility, chemical farmers and gardeners tend to concentrate on the requirements of individual plants. One encounters phrases such as ‘potatoes are heavy feeders’. Sometimes this can become complicated, as conventional wisdom dictates a different ‘feeding regime’ for each kind of vegetable. Things are much simpler for a composting no-digger, who is simply looking all the time to improve the soil and holds an understanding that well-structured, undisturbed soil has a balance of possibilities that will serve any crop. ‘Feed the soil, not the plant’ is another way of looking at it.

Incorporating manure or compost

Do we need to ‘incorporate’ our compost or animal manure or whatever organic addition we are bringing to the garden? Twenty-eight years of not doing so, on a range of soils and in different conditions, convinces me that there is absolutely no need to ‘dig manures in’ as so many gardeners do, and advise others to do, taking it for granted that it is automatically right and makes perfect sense.

In fact it makes little sense, and I find that results are better from surface application, since that is how nature works. Falling leaves are pulled in by

worms, as are many other pieces of surface debris. Charles Darwin describes the worms' approach quite beautifully in his 1882 book *The Formation of Vegetable Mould Through the Action of Worms, with Observations of Their Habits*, where he comes to the conclusion that earthworms add between 2.5-5cm (1-2") of topsoil a year in healthy pasture, as they secrete their fertile 'casts' at surface level. This is one reason why archaeologists have to dig so deep.

I find that quite soon after applying a 2.5-5cm (1-2") dressing of wellrotted manure or compost on top of the soil, it starts, quite simply, to disappear. Usually within a few months it is all gone and the soil is visible again, only a little darker, more friable and richer, with many crumbly and humus-rich worm casts. That is what we are aiming for, so compost can be applied two or three months before sowing or planting, and will be sufficiently broken up or dispersed or will have disappeared into the soil when our seeds or plants are ready. The soil will be thoroughly ready to receive them.

Occasionally, if time is short, plants can be set into recently composted soil, as long as the compost is not too rough; otherwise there is a risk of slug damage from the slimy beasts hiding under large lumps of half-decayed compost. Any lumpy compost tends to break down best on top of soil rather than being left in a heap, so it is best spread in late autumn or winter, well before planting time.

The other significant danger from digging manures or compost into the soil is 'nitrogen robbery'. Think of the woodier, tougher, fibrous bits of compost as rich in carbon and needing nitrogen to break down into humus. On top they do this quite slowly, helped by the weather, but inside the soil they are known to use the surrounding soil nutrients, which would otherwise be available to plants, to finish their rotting down. Hence a golden piece of advice is to NEVER dig sawdust into the soil. Its large surface area of wood can absorb huge amounts of plant food. However, on the surface it rots more slowly, mostly where it touches the soil surface, and the problem of nitrogen robbery does not arise. Ultimately, after a year or two of weathering on the surface, it turns much darker in colour and becomes a valuable plant food. So in many ways it is safer to apply our goodies on top, just as happens in nature, when man is not digging or ploughing.

Burying weeds?

Farmers plough to bury surface weeds and residues, as much as to 'open' the soil, although some opening is certainly necessary after tonnes of tractor and machinery have passed over the soil. However, in our gardens there is no heavy machinery apart from a wheelbarrow! Keeping this and our own footfall to restricted pathways will solve any potential compaction

problems. But what about weeds and grass?

The answer is to not let them grow in the first place. This requires an extra degree of commitment, especially in the winter half of the year, but has SO many benefits that it is at least worth careful consideration.

The main point is simple: no weeds growing means no weeds seeding. Yet how often does one see, in late autumn and winter, the gardener turn his or her back on their plot, while grasses, chickweed, groundsel and bitter cress are happily growing, then flowering and shedding seed, leading to many difficulties and discouragements in the spring.

One year's seeding is seven years' weeding. No maxim is truer or more forceful. One groundsel plant can yield hundreds of fluffy little seeds over a wide area, and a hundred groundsel weeds is not a pleasant problem to deal with. It can be quite difficult to catch all of them before they seed. Meanwhile there are other seeds lying dormant for up to seven years, waiting to spring up at unexpected moments.

Weeding is mostly a great waste of time and stops us doing the fun bits, as well as causing disturbance to the soil as we dig them out or hoe them off.

So act preventively: a stitch in time saves about ninety-nine. Do occasional weeding through the darker months, removing that occasional small clump of grass, chickweed, bittercress or anything except the flowers and vegetables that you sowed or planted. Then nothing has time to seed, because you get to it before that could happen, and in springtime the soil is clean of weeds, which are not therefore offering shelter to slugs, and is ready for immediate sowing or planting, into the free tilth provided by Jack Frost.

Tilth

Here we confront the last fallacy of 'reasons for digging'. Tilth means a crumbly soil surface, suitable for 'drawing out a drill' to sow seeds into, with lots of fine particles that small seeds can nestle into as they moisturise and then send out those first fragile roots.

Diggers and rotovators sometimes spend a long time knocking the soil around to make their tilth, because they destroyed or buried it in the first place through digging or rotovating. Large lumps of less crumbly soil have been brought up to the surface and need time and weathering, or application of mechanical force, to be broken down. In a dry spring, the lumps can go hard before disintegrating; meanwhile a lot of moisture is lost, as well as precious time.

On the other hand, a no-digger can step out into the first mild weather after frost has lifted, to rejoice in a wonderful soft surface that is crying out for seeds or plants. This is particularly apparent if a bed system has been adopted, whereby all squashing of wet soil in the winter is confined to defined pathways, leaving the much larger growing area soft and friable (see Chapter 2). No moisture is lost to cultivation, and there is even another bonus: fewer weeds.

If we return to the logic of seven years' weeds from one year's weed seeds, it can be surmised that digging (and rotovating) is incorporating quite a few more seeds each year, with the honourable exception of those diggers who do not let their weeds go to seed. At the same time, in moving soil up and down, a previously buried cache of weed seeds is brought to the surface and exposed to the daylight that is their trigger for germination – unless cultivation is done at night!

Weeds are healers after the digging

I have also come to conclude from watching what happens when I have been obliged to disturb soil, for example to remove tree roots or dig potatoes, that weed germination is almost a defensive reaction by the soil, to remedy the uncomfortable distortions caused by inversions of different layers of soil life and the breaking, even destruction, of some of its existing structure. Weeds are attempting to cover up the pain and heal the wounds. We really can treat the soil, our planet's skin and source of all our food, better than this.

So, apart from the processes of setting up your garden, please don't dig! This book is littered with advice to help adjust to a zero-cultivation approach, and once you get the hang of it you will find new alternatives to many 'traditional' gardening techniques.

Green manures

This is a good moment to mention an oft-quoted axiom of organic gardening, which is manuring the soil through digging in a green crop grown to increase soil life and organic matter. The aim is good, but I rarely do it because of the digging.

One exception is a crop such as mustard, which is killed by moderate frost. If sown late August or early September it will be just flowering as winter arrives, full of leaf and about 90cm (3') high. After being killed by frost, it will turn to inert organic matter and be taken in by worms so that, come spring, only some strawy stems will be apparent on the soil surface. It has enriched the soil without

any digging, but that brings me to the other difficulty with green manures – I rarely have room for them! Any ground cleared over the summer is quickly replanted with fast-growing vegetables such as beetroot, French beans and salads for autumn and winter.

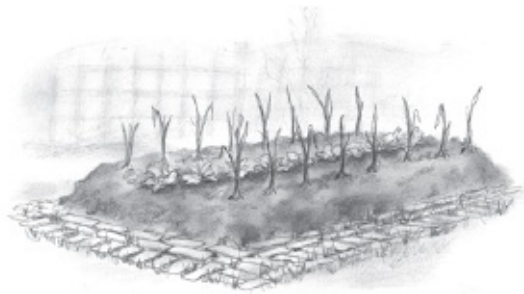
Perhaps it depends how large your garden is, relative to what you want from it. Mine seems too small, and that is a good feeling to have, ensuring that beds are covered with crops through a long growing season. Other gardens have spare space that is growing weeds, and, while weeds are a valuable green manure in themselves, we do not want their seeds as well – and it is extremely difficult to have one without the other.

So if you are likely to have an unused patch of vegetable or other garden for more than two months of the growing season, it is worth sowing a ‘catch crop’ such as mustard, or a longer-term crop such as broad or field beans, both to prevent weed growth and to enrich the soil. Beans can be removed without digging, or left on the surface for their leaves to rot in, after which the stems can be composted.

See Appendix 1 for the results of a dig/no-dig experiment at Lower Farm, Somerset. This experiment is pictured in the first colour section, pages 6-8.

Chapter 2

The basics



Everybody gardens in a different and unique way. We all need to experiment a little to find which methods are most suitable for our temperament, site and preferences. Visiting somebody else's garden is always interesting, because it says a lot about the person's character.

Yet underlying this variety is a consistency of natural laws that apply to everybody. Appreciation of these allows us to garden more successfully, and also more expressively, because we can adapt nature's demands to our own needs and desires. The former are fixed; the latter change.

Enjoy the view – varied and beautiful

The vegetable plot offers more scope for inventiveness than almost any other part of the garden, not least in its location. Traditionally in large gardens it was put far away and out of view, because the labourers were then out of sight, and boring rows of predictable crops were considered unappealing to behold. Now, thank goodness, things are different. Few of us have servants so it is a positive advantage to have the food crops close at hand, where we can tend to them regularly and gather the harvest more easily.

Fruit and vegetables can also be beautiful and inspiring to behold. There are few finer sights than beds or rows of well-looked-after crops whose colours, size and form are varied and fluid. If your garden is small, consider a couple of raised beds wherever the light is best – and light is important. Many gardens are graced with tall trees and shrubs, but their shadows and also hungry roots can take away a lot of the best growing conditions from fruit and vegetables, which definitely thrive in full sun. Should your garden be overgrown, it may be worth considering an allotment – or a small intensive bed in the lightest part.

If you have plenty of space, take a look and imagine where food plants could make an aesthetic contribution. Herbs are normally grown close to the kitchen; salads can be as well. Fruit trees can be grown as hedges, borders or against walls, using selected rootstocks to ensure the right-sized tree.¹⁹ Globe artichokes make a stunning hedge or specimen plant, and certain vegetables left to seed, such as leeks or ruby chard, add extra grace and beauty wherever they are.

The companion effect

Another benefit of mixing things up is plant friendships, whereby certain plants help others to grow well and keep healthy. I have often tried many of the better-known combinations, such as French marigolds with tomatoes to deter aphids, or onions with carrots to deter carrot root flies, and find mostly that the effects are not as cut and dried as some people claim. However, if you feel good about, say, growing flowers among your vegetables, or vice versa, then it is probably beneficial to the vegetables and it looks nice too. Insects above all are liable to live in better balance where many plants of different kinds and varieties are growing together. I find it works best to think in terms of many small ecosystems than to be too exact about precise combinations of plants.

Seasonal changes

Flowers are always a happy and attractive addition to the vegetable plot, yet the edible crops are often really beautiful on their own, with so many shapes, colours and constantly changing characters vividly illustrating each season. Spring can be lit up by the vibrant colours of a lettuce bed, and exciting meals are provided by asparagus spears poking through bare soil, although a transformation occurs in late June, when picking stops on the longest day, and within about two weeks the asparagus patch has become a jungle. At about the same time the first courgette flowers, suddenly opening, dramatically large and bright yellow, are an inspiring pointer to summer. Moving into autumn, the different hues of ripening squashes, multicoloured chicories and apples light up the darker days, while winter is softened by leek leaves gracefully bearing frost and snow.

Bare necessities

So edible crops can be complementary to the general garden, but there is another side to the coin: it makes sense to keep vegetables grouped together. Constant sowing of tiny seeds and setting out of tender plants does

not work well in congested borders where slugs and snails are lurking. One dedicated patch that is mostly bare in springtime will give more chance of success. The same applies to certain flowers. I like to plant annuals in the gaps of our herbaceous borders, but my choice is limited to ones that are less attractive to slugs – nasturtiums, for example.

It is a paradox that organic vegetables, grown the ‘natural way’, still require somewhat unnatural conditions. Nature does not do vegetable gardens, and permaculturists have made brave attempts to balance this by clearing small plots at different times, growing plants that can tolerate congested soil, and making full use of perennial vegetables. These are difficult skills to use exclusively, so we have to acknowledge that the bare soil we need is rarely found in nature and tends to re-cover itself with weeds. Regularly cropped soil that is having plants removed from it will deteriorate unless humus is regularly applied. Traditionally there was plenty of animal manure; now this applies only if you or a neighbour have horses.

A modern alternative is to source your compost from the increasing volumes produced at recycling centres from household wastes. It is less rich in nutrients than manure, so 5cm (2") annually would not go amiss. The composting process is usually very thorough, so there are almost no weed seeds, and a thick mulch on top will also help prevent the germination of dormant weed seeds in your topsoil. Usually this compost is offered in different grades according to how much of the wood has been sieved out. I would recommend 8mm grade, which is much finer than 15mm and contains less plastic – a certain number of pots, bags and toys always seem to pass through the municipal shredder.

Start clean

Before practising no-dig, the garden must be cleared of unwelcome perennials – principally docks, stinging nettles, dandelions, couch grass, ground elder, bindweed, even marestail, in order of increasing difficulty. They must be diligently cleared, either by digging out their roots or by starving them of light (see ‘Mulching to clear weeds’, below). Bindweed and marestail/equisetum are almost intractable, because some of their roots are so deep and brittle that they cannot be extracted and require either a really long mulch or weakening by regular removal of new shoots, or both.

Before a dig-over or mulch of roots of perennial weeds, it is worth temporarily digging out any bushes or plants you want to keep, so that cleaning can be effective. Thoroughness at the beginning will be amply rewarded later, with a much reduced workload.

Mulching to clear weeds

The simplest and kindest way of cleaning soil is to use mulches that exclude all light from the green leaves of weeds such as grasses, dandelion, buttercup and even bindweed. I recommend thick mulching in the first season only, to clear ground infested with weeds. Once this is achieved, weeds are best kept under control by occasional, consistent hand weeding or hoeing. Any continual use of thick mulches, every year, can result in a build-up of slugs. Once your soil is clean, I recommend an annual mulch of compost.

WHEN TO MULCH

Mulching to kill weeds is more effective in the growing season, from about March to September. During this period, the continuing attempts of weeds to grow are thwarted by the lack of light, which means that their roots become depleted more quickly. If the main weed is grass, mulching from January is worthwhile and you could be planting potatoes by April (through the mulch) and other vegetables by June.

Compost can also be spread on top of all weeds before laying the initial light-excluding mulch. This helps to deprive them of light and enriches soil for the eventual plantings of vegetables, whose desire for a rich soil knows no bounds.

Here is an outline of an approach that works in most situations. The process is pictured in the first colour section, pages 2-5.

1. Use a spade or fork to remove the principal roots of any brambles and woody growth so that you can spread compost and lay a mulch.
2. Spread 5-7cm (2-3") of compost and/or manure on top of the ground; it is OK at this stage to use organic matter that is not completely rotted – dark brown rather than black in colour.
3. On top of this, lay some cardboard or black polythene, weighted at the edges with some stones. Sheets of cardboard should be overlapped by 7-10cm (3-4") so that weeds cannot push up through the joins.
4. If you use cardboard, after about three months it will be rotting around the edges and *either* need replacing if the perennial weeds underneath are still visible as pale, white leaves and roots *or* if there were only annual weeds and grasses, they should all be dead and you can start planting, after step 7 (see overleaf).

5. At the time when mulching has killed all or nearly all weeds, any plastic or polythene – if you used that as your mulch – should be removed and then it will be hugely beneficial if you can spread some more compost, anything from 3cm to 7cm (1" to 3"), into which you can plant or sow straight away. This compost can be spread as 1.2m (4') strips to create slightly raised beds.

ORGANIC WOOD PROTECTOR

I brush on a product made by Osmo in Germany, called Wood Protector, which is composed of natural (not man-made) waxes and oils. One or two coats of Osmo paint, similarly of natural origin, will preserve wood extremely well. The Osmo products work more by soaking in than by attempting to cover wood with an impermeable layer. Hence they do not flake or peel: I used two coats of Osmo paint on my greenhouse six years ago, and it looks as good as when it was put on.

SETTING OUT PLANTS vs SOWING SEEDS

It is more worthwhile to set out plants than to sow small seeds into recently mulched soil where the decomposing roots of weed growth can delay growth just at first, and also because larger plants resist slugs better than tiny seedlings.

6. There is a risk of high slug populations in the first months after mulching of weedy areas, where slugs will have been numerous: I suggest growing leeks, potatoes and squashes in the first year, not salads, carrots or spinach.

7. I have consistently found that mulching weedy soil in the manner described here, and finishing with a layer of well-rotted compost, results in extremely little growth of new weeds. There should be almost no annual weeds – but remove them anyway! – and just a few residual perennials, which need extracting carefully with a trowel.

8. In the second year after adopting this approach, there should be a beautifully clean and humus-rich soil to grow in. You will then appreciate the value of spreading plenty of compost initially, because of the way it creates a dark, crumbly topsoil on top of clay, stones and whatever difficult soil lies underneath. Worms will become more active and improve drainage, so keep feeding them and your other allies in the soil with annual dressings of 3-5cm (1-2") of compost or composted manure.

THE VALUE OF GOOD SOIL STRUCTURE

J. Arthur Bower was a well-known flower and vegetable grower in Wisbech. He made superb compost, and spread it thickly every year. One

morning in the 1950s he was horrified to see a fully loaded brick lorry in his wet field, after a wrong turning! The wheel ruts were deep, but visitors later in the day were amazed to hear the story because the ruts had disappeared, as his humus-rich soil recovered its structure in record time.

Raised beds

Once soil is clean of weeds and invasive roots, there are many ways of cropping it. An increasingly popular option is to make some kind of raised beds, which may or may not be enclosed with wooden or plastic edges, and certainly do not need to be.

SOURCES OF EXTRA MINERALS

British government figures, based on testing a wide range of foods every decade since the 1940s, suggest that mineral contents have fallen noticeably. Re-mineralising our own soil and crops is the least we can do to compensate, but exact measurements of what works best are hard to find. Work by SEER in Scotland has found spreading the volcanic rock dust waste of basalt quarries to be beneficial, and research by the Good Gardeners Association (see Resources for both these organisations) is assessing mineral contents of vegetables from no-dig, single-dig and double-dig plots to learn what effect cultivation has on the soil food web and the potential loss of nutrients. As part of its 'Moving Beyond Organic' project, which aims to grow food for nutrition, the GGA is tracking the flow of nutrients, including vitality, from soil to crop and then relating this to human nutrition. Unfortunately this study has run out of funds, but early findings suggest that the food in the study has a higher mineral content than in the 1940s, and that a knowledge of soil biology is far more useful than a knowledge of soil chemistry if what we want to grow is nutritious food.

The advantages of raised beds are numerous:

- They clearly demarcate a growing area, making small plots more productive and large plots more manageable.
- Soil is improved by making a bed, preferably with compost simply placed on top – see 'Beds on grass' box, below.
- In wet conditions, no compaction occurs from walking on the growing area.

The simplest and cheapest way to make raised beds is to mark out a plot of clean soil into 1.2m (4') beds and 45cm (18") paths with some string and

bamboo, and then use a spade to lift the top 10-15cm (4-6") of soil from the path area on to the bed next to it. Then level off the bed, knocking out the largest lumps but not worrying about making a fine tilth, because adding a thick mulch of compost at this point, on the bed only, will help the soil to settle down again by nourishing its vital fungi, especially the mycorrhizae that are so vital to plants' well-being. Beds made in this way can be planted into straight away, but before sowing it is best to knock out any surface lumps and *even to tread the soil and compost down*, as long as the ground is not sticky.

BEDS ON GRASS

To create beds on lawns and areas of grassy growth, wood planks, made into raised beds 15cm (6") deep, can simply be placed on top of the grass. This depth of compost, well trodden, is enough to kill grass and many other weeds such as buttercups. Any shoots of couch grass and dandelion that subsequently poke through should be pulled out gently as soon as they emerge. Outside the beds, grass can be allowed to grow up to the outside of wooden edges (and then kept mown) but I recommend an initial mulch with cardboard on paths between beds to kill all grass and weeds there. This method is pictured in the first colour section, pages 9-10.

If the plot is initially all poor soil, instead of digging out a path you could create a bed by importing a larger amount of compost, up to 15cm (6") depth, even spreading some on the pathways.

Once you have nicely defined beds that look dark and inviting, paths between them need consideration. They are best kept clean of grass and weeds at all times and I do this by hoeing and hand weeding: it is a quick job when soil is clean. Or paths can be mulched with, for example, wood chips or sawdust or more compost. Remember that woody materials will take nutrients from the soil ('nitrogen robbery' – see page 15) to help their cellulose and carbon to break down, so they are suitable for paths only.

According to the size of your plot, you can keep marking out new beds and paths until arriving at the outside edge, where it is best to finish with a path, so that the cropped area is surrounded by pathways that are lower than grassy edges, and are therefore easier to keep clear of invading weeds and grasses. The resilience of grass never ceases to amaze me; it often feels as though I spend as much time keeping my grassy edges in order as I do weeding all of the vegetable beds. One answer is to bury 10-15cm (4-6") strips of thin wood as edging to

keep the grass at bay, making sure that the top of the wood is at soil level and almost invisible. My preferred method is to run a sharp scythe along the edge every two or three weeks. Also I pass along occasionally with an edging tool and trowel to reclaim the edge, and dig out any shiny white roots of grasses such as couch that are invading all the time in certain parts.

For small plots, the most productive and practical method is to create beds with wooden or plastic edges, of whatever size fits. Planks can be any dimension from 15cm x 2.5cm (6" x 1") to 20cm x 5cm (8" x 2"), treated with organic wood protector and kept in place with stout wooden pegs at the corners, and also every metre or so where sides are long, or when planks are 1" thick only.

Wooden raised beds look attractive and are easy to manage, but have a couple of drawbacks. Soil next to wood tends to create a sanctuary for slugs – I keep an eye out and chop any that I see there. Conversely, in fine weather the edges dry out and lose moisture rapidly, which may encourage red ants, whose excretions are acidic and toxic to many plant roots. Water is the best remedy to keep them in check.

Once your beds are created, no more digging is needed, ever. Use compost on top only. This leads over the years to the creation of a deeper, darker topsoil, even if there is clay, chalk or builders' rubble underneath. Worms and a vast spectrum of other soil life will keep busy under your beds, continually mixing soil and compost, improving drainage and making nutrients available to plants.

A final and different thought is that if you don't want to make beds, you can run your plot as a level area. In this case, an annual 3cm (1") mulch of compost over all the bare soil will keep it healthy and contributes to development of a sound structure. Any undug soil with compost or mulch on top develops enormous resilience and can certainly support the weight of humans on occasions when there is a need to tread on the growing area, or to pass with a heavy wheelbarrow.

Improving fertility

My experience has led me to see soil fertility as having more to do with biology than chemistry. Using the methods explained here will help your soil to realise its innate and often locked-up fertility by increasing a mostly invisible army of soil workers such as fungi and bacteria, as well as the more obvious worms, beetles, centipedes and nematodes. All these creatures, and hosts of others, are busy in a healthy soil, recycling plant remains and all organic matter, converting it into food that is available to

plants.

The open structure of undug soil, with all its undisturbed worm channels and agglomerations of humus, allows roots to travel freely and to meet a host of mycorrhizal fungi whose chief role is to help them find nutrients, in return for carbohydrates from the roots. These fungi play a vital role as root extensions, yet they are often damaged by soil cultivation and any use of synthetic chemicals such as weedkillers and artificial fertilisers. They are most common in undug soil and especially where organic matter is applied. We need to appreciate fungi more, yet we concentrate too much on harmful ones such as potato blight. Many fungi are invaluable to healthy growth, and mycorrhizae alone can significantly increase the 'reach' of plant roots.

Occasionally you may be growing plants that demand a little more food, or help in some way – plants or bushes in pots, for example, can benefit from organic liquid feeds. Urine is an excellent feed and males have the necessary tool for application. Sometimes I feed tomatoes in the polytunnels using comfrey and stinging nettles packed in a barrel, which creates a disgustingly stinky brew. The job of diluting it and watering on to plants is no less smelly, and altogether I feel that one's time is better spent in attending to the compost and manure heaps, meeting plants' demands through a soil-based approach.

An exception to this is occasional use of seaweed- or seawater-based sprays, to ensure that all plants have the full quota of minerals and trace elements, which are such an important part of their health and thus of our health. The sea is a fantastic resource that I became aware of when watching vegetables grow abundantly on the Isle of Iona, in the Inner Hebrides. The plants were growing in what looked like sand, to which the only addition was barrowloads of seaweed every winter.

Tools

You should require only a few tools, so it is worth buying good ones. The best I have found are made of copper in Austria, and last extremely well because copper does not rust (see www.implementations.co.uk). My copper trowel has kept sharp, has a useful pointed end, and has outlived two stainless steel trowels from a well-known store, which simply snapped at a poorly designed weak point below their handle. However, copper is softer than iron, so is less suitable for stony soil.

Here is a list of the tools I use to tend an acre and a half of vegetables, fruit and flowers:

- a long-pronged compost or manure fork
- a wooden dibber for making holes to set plants into, 70cm (2'4") long – I buy a fork handle and chisel its end to a smooth point
- a copper trowel
- a wheelbarrow
- a sharp copper spade for trimming grassy edges, chopping plant remains, etc.
- a copper ridging tool for drawing drills to sow into
- secateurs for pruning
- a short-pronged digging fork for lifting roots or stones
- a short-bladed scythe for grass and brambles
- a rotary lawnmower for grass, occasionally also for collecting leaves.

So, what next? Lots of healthy soil awaiting seeds and plants. Which ones, and when?

Chapter 3

Deciding what to grow



Gardening for food is brilliant because there are so many plants to grow, so many ways to improve the soil and make them grow better, and so much opportunity to enjoy the rewards. Every season I enjoy the challenge of new plants or varieties or ways of doing things. Success is sometimes elusive, although one is constantly learning, and it really is exciting when a new idea comes to fruition. But before that, some things need consideration when making your choice of what to grow.

How much experience do you have?

If you are a beginner, start with quicker and easier vegetables such as salads and spinach – as long as you are on top of slugs – and avoid demanding plants such as aubergines and celeriac.

How big is your growing space?

Some plants grow huge in just a few months and can take up large parts of a growing area, depriving their neighbours of light and moisture. Avoid these if your growing area is small.

How much time do you have?

Things will go best if you grow plants that suit your ability to look after them: for instance, salads and courgettes need constant attention compared with beetroot and purple sprouting broccoli.

Some examples to help you choose

For all of us, especially the beginner, nothing is more heartening than healthy growth and a worthwhile harvest. So I encourage you, initially, to grow what will grow most easily in your outdoor climate. For beginners in Britain, there is huge scope for rapid and interesting harvests of salads,

because the time from sowing to picking is often less than two months, and many different plants are suitable. Some salad plants will then crop for two or three months, and many leaves can be gathered from relatively small areas, so I warmly recommend a close look at Chapter 9. Remember how much time is required for picking, making it worthwhile to have your salads as near to the kitchen as possible, possibly in a large pot outside the door.

If you have the space, a tasty and easy crop is new potatoes. They grow fast and reliably, and are out of the ground before their main disease, a fungus called blight that withers all the leaves, is even around. Potato plants are among the largest and quickest of all the root crops because they grow from old potatoes or tubers, which have enough food resources to propel young plants into rapid growth. Compare that to carrots – slowly growing from tiny seeds, which take an age to create enough root and leaf to make worthwhile growth – and parsnips, which take an age to even germinate.

Another space-hungry plant that is not too difficult is courgette, and it illustrates a highly important aspect of vegetable growing. How regularly can you be in the garden? Courgettes need picking every day, or two at the most, before they turn into small tender marrows and then, surprisingly rapidly, into large hard-skinned marrows. You may be caught out by the amount of time required for picking and dealing with your harvests, as one courgette plant can yield about 60 fruits between July and October. There is more work in harvesting and dealing with its output than in growing the plant.

Similarly, runner and French beans need frequent picking. The bean pods do not just develop and wait for us to gather them: they pass quickly through the tender pod stage on their way to becoming a tougher ripening pod that contains maturing seeds. It is such a pity that summer holidays occur when the garden is bursting with beans and other produce – another thing to bear in mind when you are planning.

The allium family is friendly in this respect: leeks, garlic and onions all grow slowly but steadily, and one harvest of garlic and onions, well stored, will afford many months of meals. Then once they are picked, there is still time for another crop of late salad or French beans or oriental greens. Familiarise yourself a little with all the possibilities so as to make the choices best suited to you and your family's tastes.

Successional cropping (see Plate 38)

Keeping the ground full of something growing at all times is highly

worthwhile.

- First, there is more to eat.
- Second, the soil is more often covered by leaves, helping to conserve moisture and to protect from heavy rain.
- Third, there is less room for weeds, which are shaded out by growing crops.
- Fourth, the plot or bed is more beautiful.

One way to achieve a succession is by ongoing propagation of sturdy plants, preferably in a greenhouse. Work out when crops will finish and have another plant ready to fill the space. Most salads, beetroot, French beans, spinach, kale, fennel, kohlrabi and other vegetables are around for only half a season, giving lots of interesting combinations to play with. Look at the table below to pick out a few. Apart from corn salad (lamb's lettuce), salads are not included in this table because there are simply too many possibilities, arising from their great number and rapid growth. So they can often be slotted in before or after other vegetables.

Combinations for succession

Match up any last 'H' with a first 'S' or 'P' to see what vegetables can succeed each other. Even more combinations are made possible by doing the 'S' part in a greenhouse so you can follow 'H' with 'X'.

S = sow

P = plant modules, tubers or sets

X = growing vegetable

H = main harvest

OW = overwintered

VEGETABLES	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Early potato			P	P	H	H						
Second early potato				P	P	X	H	H	H			
Corn salad	H	H	H	H				S	S	S/H	H	H
Broad bean		S	S	S	X	H	H	H				
Broad bean (OW)	X	X	X	X	X	H	H				S	X
Early French bean					S	X	H	H				
Late French bean							S	X	H			
Summer beetroot		S	S	S/P	H	H	H	H				
Winter beetroot						S	S/X	X	H	H	H	
Summer carrot			S	S	X	H	H	H				
Winter carrot						S	X	X	H	H	H	
Spring cabbage	X	X	X	H	H			S	P	P/X	X	X
Early cabbage			S	S/P	X	H	H					
Winter cabbage					S	X	P	X	X	H	H	H
Early onions	X	X	X	X	X	H		S	X/P	X/P	X	X
Maincrop onions		S	S/P	P	X	X	H	H				
VEGETABLES	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Early leeks			S	S	X	P	P/X	X	H	H	H	
Late leeks	H	H	H	H/S	X	X	P	P/X	X	X	X	H
Garlic	X	X	X	X	X/H	X/H	H			P	P	X

Rotation

Rotation can be made into a frighteningly complex subject – indeed it often is. It simply means moving vegetables around the garden in succession, rather than growing the same ones in the same place every year, to avoid a build-up of pests and diseases.

A four-fold rotation of roots, brassicas, potatoes and miscellaneous vegetables used to be commonly recommended. The difficulty with this, and indeed with any strict rules, is that it tends to divide the vegetable plot into rigidly defined areas, making it necessary to grow fixed amounts of certain crops every year.

I recommend instead that you keep an awareness or a plan of what has grown where, aiming to avoid repeat cropping for as long as possible. This may mean a gap of only two years, and some people manage to grow vegetables such as runner beans in the same place every year. A short rotation is definitely helped by not digging and by adding sufficient organic matter to maintain an abundant amount of life in the soil.

Another confusion that can arise in discussions about rotation is how to allow for second croppings of two different vegetables in the same year. For instance, you could grow carrots until late June, then plant French beans, followed by lettuce the following spring and swedes planted after them. That is a fourfold rotation in two years and it means that a four-year rotation becomes a two-year rotation. When gardening like this, I recommend thinking of rotation in more relaxed terms, namely ‘keeping vegetables of the same family as far apart as possible in terms of time’.

Listed on the opposite page are the important categories of plants that are often closely related. For example, leeks and onions are both alliums; therefore avoid following one with another, but intersperse them with successions of vegetables from other groups. More details are provided in the relevant chapters. Note that some plants cannot be rotated, for example, perennial vegetables that grow in the same place for many years.

Perennials

Growing perennial vegetables will avoid any worries over sowing and planting, once they are established. Their roots survive the winter and they send out new leaves in early spring. In moist soil, rhubarb is ridiculously easy to keep going over several years, and choosing an early variety can give stems by the end of March. Asparagus, once established over two or three years, will crop from late April for two whole months, although quite a large area is needed to grow worthwhile amounts. Globe artichokes also need a fair amount of space but will spring up most years, and freshly picked chokes have a wonderful taste and tenderness.

SOME VEGETABLES SHARING THE SAME CHARACTERISTICS

Brassicas: All cabbages, cauliflower, brussels sprouts, calabrese, broccoli, kale, rocket, most of the common oriental greens, swede, turnip, radish, kohlrabi

Alliums: Onion, spring onion, shallots, leek, garlic, chives

Umbellifers: Carrot, parsnip, celeriac, celery, parsley, fennel, dill

Solanaceae: Potato, tomato, sweet pepper, chilli, aubergine

Cucurbitae: Cucumber, melon, courgette, marrow, squash, pumpkin, gourd

Legumes: Peas, broad beans, runner beans, French beans

Beet: Beetroot, spinach, chard

Other: Lettuce, chicory, endive, basil

Perennial possibilities abound in fruit – above all raspberries, which are so well suited to the damp British climate. Early varieties crop for a month from late June, and autumn varieties give a steady harvest throughout late summer and early autumn. Strawberries offer similar choices of different harvest times, but are a little harder to grow – you need to keep control of their runners and watch out for slugs and fungal damage in wet seasons. Consider carefully the pros and cons before planting, as outlined in Chapter 19, since you are committing to a few years' work and harvesting.

Chapter 4

What's in season?



Growing your own food is a complete antidote to the seasonal uniformity of supermarket shelves. Out in the garden there are still four seasons, and it is vital to understand how they affect our sowing, planting and harvesting.

Sowing at the right time for healthy plants

Confusing signals abound, from nurseries offering plants out of season, to seed packets advising unnaturally long sowing seasons, presumably in the hope that we use up more seed. What we really need is information about when is the best time to sow for the plant to achieve its full potential and grow most healthily. I have in front of me a packet of rocket seed that says on the back 'Sow April–September'. Presumably they mean that their rocket seed will grow into nice rocket leaves at any time from late spring to early winter, but this is simply not true.

Like all plants, the growth of rocket is governed by changing day length. Days growing longer, from midwinter to midsummer, make it want to reproduce, so its energy goes into producing a stem with nice flowers that will turn into seeds as the plant dies off (see Plate 39); whereas days growing shorter, after the 21 June solstice, but more especially after about early September, send it a signal to take it easy a bit! There is time to make plenty of leaves and roots in preparation for that great seeding season in the spring ... and plenty of leaves for the gardener to pick in the meanwhile.

As an organic gardener, it is vital to appreciate this calendar of activity that affects the behaviour of everything we sow; also, sowing out of season often results in plants succumbing to more pests and diseases. Consider rocket again: it is a member of the Cruciferae, also called brassicas or the cabbage family, all of which are affected by flea beetles making lots of little holes in their leaves,

but chiefly from mid-spring to late summer. So even if you do achieve some rocket leaves in May and June, they are likely to be peppered with these beetle holes that enlarge as the leaves grow bigger, whereas an August sowing will produce cleaner leaves in the autumn and winter, when flea beetles are much less active.

There is a major link between sowings made at the right time and healthier growth. Spring salad sowing should be lettuce above all, as it grows most healthily then and is not in a rush to make seed until later in the summer. Furthermore, frequent and careful picking of its leaves will delay the seeding attempt by at least a month (see Chapter 9). In contrast to lettuce, all the oriental greens have an internal clock that is similar to rocket, so it really is not a good idea to sow mizuna or pak choi in the spring. Your leaf harvest will be quite small, and they will be of relatively poor quality. Sow them in July and August.

As a rule the most discouragement stems from sowing too early, before conditions are right or the soil is warm enough for plants to flourish. Until you have some experience, err on the side of caution. In my first year of learning to grow vegetables I sowed carrots in January, as recommended on the back of the seed packet. I never saw any seedlings, although they probably came up briefly before slugs ate them off – a complete waste of time and seed. Now I make the earliest carrot sowing in late March and even then, if the weather turns wet, allowing slugs to prosper and eat the baby carrots' leaves, it can be necessary to re-sow.

Bringing the 'right time' forward

Carrots (except for round ones) and parsnips are difficult to raise as greenhouse plants, but I sow almost all other seeds in my greenhouse, into modules or seed trays. They grow into vigorous plants that can resist slugs and give an earlier harvest. Spinach in April, beetroot in May and courgettes in June are most satisfying to harvest, at a time called the 'hungry gap' because few other crops are ready. Look at Chapter 6 for some ideas on both how to grow your own plants and how to extend the season a little with such simple materials as a roll of fleece.

Weather and climate

Plants grow and mature quite differently from one season to the next. One year my onions keep brilliantly; the next I lose half to a fungus that arrives in midsummer. Potatoes can be blight-free one autumn and full of it the next; leeks and celeriac may struggle through a dry summer or flourish in a

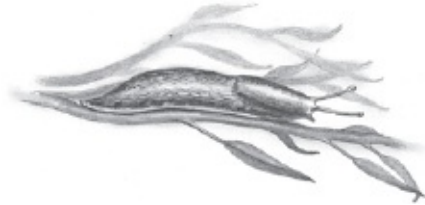
wet one. I strongly encourage you to learn the basics of what conditions each plant likes, so that you can adapt your growing to their different requirements, but there will always be the unforeseeable consequences of extra rain or sun.

Over the last three decades I have experienced a range of vastly different years, and have also recorded an interesting rise in temperature that has extended the growing season by about a week at either end. For example, sweetcorn used to occupy ground for almost the whole growing season, whereas, for now at least, it matures early enough for significant crops of late salads to grow in the same bed through autumn.

But there is still no certainty as to whether next spring will be cool and damp or warm and dry. What works one year may fail the next; all we know for sure is the seasonal requirements of different plants, with experience giving a glimpse of the timings and methods that have most chance of success. I invite you to benefit from my years of trying different things to learn how sowing at the right time is an invaluable but oft-ignored part of successful growing, and even helps in dealing with slugs and snails.

Chapter 5

Living with pests



A sound organic approach is to minimise opportunities for pests to prosper, rather than having to deal with unexpected damage. Put simply, gardeners have the ability to reduce pest problems through good gardening.

SLUGS AND SNAILS

Slugs are a fact of life, even for those who regularly use poisons to control their numbers. A better approach is to understand more about them, both to stop their numbers escalating and to adapt to their ways.

- ***Correct timing of sowings*** is one strategy for coexistence, so that seedlings thrive in helpful conditions and are able to grow away from any nibbles. Look closely at the recommended dates for different vegetables in Part 2 (Chapters 9 to 19). Also, if possible:
- ***Sow seeds in controlled environments*** such as a greenhouse, where they can grow unmolested into strong plants that are large and vigorous enough to resist the slimy marauders. This is a vital aspect of growing any early crop, whose health and vigour says to Mr Slug “Hold off here! I am growing well so leave me alone, or just nibble my fading outer leaves. Your job is to clear up the debris!” In other words, slugs have a place in the garden, but hopefully not too many places.
- ***Reduce slug habitats*** as much as possible. Areas of unnecessary weeds, rubbish, long grass or overgrown plants can all be shelters to surprising numbers of the larger multicoloured sorts, which can destroy even large seedlings in a short spell of damp weather. For instance, once my rhubarb is growing I have an occasional look under the lowest leaves to find snails that are lurking in the dark coolness, waiting to come out for a nightly feed on anything nearby. Keeping the soil clear of weeds in springtime is vital; so is removing the leftover leaves and stems of any finished crops to the compost heap or bin, as soon as possible after harvest.

The greatest slug damage often occurs where ground has recently been cleared of grass or overgrowth that was home to large numbers who, suddenly, have less to eat than before. In the first year of cropping such ground, I would avoid growing slug-prone vegetables such as salads, spinach and carrots. The least problems arise in a tidy garden where only the crops are growing, but nearby habitats can still make difficulties. Walls and stony borders are an invitation to snails to set up home, so it is best to grow resistant flowers together with fruiting trees and bushes near to walls, and site the vegetable patch a little way from them.

SLUG- AND SNAIL-RESISTANT FLOWERS

Slug- and snail-resistant flowers that I grow include penstemons, wallflowers, auriculas, campanulae, cornflowers, sweet williams, foxgloves, Verbena bonariensis and a wide range of other perennials. Note that certain plants whose leaves offer little culinary interest to our slimy friends can often serve as shelter to large numbers, so it is beneficial to conduct a clean-up in damp weather. A little foraging under leaves should soon reveal favourite hiding places. Slug-tender flowers such as French marigolds and dahlias need to be grown in more open ground and planted a little later than often recommended.

Night-time forays Another trick, for the brave gardener of nocturnal instinct, is to venture out with a torch and maybe gloves as well, and pick off everything that has appeared under cover of darkness – there can be a surprisingly large number of slugs. Putting them in a bucket of water will drown them, or push a pointed knife through them.

Frequent harvests Even in bare soil there are always slugs – chiefly the small grey ones who are notably conscientious in their tidying-up role. When lettuce matures and develops a heart, I find that the decaying outer leaves become home to large numbers, whereas the heart that is still growing strongly and has the youngest, healthiest leaves is mostly free of damage. My sales of lettuce used to be always limited by the presence of at least one slug, even after trimming off the damaged outer leaves. People just do not like dealing with them; supermarket buyers above all! So it has been a great joy for me to discover how to grow frequently picked lettuce – whose small and less-numerous leaves afford little shelter – as well as finding that it is feasible to mix leaves in water so that slugs are washed out. Chapter 9, Summer Salads, explains how you can achieve this and produce your own salad bag.

Predators You may be wondering if it is possible to encourage sufficient predators into a garden. Personally I feel that this helps, but not to the point that we can ever cease to be alert to the dangers, because slugs and snails are themselves simply part of the garden. Our role is to keep their numbers at a manageable level. Sometimes when picking spinach I disturb a toad sheltering under the leaves – they like the same conditions as the slugs they eat. But there are always slugs on the spinach as well, which makes sense because if the toad ate them all he or she would have to go elsewhere. Ducks or hens will clean up a garden, but I never let them into the vegetable patch because of the damage caused by hens digging and ducks nibbling. When we lived in rural France it was clear that poultry were encouraged to range all around our neighbours' farms and gardens, but never in the carefully fenced *potagers*.

Slug traps Slugs like a cool, dark, damp place to shelter in daytime. Laying something such as an old wooden board on the soil will often result, the following morning, in being able to remove many slugs from underneath it. Slugs also like a drink at night and can be lured into saucers of old beer set into the soil, but these need regular inspection and refilling.

Slug pellets If your patience is exhausted and you reach for the pellets, there are now 'organic' ones available. I would be careful to limit their use, to avoid a build-up of iron phosphate in the soil, and personally I have found them ineffective in really wet conditions, when you could use a VERY FEW of the chemical ones – one per plant and preferably under a cover, from where the poisoned slug(s) can be removed and binned. Most applications of metaldehyde poison are far too abundant and casual, whereas their extremely limited and careful use in occasional severely wet weather is, I feel, better than losing whole crops to slugs.

INSECTS

The importance of sowing dates

After slugs, the most common difficulties are caused by cabbage-family caterpillars, to the point that I rarely grow late-summer cabbages and calabrese. At that time of year, cabbage white butterflies are abundant and laying many eggs, especially in sheltered gardens. Measures can be taken to keep them out of crops or even to kill them, but I prefer to grow cabbages and other brassicas in the winter half of the year, when their predatory insects are much rarer. Suitable dates for all brassicas are covered in

Chapter 14, together with tips on reducing pest damage.

Put another way, for all the vegetables you grow, think which is the best time of year to sow and grow them for the least difficulty with insects. For example, peas sown in late winter have a fair chance of cropping before pea moths lay their eggs; cabbages for spring that are sown in late August will mature when there are no caterpillars at all; and carrots sown in mid-June avoid the spring flights of carrot root fly, and should be clean until October.

If, on the other hand, you sow seed on dates that do not respect the potential insect problems for any crop, you will need to spend time and money on remedies. Sometimes it may feel worthwhile; other times not, and in later chapters I suggest the sowing dates that offer most chance to each different vegetable of avoiding serious insect attack.

Attracting beneficial insects

There are many ways of maintaining a better balance of insects so that you have enough predators nearby. Remember that pests are usually present, but in small, scarcely noticeable numbers because other insects are eating them – aphids and hoverfly larvae, for example. More predators can be encouraged by having the widest possible range of plants, including many flowers and a few stinging nettles.

For indoor growing, suitable predators (which do not usually survive the winter) can be purchased in spring, but beware of being persuaded into spending a lot of money on a problem that may not happen – see pages 168 (aphids) and 172 (red spider mite).

WOODLICE

Woodlice can peck away relentlessly at tender young leaves, making serrated margins. If this happens – and you rarely see them as they eat by night - you need to raise as strong and healthy plants as possible for setting out, rather than sowing seeds direct in the soil where woodlice can damage so many emerging leaves.

BIRDS

Pigeons above all, but also partridges and pheasants, can systematically strip leaves off peas, brassicas and salads, particularly in winter and spring. If this happens, you will need anti-bird netting. For example, drape a roll of 4m (13')-wide mesh over semicircular wire hoops spanning the beds.

Sparrows love to peck at seedlings of beetroot and chard, sometimes salad too; even blackbirds may learn this trick. In springtime, fleece offers excellent protection against birds, as well as helping to protect plants from cold winds.

OTHER ANIMALS

Badgers

During dry spells and cold winters in Somerset, badgers often come into the garden searching for worms and slugs, perhaps because recently spread compost on top of the soil is an easier source of this food in dry and frosty conditions than their more regular haunts. Some of my first plantings are occasionally dug up as badgers look for little worms in the modules' compost. Yet in spring they usually return to the fields, having in fact reduced the slug population at a wonderful time – just before the major plantings of early spring.

However, I am still extremely nervous of badgers because they are power ful and can be extremely destructive when, for instance, they are foraging through a row of peas to satisfy their sweet tooth, or rapidly destroying rows of sweetcorn to devour its slightly immature cobs. As a protected species, they may not be hunted.

Rabbits

Rabbits are another concern. They can enter my garden because I hate putting up fencing, which would also need to be dug in so they can't burrow underneath. A partial solution is provided by our two cats, who live outdoors and occasionally bring home young rabbits to eat. Numbers vary, and most springs I suffer some damage, with onion, leek and garlic seedlings almost disappearing, before they grow away strongly in a warm May.

Rabbit numbers and eating grounds fluctuate all the time, but severe infestations might be tackled by paying somebody to bring in their ferret. Or some fencing may be necessary, but this can be an onerous undertaking which involves maintenance as well.

RABBIT FENCING

I admit to ambivalence over fencing rabbits out because it is such a major job: digging a narrow trench about a foot deep and lining it with mesh fencing, which should emerge above ground to about 80cm (2'8"). Or

instead of digging it in, the mesh fence can also be laid flat on the ground, outside the fence, to a distance of about 60cm (2'): grass will grow through it and can be kept mown. Or you can run two strands of permanently electrified wire around your plot, about 15cm (6") and 30cm (12") above ground level. However this is clearly bad for children, can be broken by badgers, and any grass below the fence needs regular cutting to prevent the electricity disappearing down blades of grass into the soil.

DISEASES

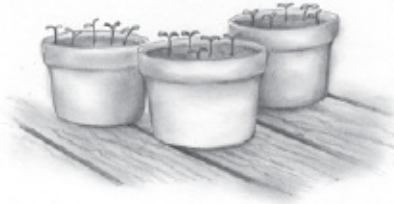
I suggest a similar approach to diseases as to pests, aiming to understand where problems are likely and then gardening to avoid them. For instance, potatoes are notorious for succumbing to blight, such that whole crops can be lost. This can be avoided by growing one of the new blight-resistant Sarpo varieties; or if you don't like their slightly floury texture you could grow a more waxy second early variety such as Wilja, which matures in August, often before the worst blight arrives, and its early harvest can be kept for use through the winter.

If crops are lost to pests or diseases, you need neither despair nor reach for an expensive cure. Learn from what has happened and do it differently next time, to avoid the worst pitfalls. There is often slight damage, but we should be able to afford some losses if our soil is well composted and growing abundant, healthy crops.

The essence of gardening is learning how everything fits together and how to respond as different situations arise. It is a continual learning process, never devoid of interest and always changing. Every season throws up new challenges and opportunities. The next chapter looks at ways of increasing the chances of success.

Chapter 6

Sowing seeds, raising plants



The early summer can be a curious time. In those first long days of hot sunshine, just when one feels like some fresh, juicy vegetables, nothing is ready in the garden.

The days lengthen more rapidly than the soil warms up. And, crucially, plant growth from seed is initially very slow. In the cool of early spring, small seeds need many weeks to germinate, develop roots and attain any notable size. How can we speed up the early slow part of growth, to reach more rapidly the point where plants have enough roots and leaves for growth to take off?

Buying plants

The simplest way is to buy plants. However, there are three potential pitfalls.

- Firstly, they may have been raised in such ideal conditions for speedy but soft growth that finding themselves outside in cool, wet soil is terminally shocking. Keeping them outdoors in pots or trays for a few days before planting is always wise, so they can at least acclimatise, after which they may look less glossy but will be stronger.
- Secondly, there is the question of seasonality. The nursery's business is to sell plants, not to ensure that the gardener has a fine crop. Every year I see plants for sale that are wrong for the season (such as pak choi in springtime) and hence doomed to relative failure, however well the gardener may look after them. So you will benefit from learning the right seasons for planting the right crops (a theme that runs throughout this book) and sowing your seeds at the right time, and ignoring some nice-looking plants of dubious value.
- Thirdly, there is the question of vegetable variety or cultivar. Plants offered for sale need to look sturdy and appealing, but these characteristics do not always result in the best crop later on. Commercial seed catalogues describe

certain varieties as 'good for plant sales', which says 42 to me 'avoid this variety, because they are listing no other benefits'. The seed is usually cheap and I know from growing some of them that I prefer varieties with different characteristics. However, unless you have enough experience or knowledge of which varieties are the good ones, it can be tricky. Sometimes they turn out all right, but it is far more reliable to grow your own; space and materials permitting.

Buying seed

The principles of successful sowing and plant raising are the same for almost everything you will grow, so I will go into some detail. The first thing is to choose some good seeds, and this is not entirely straight forward. I sow a lot of seeds every year, often of the same vegetable but from different seed companies, and I have experienced a surprising number of irregularities.

For example, there are seeds that germinate poorly and unevenly, when sown at the same time as and next to other seeds of the same vegetable that are doing well. One year a large sowing of parsnips failed to germinate at all, while the neighbouring seed of a different cultivar grew strongly. A batch of lettuce seed came up as something completely different from what was on the packet. Two packets of Musselburgh leeks from different companies had completely different colour, stem length and frost resistance.

It is almost impossible to get any admission of such happenings out of a seed company. So buyer beware! If germination is poor or growth uneven, it may not be you who is at fault.

The other side of this story is that there are a lot of good seeds of a wonderful and growing range of vegetables and their many different cultivars. Seed catalogues offer a wider choice than most garden centres and it can be great fun to spend time in the winter picking out the seeds of an exciting summer. Hope springs eternal, and I love to try new and unusual offerings, at the same time as continuing with my tried-and-trusted regulars.

I recommend organic seeds because I feel that they have more vigour and integrity. No chemicals were used to protect their parents, who must therefore have prospered in reasonably natural conditions, and will have passed on some of this ability to thrive without artificial help to their progeny. Also, in buying organic seed, you are supporting a chemical-free farm somewhere in the world. The only difficulty is that many cultivars are not yet available as organically

grown, although the choice is expanding.

When looking through seed catalogues, read the small print carefully – and read between it, the unwritten bits! For instance, ‘succulent and prolific’ with no mention of taste suggests ‘unremarkable flavour’. Any description involving the word ‘popular’ makes me suspicious; look instead for terms such as ‘hardy strain’, ‘productive’ and ‘tasty’.

Normally seeds come from ‘open pollination’, meaning that insects have been allowed to move freely amongst them and move the pollen from plant to plant, resulting in a little uncertainty about the exact identity of male and female parents of any seed produced. F1 hybrid seed, by contrast, is bred in a controlled way to specifically selected parents that have been bred for many generations: a more expensive process.

Hybrids are not genetically modified!

F1 hybrids can achieve certain characteristics that make the extra cost worthwhile, such as the rich flavour of certain tomatoes, the sweetness of sugar-enhanced sweetcorn and the tightness of hybrid Brussels sprout buttons. Note that seed saved from hybrids will not grow true to type.

Hybridisation is an artificial method but is still working within natural laws, unlike the processes involved in genetic manipulation (GM). It is exasperating to hear (so often!) the claim that plant breeding has been going on throughout history and that GM is just another refinement. Suffice to say here that GM is a dangerous attempt to manipulate plants outside the boundaries of the world as we know it, and has more to do with money than with enduring productivity.

How long will seed keep?

Many seed packets contain far more seeds than are needed for one year’s harvest, and if kept reasonably cool and dry they can serve for another season. I find that cucumbers and tomatoes will germinate reliably when up to five years old, but parsnip definitely works better with fresh seed – as long as it is fresh when you buy it! The best germination is usually from home-saved seed such as peas and beans (see Part 2, pages 128 and 139), whose vigour and reliability is often way ahead of most commercial offerings.

The table below shows the average length of time that seed of different vegetables will keep. The best storage conditions are cold and dry, but the figures below are based on ambient temperature and humidity, so they may not

agree with other published sources!

In ideal storage conditions of minimum humidity and around freezing point, seed will keep for much longer. Yet four years is long enough to mean that packets of many different lettuces, for example, can be purchased and used over a number of seasons, sowing just a few seeds each time, so as not to be overwhelmed by lots of the same lettuce all at once. Or you can buy a packet of the seed company's own mix and see how it suits you, again sowing just a small number of seeds each time.

***LENGTH OF TIME SEED KEEPS IN AVERAGE
DOMESTIC CONDITIONS (NO. OF YEARS)***

<i>Lettuce</i>	<i>4</i>	<i>Tomato</i>	<i>7</i>	<i>Courgettes</i>	<i>2</i>
<i>Onions/leeks</i>	<i>2</i>	<i>Spinach</i>	<i>3</i>	<i>Brassicas</i>	<i>4</i>
<i>Parsley</i>	<i>2</i>	<i>Carrot</i>	<i>2</i>	<i>Parsnip</i>	<i>1</i>
<i>Beans/peas</i>	<i>6</i>	<i>Cucumber</i>	<i>10</i>	<i>Sweetcorn</i>	<i>5</i>

One important caveat here is that when buying seed, we do not know how old it already is, and experience suggests that quite a bit of seed for sale is close to its 'use by' date, meaning that germination is about to become more patchy. I have experienced this with seed from many different companies, and if you experience similar problems I do urge you to let them know.

Sowing

Once you have your seeds, there is an important choice to be made between sowing them directly in the soil, or in compost in a greenhouse or on the windowsill.

As an example, the first outdoor sowings (not plantings) of lettuce in early spring will often be at risk from slugs if it is cold and wet, partly because it takes only one nibble for a tiny seedling to lose most of its two tiny leaves. In a cold spring, it is wise to wait for some warmer and reasonably dry weather.

While April can be warm and dry, it is usually a fickle month and it often pays to have raised seedlings 'indoors', in reliable conditions. A greenhouse offers the possibility of sowing some vegetables as early as late February, since seedlings of many vegetables can survive some frost, especially when they have the chance of growing strongly by day in warm, dry conditions. By April you can then have plants rather than seeds, and will be looking forward to some early harvests.

Using a windowsill for propagation is more difficult because a lack of light causes plants to become somewhat drawn up and spindly. It is still a fair option if there are no other alternatives, and if you can ‘harden off’ the plants outside before planting. Hardening-off means accustoming plants to harsher conditions, such as the rain and cold winds that have not affected them inside. It toughens them up to face the more bruising aspects of life outdoors.

Chief among these aspects are undoubtedly slugs and snails – hereafter referred to as slugs for simplicity, since a snail is really a shell-covered slug. Their enduring presence must ALWAYS be borne in mind (see Chapter 5, pages 35-37). At the same time, remember that their proper role is to ‘tidy up the debris’, so we want to ensure that our plants do not come into this category. Well-grown and hardened-off plants are definitely less appealing to slugs than spindly, weak ones. Remember also that plants growing in their right season are always more likely to succeed, when there is a much greater likelihood of the right level of warmth and moisture, and of lower prevalence of harmful insects or diseases.

Using a greenhouse

To spread the load of growing your own plants it might be possible, on an allotment, to get together with the neighbours and share out some plant raising. Once everything is set up, it takes little more time to raise 200 lettuces than 40. It would be marvellous if every allotment could have just one good greenhouse with automatic ventilation and a large water butt outside the door, or a tap nearby. The amounts of water needed are actually quite small, but watering needs to be regular, daily at least in fine weather, so water nearby is a great blessing.

Light from all sides makes growth in a greenhouse or polytunnel superior to windowsills, which give rise to drawn-up leaves. Glass greenhouses hold more warmth than plastic structures, although bear in mind that even under glass, from November to February, sunshine is too weak and limited to build up significant heat, or to prevent night frosts indoors. Nonetheless, keeping cold rain and winds off plants and seedlings makes a huge difference, and once the days start to lengthen rapidly in March the greenhouse can become an exciting port of call, with visible spurts of growth and pleasant working conditions.

Late spring frosts, if hard enough (-3 or -4°C; 25 or 27°F) can penetrate glass or plastic, so frost-sensitive plants such as tomatoes and courgettes may need a paraffin or electric heater set working at dusk, when an air frost is forecast. The last ‘normal’ date for such an event is worth ascertaining from a local gardener,

who will also be well aware of the later date of possible ground frost, which would scorch or destroy the leaves of potatoes, tomatoes, runner beans and so on.

SURVIVING FROST

Vegetable seedlings that survive frost include most of the spring leaves such as lettuce, spinach, cabbage, parsley and coriander, and also broad beans, peas and sweet peas. They will germinate and grow slowly in an unheated greenhouse from a sowing in late winter.

For rapid germination and growth of seedlings, a bench of moist sand with electric soil-warming cables, controlled by a thermostat, will soon repay the investment if you are growing a larger number of plants. Smaller versions of the same idea, such as electric propagators the size of a seed tray with a plastic hat on top and an electric heater underneath, need more careful use because water cannot drain out of the bottom. There is a risk of waterlogging or, at the other extreme, of roots drying out from the powerful heat rising out of the base.

Failing a greenhouse, coldframes are a fair second option for successful plant raising. They are just not so good for the gardener on a cold, wet day! Also they risk harbouring more slugs than larger, warmer structures, so attention must be paid to damp corners and the undersides of pots, planks or trays. Have a look regularly, even every couple of days, to remove slugs and snails, only one of which can eat lots of small seedlings overnight.

Composts for sowing

What to sow the seeds in? Do not use soil, because it will hold insufficient food and moisture to raise a reasonably large plant in a confined zone of root growth. Use a good commercial plant-raising compost – preferably organic – for slower, stronger growth. It will usually be called ‘multipurpose’, suitable for sowing and plant raising. Special sowing compost has fewer nutrients and superior drainage, useful for seeds such as basil and lettuce that dislike excess moisture.

The nutrients in organic compost are similar to those in a non-organic compost, but their proportions should be more natural since they come from the field or farmyard rather than a factory, and their lower solubility in water enables sturdier growth of slightly smaller, stronger plants. Some organic potting composts have added seaweed or rock dust to offer a range of trace elements, which are important for healthy growth.

Modules and seed trays

Regarding a container for the compost, the two main options are seed trays or modules, also called plugs. The main difference is that modules are divided into partitions of variable size, enabling each plant to develop roots in a defined space and then to be planted without any root disturbance. Both seed and module trays come usually in A5 or A4 size, about 5cm (2") deep and with drainage holes in the bottom.

INSTANT ROWS OF VEGETABLES

Plastic guttering of different lengths, filled with compost, is a useful way of raising short rows of peas, salad, spinach or any vegetable that grows at close spacing in a row. When plants are growing strongly, place the gutter outside for two or three days before drawing out a large drill in the soil and sliding all the gutter's contents into it. For this to be successful, you need both practice and an extremely smooth gutter.

Different vegetables need modules of different sizes. For lettuce, I recommend about 40-60 3cm (1") modules per A4 size, to enable development of a fair-sized plant. Courgettes can start in modules of this size, but grow rapidly and will soon need transplanting to pots or larger 5cm (2") modules, 15 per A4 size. Fill trays or modules to at least 1cm (½") above the top with compost and then press it down *quite firmly*, since roots thrive best in a medium that offers solid support.

Correct watering

Good watering is critical, and above all avoid over-watering. It is more likely to cause problems in seed trays, where water may lie near the bottom despite all the drainage holes. If the compost has been thoroughly wetted before sowing any seeds and then covered with glass, no watering will be necessary for quite a few days after sowing.

The amounts and frequency of water needed vary all the time, depending on sunshine and temperature, and different plants need different amounts in different weather conditions. If ever the compost's surface dries to a paler colour then water is certainly needed; avoid letting it dry out to the point where the compost has shrunk and become difficult to make wet again. Peat-based composts can be difficult in this respect, and are also best avoided for ecological reasons. Watering with a fine rose is kindest for seedlings and young plants. As plants develop more leaves they require noticeably more water, and after a month or so (longer for certain plants such as tomatoes, aubergines and peppers)

they can be hardened off outside.

It takes some experience to learn how much water to give. Getting it right takes plenty of observation and practice. Seed trays and seedlings in general want a light touch from the watering can: germinating seeds grow so slowly, and really require dampness more than wetness. Too much of the latter and they will 'damp off' as their tiny roots suffocate in airless compost, where water is filling all the holes.

Modules are easier to water correctly because they drain more freely than seed trays. Later, as large seedlings grow into small plants, it can become difficult to give sufficient water for even half of a sunny day, and this is one sure indication that a plant is ready to go out. Although most plants will tolerate quite dry conditions and stay healthy, they will not grow much, so on hot spring days a twice-daily watering of modules will certainly help larger plants.

Otherwise, a once-daily routine is excellent, preferably in the morning so that cold water is not cooling the compost of an evening and leaving damp conditions through the night, in which slugs and moulds may thrive. For this reason too, be careful not to over-water on mornings of cool dark days as late as early May, when plants draw up little moisture: it is sometimes better to miss a day's watering. If you are not sure, lift up a pot or tray to see if it is heavy or light – you may be surprised either way.

Pests under cover

Slugs If ever you see holes in the leaves, or plants eaten off, have an immediate and careful look for the slimy intruder (often only one) before it mows through any other plants. It should be possible to maintain the small area of a greenhouse or coldframe slug-free, 99 per cent of the time at least. A thorough spring clean before first sowings affords great peace of mind.

Other pests can be trickier. **Woodlice** have multiplied recently in mild winters, to the extent that certain plants can have their stems terminally nibbled. I find most damage to tomato, cucumber and spinach seedlings. Usually lifting the module tray will reveal clusters of woodlice that can be swept up and put on a compost heap. Doing this occasionally in late winter will help you keep on top of the problem for most of a season.

Ants are another beneficiary of rising temperatures, making their presence known each springtime and then throughout the season. The sand of my propagating bench is home to a colony of flying ants that travel up into the compost of modules in contact with it. After midsummer they can make compost

toxic with their secretions, and I place a lattice of wooden battens on top of the sand, with plants sitting on that, to keep my plants out of contact with the ant-filled sand below.

Ventilation and shading

Too much air is infinitely better than too little. Some greenhouses have automatic window-opening and -shutting devices that are sensitive to temperature. In their absence, opening and closing is vital in sunny weather; less so in dull conditions. Each structure is different: my home-made greenhouse has ill-fitting windows that serve extremely well for natural ventilation. The small air volume of coldframes makes opening every day more important. The homogenous plastic sheet of a polytunnel admits no air at all, so at least one door should be left open every day.

Some gardeners paint their greenhouse roofs with lime wash, or hang up shading to prevent overheating in summer. Genuine lime wash is effective because it is most opaque on dry days and admits more light in damp weather. However, I find this unnecessary and have always managed fine without it, in the British climate where light is so precious.



Profile of spring compost heap after ten weeks. The top layer has only just been added.

Step-by-step: Mulching to clear ground, then planting and harvesting. This is a four-metre strip between espaliered apples.



1. Pasture of grass, dandelion, buttercup, including a little couch grass, being covered with 7cm (3") of mushroom compost and cardboard. This was in 2008 – I now realise that cardboard survives longer and mulches more effectively when on top of the compost.



2. By June, after a second mulch of cardboard applied in April, the ground is clean and some butternut squash have been planted in front; potatoes are growing at back.



3. July. Leeks are planted in the middle section on beds made by moving a little of the topsoil and compost from pathways 30cm (12") wide.



4. Growth is rapid by August as the pasture roots have rotted and plenty of nutrients become available.



5. In October the squash plants are dying and have yielded 27 small butternuts from 8 plants. Beyond the leeks, oriental salad leaves are growing after the potato harvest.



6. After harvesting the leeks in November and December, I am spreading home-made compost on top of the cleared ground in

January.



7. In April there are some plantings of sorrel and dill in the background. The beds in front are waiting to be planted with lettuce in June.



8. The first harvest of lettuce leaves in July. Harvesting was weekly until late September. No dandelion or buttercup are re-growing and very few annual weeds grew all season.



9. In early October the lettuce plants are cleared, 5cm (2") of well-rotted cow manure is spread and garlic cloves are planted, as well as some broad beans to overwinter.



1. The bed on the left has home-made compost on top. The bed on the right had the same amount of compost incorporated while being dug in late November; weather has broken down the lumps of sticky clay soil.



2. Beds were planted in March and covered with fleece for a month. By late April there are (from front) parsnip seedlings with a row of radish in between, spinach, lettuce ('Freckles', 'Grenoble Red' and 'Rosemoor'), Swiss chard and early potatoes.



3. By 8 June, radish and one potato plant from each bed have been harvested. Lettuce have been harvested six times so far; spinach four times. The no-dig bed is in front; the dug bed behind.



4. The dug bed: 10.7kg of parsnips from two rows of the bed – rather forked.



5. The undug bed: 9.7kg of parsnips from two rows of the bed – cleaner and straighter.



1. Late May: undug bed in front, then dug bed, both planted at the same time, with another undug and dug pair of beds behind. Note bulb onions growing faster on the right of the undug bed.



2. Late June, same view: faster growth on the undug bed in front led to August harvest of 6.6kg onions, compared with 4.4kg onions on the dug bed behind.



1. A wooden framework is placed on pasture grass and filled with compost; one half of the bed has had a cardboard mulch laid on its base. You can also fill beds with well-rotted manure, with fine compost as a top layer.



2. Late February. Firming the compost, to retain moisture and give firm anchor to plant roots.



3. First plantings in April of lettuce, carrots, beetroot, spinach and potatoes; a net over the top is to keep birds and cats off.



4. Rapid growth by mid-May. 'Bronze Arrowhead' lettuce in front, then 'Lollo Biondi' and 'Bijou'. Weed growth was no different between the two halves where cardboard was laid or not laid at the base.



5. Harvest of 'Early Nantes' carrots in late July. Leeks have been planted after the harvest of early potatoes.



1. From lettuce sown in late May, this is the first harvest of leaves in July. The lowest, outer leaves are carefully twisted off.



2. The same bed after harvest. Small innermost leaves will grow quickly for a harvest after another week, more quickly than if they had been cut.



3. The front two rows of endive have been picked in the same way – the outer leaves twisted off.



Lettuce (cos) 'Chartwell' in early July.



Lettuce 'Grenoble Red' and salad rocket plants in modules for planting in tunnel, early October.



Lettuce in late May: 'Rosemoor' in front, then 'Chartwell' and others.



Radicchio 'Treviso' in late October.



Lettuce 'Freckles',



Lettuce 'Amorina'.



Radicchio 'Marzatica', late November.



Mizuna, onions and spring cabbage in modules. Raised in the greenhouse, planted late September.

10



Leek 'Swiss Giant' in October from April sowing.



Onion 'Santero' in late July, from sowing six seeds per module indoors in February, planted April.



Celeriac 'Ibis', early October.

Sowing indoors versus sowing outdoors

It may seem strange to spend so much time, effort and money on propagation when seeds can simply be sown outside in the soil. This is true to a point, but consider at the advantages of good indoor propagation.

- Earlier harvests – first salad in April and May not June, courgettes in June not July, and so on.
- Less slug and pest damage, because a larger well-grown plant can resist them much better than tiny seedlings. ‘The seeds did not come up’ is often, really, ‘the seedlings were grazed off completely by slugs and snails’.
- More crops over the season, because as soon as one crop – say carrots – is finished, another can be planted that is already a month under way indoors, such as plants of kale, beans or winter salad. There has been less of a pause while the new crop is germinating and establishing.
- The possibility of growing exotic crops, both because plants such as melons will have more time to fruit well in Britain from an indoor sowing, and because any spare greenhouse space in summertime, after the busy plant-raising of late spring, can be used for aubergines or chillies, for example. This may be in pots, grow bags or in the soil.

Planting out

Some plants, such as lettuce, are tougher than they appear, and should survive any outdoor weather from about early April, except in parts of upland or northern Britain. A few days of acclimatisation to sun, wind, rain and frost will see them ready for growing in the soil.

Other plants, such as courgettes and French or runner beans, are much more temperature-sensitive. Firstly, they will be killed dead by any frost. Secondly, even without frost they will perish in the absence of sufficient warmth to enable their growth. They simply cannot function when the soil temperature is too low; hence the advice to wait until late May or June before planting them out. This important detail is covered for each vegetable in Part 2 of this book.

Even when plants are set out at the right time, slugs will be interested because any plant that suddenly appears – as if from nowhere from a slug’s point of view – needs time to settle in and start growing strongly. While in this phase of transition, plants have less spare energy than usual for resisting slimy attacks, so one or two leaves may be lost. The aim is to start with a reasonably large and healthy plant which has sufficient reserves to overcome the shock of

transplanting, and at a time of year when the climate favours its steady growth.

The planting of modules and many other small plants is made easier with dibbers, which come in many sizes, to make small holes in the soil; each hole a little larger than the plant's rootball. I recommend a good dibber as one of your basic tools (see page 26).

A critical time: young plants settling in

For what seems like a long time just after planting (up to two weeks in the coolness of spring), your precious young plants will scarcely grow. Instead, they will be consolidating and adjusting to their new situation, above all organising their roots. This is an important principle that applies to everything newly placed in the soil: the settling-in period, when a plant's energy is used more for self-therapy than for growing. Through this critical period, plants have less ability to resist pests and diseases.

This is also why your home-raised plants are almost certainly more likely to survive than many you may buy. Yours will have grown slowly in less-than-ideal conditions – some cold nights, dark days, the odd watering missed, in compost that may not be 100-per-cent perfect for the plant. All this helps to make them stronger. And it is why some of the beautiful-looking plants offered for sale by professionals may well struggle when confronted by the less-than-perfect conditions of a cold, wet spring; or a hot, dry one for that matter.

Fleece

Fleece is an invaluable and simple tool for helping young plants to grow in slightly adverse conditions, especially in spring and early summer. It is a thin, light, porous and translucent woven plastic, which admits rain and air but not too much wind, and traps some warmth. What more could we ask for? It is suitable for covering all early salad plantings, spinach, courgettes, calabrese and sometimes French and broad beans, early potatoes and peas. Allied to good plants from the greenhouse, it helps the year to begin with a (nice) bang and to make the most of any half-helpful weather in springtime. It works best over young plants, and is so light that their leaves can hold it slightly above ground level, allowing the soil surface to dry out enough to discourage slugs. (But occasionally, the opposite can occur – the fleece keeping the soil damp – if it is laid over newly sown seedbeds in cold, damp weather.) It also offers slight frost protection: leaves will be scorched where they are in contact with frozen fleece but reasonably protected otherwise.

Young plants seem happy to hold the slight weight of it by their leaves, and in growing they will push it up like a bubble. Keep it in place with, for example, a stone or brick every 1-1.5m (3-5'), and use these to pull the fleece *fairly tightly* over your seedlings. It works better to squash them a little, rather than allowing loose fleece to flap in the wind, hitting tender leaves. After a fortnight or so, to access beds for weeding, or even for picking, simply roll the stones back on both sides and pull the fleece up to one end, before replacing it again. Usually it is best taken off after four to six weeks, by which time plants will be growing strongly and the weather will be warmer.

Fleece has less value in winter because there may be snow that will squash it on to plants below, and winter gales can cause holes and gashes. In high summer it can be useful for keeping insects off cabbages and oriental greens, but can also lead to overheating, and fine meshes are usually recommended for this purpose, on brassicas especially (See Chapter 14). A drawback of fleece and mesh is the aesthetic one: that carrots, brassicas and salad are not attractive when covered by what looks like white sheeting. Environmentally it is a reasonable choice; although made from oil, the material's lightness means little weight of raw material has been used. Also, many of my sheets have covered at least five crops already; the odd hole is not too critical, and some fleece has even survived trampling by badgers, as long as it is a minimum weight of 25g/m². Beware the commonly offered 17g/m², which falls apart after one use.

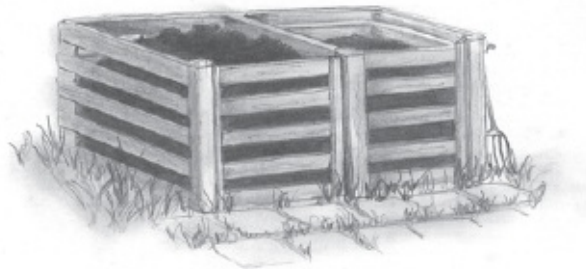
One further use of fleece is in a greenhouse or polytunnel, as an extra layer of insulation in really cold weather. The 30% loss of light is more than offset by higher temperatures, helping plants through severe frost especially.

Other possibilities

A precursor of fleece is the cloche, made of glass or polythene. The former are expensive to buy, of interest mainly to listed gardens. Plastic cloches are cheaper, though still relatively pricy, and they require more work to erect and look after than fleece. Plants underneath them will require occasional watering and some ventilation as well, on hot days, since polythene is impervious to air and water. I use a cloche for winter salad only, whereas in March and April my garden can be at least a quarter fleeced, then by early June the fleece will almost all have been removed, its job done.

Chapter 7

Making compost



Whole books have been written on composting (see Resources for one good example). This chapter is a brief outline to help you make the most of your possibilities.

Compost heaps and bins are magical means of turning large amounts of garden waste into small nuggets of fertility. Opening up a heap of successfully ripened compost is, for me, almost as satisfying as growing fine food.

Quick composting

An ideal heap, although it rarely occurs, has the right balance of green and fibrous material – about two parts green to one part drier, fibrous matter – and is built up within about a fortnight. The internal heat rises to 60-70°C (about 140-150°F), killing weed seeds and pathogens. When a month or so later it is just lukewarm, turning the contents into an empty bin will introduce air and encourage a second, less hot fermentation.

From start to finish the process can take as little as two months, but in most gardens six months is more likely. The best composting happens in summer, while in winter a lack of green matter and low temperatures make hot and fast fermentation unlikely.

Good compost is dark brown, almost black; soft to the touch; crumbly and sweet-smelling, like a damp forest in autumn. (Plate 1, in the first colour section, shows a compost heap in profile, with almost-finished compost at the base.) If yours is not like this, keep trying – and remember that few gardens have an ideal mix of ingredients, all available at the same moment. Make the most of what you have.

Slow composting

In smaller gardens with less material to compost, it may be that heaps never become really hot. Nonetheless, compost will gradually be created, from the bottom up and over a longer period of about a year. Be careful, when assembling heaps slowly, not to put in large amounts of seeding weeds and perennial roots such as bindweed.

Types of heap or bin

Larger gardens need two or more heaps, preferably side by side. Enclosures of slatted wood keep them tidy and conserve some heat. Solid sides are less good because air and moisture need to circulate. A roof to keep rain out is ideal, or finished compost can be covered with polythene or cardboard.

Smaller gardens can manage with bought plastic bins with lidded tops for adding green matter, and holes at the bottom for drawing compost out. One large bin may be sufficient: when full, lift it off (a two-person job), place it beside the exposed heap and then fork all less-rotted material into it, leaving the finished compost for spreading.

I have found least success with rotating cylinders and drums: although easy to turn, they admit insufficient air and tend to make well-mixed silage. By contrast, the value of turning a heap with a fork is largely the introduction of fresh oxygen to feed all the bacteria.

Rats

Heaps are attractive to rats, and once arrived, usually in autumn, they will certainly make themselves at home, especially over winter. They enjoy both the warmth and any edible additions. To reduce their menu, avoid all food scraps (see 'Suitable ingredients', below), even anything remotely edible such as peelings of potatoes, apple cores and avocado skins. Encourage cats or a terrier to patrol, particularly when you are turning or spreading compost in spring. (As late as May I once chanced upon a nest of ten baby rats.)

Worms

When compost is almost mature, heaps built on soil will fill up with small, red brandling worms. They are present in small numbers in most gardens and multiply rapidly in piles of damp, partly rotted organic matter. Their feeding and secretions are a great help in achieving the last phase of composting, which results in soft, crumbly and extremely fertile humus, also known as 'vermicompost' by those who maintain worm composting

units.

Brandling worms (*Eisenia foetida*) are not the same as earthworms (*Lumbricus terrestris*), which are paler and fatter and are more important in the soil, to shred and incorporate organic matter and build fertility with their secretions and tunneling.

Suitable ingredients

There are many recipes for making compost but, most importantly, the aim is to use up and rot down all of a garden's waste. Sometimes this means mostly grass mowings, sometimes mostly prunings, sometimes mostly kitchen waste. Aim for all ingredients to be moist rather than soggy, and small in size.

- Grass mowings are valuable for heating rapidly, and compost best when mixed with cardboard, paper, leaves, small twiggy wastes and crop residues.
- Prunings of trees and hedges need chopping into 15cm (6") lengths at most, otherwise they allow pockets of air that prevent the build-up of heat. Large quantities of woody material are best taken to a recycling centre, unless you have a shredder.
- Kitchen wastes, such as fruit and vegetable peelings, coffee grounds, teabags and eggshells, are excellent. However, avoid food leftovers because they encourage rats and foxes – put them in a green bin for your local council to compost or give them to poultry.
- Leaves are fine in small quantities, though too many will slow and cool the fermentation. Large amounts can be turned into leaf mould over one or two years, in sacks or bins.
- Weeds rot down well, even perennial roots such as dandelion and the odd root of almost anything, but there are exceptions. Bindweed roots are best burnt, unless you have lots of grass mowings to help them rot quickly, and weeds with excessive amounts of seed may be better taken to a recycling centre, because their seeds usually survive unless heaps heat up thoroughly.
- Crop residues such as pea haulm and tomato stems are often on the woody side, and need both chopping up and mixing with some green matter. Diseased leaves are fine to put on your heap, including blighted tomato and potato plants, because most fungal diseases arrive in moist air, rather than from soil or compost. White rot is an exception: infected onions, leeks and garlic are best burnt.

- Newspaper and cardboard need to be moist and scrunpled, and rot nicely in the presence of some green waste.
- Air is a vital ingredient, dispersed evenly through heaps. Intermix soggy and wet ingredients with fibrous ones. Turning heaps introduces valuable air.
- Soil is sometimes recommended as an ingredient for its bacteria, but usually there is enough on roots of weeds and crop remains.
- Minor additions of wood ash (not coal), yard sweepings, and vacuum cleaner bags are fine as long as they contain no metal or plastic.
- Do not add plastic, unless it is clearly labelled as biodegradable, because it will not rot down.

TURNING COMPOST

Heaps can be turned as soon as they cool to lukewarm. Although most gardeners do not find time for this, it is well worth the effort. Air that is introduced will help further decomposition, as will further mixing of any uneven parts of the heap. Turned heaps are ready after another month or so, and are less work to spread since their contents are more even.

Layering or turning

Many texts recommend compiling regular layers of different ingredients. This can make the process more complicated than it needs to be, and in practice all ingredients are best added as they become available. I find that layering can even be disadvantageous, and prefer to mix different ingredients together. In July, for example, there may be a large amount of grass mowings, followed, two days later, by a lot of broad bean stems (chopped into 15cm / 6" lengths preferably, or smaller). These are ideal companions, and mixing them together with a manure fork will help the hot mowings to speed up the decomposition of the woodier bean stalks.

STARTERS, ACTIVATORS AND ACCELERATORS

Small additions of animal manure such as poultry droppings can really add quality to compost, thanks to their fungi, bacteria and nutrients, which all contribute to faster decomposition and a more nutritious end product. Nettles can have a similar effect. Adding rockdust in occasional handfuls contributes minerals and helps them to be more available to plant roots through the partial breakdown of the dust. Many other proprietary products may be bought, but are unnecessary where basic compost ingredients are available.

Most gardeners use a compost heap as their garden refuse bin: to achieve some fine compost from ingredients added at random – for larger heaps especially – one turning is really worthwhile to mix things up and to admit air for a second fermentation. Time spent in turning a heap is regained at spreading time, when the compost is more even and of better general quality.

Last additions

The eventual height of any heap depends on how long it has taken to assemble, because some rotting down occurs long before arrival of the last ingredients (see Plate 1). Any height between 1.2 and 2 metres (4-6') is feasible, and the heap will soon decline to half that or less.

A waterproof cover will prevent cold rain from removing heat and air. A month or two later, the much-diminished heap can be turned, or spread on the garden if sufficiently decomposed. Leaving it for longer will result in a more crumbly compost, as long as no basic mistakes have been made!

This does not apply to bins where compost is regularly removed from the bottom, because in theory their contents should keep recycling forever. Should they stay full and decline to compost, they may be too dry, or with too many large stems making large pockets of air, or contain a wrong balance of ingredients, such as too much wood (see below).

Problems

I find that the compost of every heap has different qualities and defects, always reflecting its ingredients, the kind of protection, rainfall and the time of year. Here are remedies for some common problems.

Soggy compost, often bad-smelling, results from:

- too much fine green matter with too little fibre. Remedy: add more crumpled paper, cardboard or other high-carbon ingredients.
- too much rain percolating through the heap. Remedy: cover as soon as complete and turn once to admit air.
- a poor site with bad drainage. Remedy: make heaps in a drier area.

Uneven compost, with large lumps unrotted, is usually a result usually of insufficient chopping, shredding or mixing, meaning too many air pockets, not enough surfaces for bacteria to work on and insufficiently mixed material for successful decomposition. Remedy: mix and chop more thoroughly.

Pockets of undecomposed dry ingredients. Remedy: Make sure, when adding large quantities of dry waste such as pea haulm, that it is sufficiently chopped to pack down and absorb any moisture added. Some stemmy wastes make a fibrous mat that water simply percolates through.

Generally, **poor decomposition** may have several causes, ranging from a lack of green matter to too much or too little moisture or waste added in too large pieces. It should be possible to deduce which of these factors is to blame from the exact condition of unrotted compost. Every heap is an interesting reminder of earlier seasons, and a wonderful way of processing waste.

Chapter 8

The moon



When people ask whether I take the moon into account in my gardening, I am mostly surprised that the question even arises. Consider how the moon pulls great masses of water in the oceans. Plants are mostly water, so how could they not be responding in some way to the moon's force?

But what effect exactly is the moon exerting on plants? I think nobody knows for sure, although I have observed that it certainly does. I love to cut open roots of beetroot 'Barbietola di Chioggia' (see Plate 14), whose sweet white flesh is ringed with pink circles that correspond to each moon of the plant's life. Leeks seem to create one leaf for each half moon, but some vegetables reveal no obvious pattern – carrots, for instance, show fantastic explosions of lines from their centre, but no series of rings.

How, as gardeners, can we best work with the forces of the moon to help them work in our favour? There are two different schools of thought, which I explain below. You will have to decide which makes more sense for your own gardening.

The traditional approach

The traditional approach, in Britain at least, mostly relies on whether the moon is waxing or waning. Waxing happens over 14 or 15 days between the new moon, when no moon is visible, and the full moon. So a waxing moon is growing brighter and larger, and is considered to have an uplifting or drawing-up effect on plants. Its signature effects are strong leaf growth and general vigour above ground, especially of plants whose seeds are sown two or three days before the full moon, when the waxing effect is strongest.

A waning moon occurs between full and new moon, so the moon that we see is becoming thinner every night, until it disappears again and becomes the next new moon. This fortnightly period is one of 'contracting forces' that favour

consolidation below ground. Growth of roots is enhanced, so, for example, carrots and onions sown during a waning moon will tend, over the course of their life, to emphasise root development a little more than leaf growth.

One moon above all is traditionally of great importance for plant growth: the first full moon after the spring equinox, seen as harbinger of spring and new life. The Christian festival of Easter still follows it, on the first Sunday after that full moon.

If you want to take the moon into account, the simple framework described above, and in the hundred-year-old poem below, is an excellent place to start. It was much used by farmers and gardeners before we all became more scientific.

*If ye plant yer corn on the growin' moon,
And put up the lines for crows,
You'll find it will bear, and yer wheat will too,
If it's decent land wher't grows.
But potatoes now are a different thing,
They want to grow down, that is plain;
And don't you see you must plant for that,
When the moon is on the wane!*

Paying attention to waxing and waning may also alert you to other changes in your mind and body, and in the weather as well. I have often remarked shifts in weather patterns that correlate with new or full moons, and when this occurs the pattern may persist for most of the next fortnight, especially if it is a change to fine weather. The new moon seems to have a greater effect than the full moon, while both cause a noticeable difference to rainfall, usually increasing it.

One drawback to working exclusively with a waxing and waning moon framework is the long period of each. If you miss sowing carrots before the new moon, a whole fortnight must elapse before another opportunity comes around. Another snag is that most gardening work is governed by the waxing moon, which is benefiting leaves, flowers and fruits, indeed everything except plants whose growth below ground interests us.

The astrological approach

Another school of thought about moon forces looks at how the moon

translates energies from the constellation in which it resides at any one time. Much of the work on this has come from biodynamic farmers and gardeners, who follow the teaching of Austrian mystic Rudolf Steiner. He developed a whole system of farming in tune with cosmic forces that is extremely successful and used worldwide, although somewhat less in Britain.* Biodynamic gardeners watch the moon very closely: how it looks and where it is in the sky, as well as how it relates to other planets and the universe as a whole.

Just as the sun passes through 12 constellations each year, so the moon passes through all of the same constellations each lunar month, spending about two and a half days in each. From each one it picks up one of the four dominant characteristics, or elements: Earth, Air, Water or Fire. So the moon in Taurus has an earthbound, rooty influence; in Gemini an airy, flowering one; in Cancer a watery, leaf-promoting effect and in Leo a warm and fruity aspect. After nine or ten days the 'Earth, Air, Water, Fire cycle' is finished and repeats itself, so that if you miss an opportunity to plant, another comes along quickly.

Researchers such as Maria Thun in Germany have collected plenty of evidence to suggest that this fourrhythm cycle has a strong effect on plant growth. To follow it, you need a current year's guide book (see Resources) to know which constellation the moon is in on any given day. There is also the peculiar fact that this cycle can contradict the waxing/waning approach, because it is possible to have 'root' days during a waxing moon and 'leaf' days during a waning moon.

One further aspect is the contrast between an ascending and descending moon. For half of each lunar month, the moon is higher in the sky each night, equivalent to the sun rising higher each day between the winter and summer solstices. This fortnight sees more rapid flow of sap and vigorous growth, similar to the waxing effect. Then in the fortnight of a descending moon, root development is encouraged and transplanting is more likely to succeed.

The practical approach

If working with the moon appeals to you, the simplest rhythm to use is waning and waxing. Many ordinary calendars show the dates of full and new moons, giving you an immediate sowing guide for the year ahead.

Remember that the moon's quality at any given time is most powerfully transmitted to plants when their seeds are brought to life by coming into contact with damp soil. This contact moment is like a birth sign, a signature effect that

stays with plants all their lives, so if you do nothing else moon-wise, it is worth sowing seeds at favourable moments. This means doing a little homework in advance to see when your gardening days or hours coincide with good moments for sowing. Becoming more aware of moon phases is an enriching process, quite apart from any benefits in gardening.

Green fingers

Just as important as the moon – perhaps more so – is the gardener. You and I carry thoughts and feelings everywhere and not least to the garden, where sensitive plants respond to them. If we are depressed or upset, our plants may succumb to some of the same malaise. When our mood is warm and sunny, growth is enhanced. True concern for plants and a desire for their health and well-being is felt by them as a positive help, which is probably what it means to have green fingers.

Feedback happens in both directions, because plants can also help us. Many people experience a calming and beneficial effect when surrounded by plants in a well-tended garden, so we have the chance, through cultivating better thoughts and feelings ourselves, to set up a virtuous circle of mutual help.

*Rudolf Steiner became prominent in the early twentieth century. He divined his understandings intuitively, and specifically related many of them to the land, because of the importance he attached to eating good food, in order for people to realise their full potential, both earthly and spiritual. Biodynamic scientists have a way of measuring life forces in plants, using silver chloride on filter paper, that reveals striking differences between, for example, carrots that are biodynamically, organically or chemically grown. See Biodynamic Agricultural Association in Resources.

PART 2
HEALTHY HARVESTS

Chapter 9

Summer salads

Top-quality leaves every day



Growing salad leaves in the summer half of the year is perhaps the most rewarding part of vegetable gardening. They grow quickly, they are beautiful to behold, and when picked fresh from the garden they have a quality that is rarely found in bought salad. The more healthy your soil, the better they become. After many years of adding compost to the soil, the leaves develop even more exciting flavours, and each one boasts a crispness, a colour and an allure that will make you simply want to eat more of them.

Furthermore, seed catalogues are now bursting with a huge and growing variety of flavours, colours and textures to try out. In the world of lettuce alone, I have grown and enjoyed over 50 different varieties, and love to experiment with planting varied combinations to serve as ingredients for different salad mixes. Or, more simply, you can buy mixes of different seeds in a packet, which vary according to which seed company selected it. I recommend, for any sowing before July, that you choose a lettuce-only mix, without rocket or oriental greens, because they have different requirements and will not thrive from being sown before the longest day.

LETTUCE

Lettuce is ideally suited to the British climate and conditions, growing quickly and healthily from about April to October. It thrives in both moist and sunny weather, has only one notable pest, the redoubtable slug, and only one significant disease, mildew of the leaves, which can be avoided in most conditions (see page 69).

Pests

Special advice on dealing with pests, and slugs in particular, is given in

Chapter 5 and at the end of this section (see page 69). Such vital information is often too important to be put separately under ‘Problems’ because it affects everything else, from sowing to growing and the varieties used. Also, pest numbers and behaviour are affected by how soil is cultivated or not, and to how and how much compost is used.

Categories of lettuce

Most seed catalogues list lettuce in five main groups.

Butterheads have soft, round, floppy, slightly waxy or buttery leaves and well-rounded hearts. They overwinter better than most other lettuce, and are usually pale green or yellow in colour, with some interesting exceptions.

Cos are tall, thinner-leaved and usually dark green, but with some nicely different colours now becoming available. They do best in slightly warmer conditions and, although normally grown for hearts, many varieties perform well as leaf lettuce.

Batavian have thick, crunchy leaves of variable colour. If allowed to heart, they are pale and crisp, while many can be grown as leaf lettuce.

Iceberg / crisp make light green hearts of smooth, watery leaves. They are relatively susceptible to tipburn (see page 70).

Leaf lettuce are the most suitable for regular picking of leaves as they grow, or for cutting as baby leaves when very small. Some will heart up if allowed to; most will simply make a larger and larger mass of small leaves at their centre. Since many of the cos and Batavian lettuces can also be treated as leaf lettuce and picked over for a regular supply of leaves, this expands the repertoire to a wide range of shapes, colours and flavours.

LEAF LETTUCE

Season of harvest: May-October

Follow with: it depends when they finish – French beans, leeks, kale, oriental leaves are all possible

<i>Variety</i>	<i>Character Special qualities</i>	<i>Sow</i>	<i>Spacing (cm) Harvest</i>
BERGAMO	Vigorous, bright green Attractive, long-lived	Mar-Aug	Min. 20x20 May-Oct
BIJOU, ROSEMOOR	Vibrant dark red Tasty and ornamental, slug-resistant	Mar-Aug	Min. 20x20 May-Sep
GRENOBLE RED	Hardy, attractive For leaves or heart, slug-resistant	Feb-Sep	Min. 20x20 May-Oct

For other varieties see page 67.

For other varieties see page 67.

Sowing

A fair rule of thumb in sowing generally is to cover seeds with as much compost as the seed is thick. Lettuce seed is small and fine, and grows best if covered with very little or even no compost at all. I find most success with greenhouse sowings into modules: I just drop lettuce seed on the surface of well-wetted compost, and do not cover it at all. In soil outdoors, draw a shallow drill and sow at the rate of about ten seeds per 5cm (2").

One special thing to remember when sowing lettuce is that it is not supposed to germinate in hot weather. In practice, however, I have almost always had excellent germination in high temperatures. Keeping a newly sown seed tray in the shade is a wise precaution in high summer, until small leaves are visible after three or four days.

If you have sown seed in a row outside, there is a choice to be made after about three weeks: either to crop the plants as baby leaves where they are, or to space them out more widely and either pick leaves off them for a longer time or wait for a heart to develop. Seed packets often come with advice that promotes the idea of 'regular cutting', as opposed to careful picking of leaves. In fact this leads to plants' untimely demise and the need to re-sow.

I strongly recommend the longer-term use of fewer plants, and looking after them more carefully. Above all, they need to be given room to develop a worthwhile root system. If you have raised or bought 30 to 40 plants – a good number to provide leaves for a family over at least two months – dib holes about 25-30cm (10-12") apart. Place each plant firmly in its hole, so that the top of its root system is just covered by soil, and then give a little water to each so that its roots are moistened and helped to make contact with the soil all around.

CHARLES DOWDING'S LETTUCE METHOD

Between two and four weeks after setting out plants, depending on the season (less in summer), the larger outer leaves can be carefully picked

off to leave the plant looking quite denuded, but always with no less than four of its youngest leaves at the centre. These will quickly re-grow to provide more medium-sized leaves for salad. Some of the first picking will be slug-eaten or a little mouldy, but thereafter leaf quality should be very good. This process is pictured in the first colour section, page 11.

In this way, a steady stream of lettuce leaves can be picked off a small area, with much less need than usual to re-sow. The same plants are repeatedly cropped, always leaving the growing central rosette of baby leaves and never using a knife. A miserly three sowings of lettuce can provide leaves for the whole season from late April to early November, depending somewhat on timing of the last and first frosts at either end. You will not see this recommended on any seed packet, as it is very economical with the contents!

The repeated picking of leaves makes the plant want to grow more, and more, and more, because it needs a certain volume of root and leaf before it feels ready to rise to seed. Hence the life and productivity of each plant is considerably increased.

Growing

The harvesting period lasts a long time for well-picked leaf lettuce (see box on page 65): keep plants tidy, weeded and occasionally watered in dry weather. After about two months of picking, some plants will start to make a noticeable central stem, with their leaves becoming smaller and a flower bud appearing. Few worthwhile leaves will be produced after this happens, so the plant is best removed by twisting it out of the soil, tapping the roots clean of soil lumps and removing it to the compost heap.

If weed seedlings come up thickly among the lettuce, they can be hoed off carefully after any thorough picking, which will have made it easier to pass a hoe between plants. Or you can scrape amongst the plants with a trowel, or hand-weed when there are just a few weeds. Keeping the soil clean is highly worthwhile in order to prevent any weeds from flowering, and to provide fewer habitats for slugs.

The lettuce season can be extended by laying fleece over early plantings in late March or April, to keep cold winds at bay and afford some protection on cold nights. This is optional, as the plants will grow without it and sometimes fleece can afford shelter to slugs, in very wet weather. I mostly use fleece for my very early plantings of lettuce that have been raised in gentle heat from sowings

in mid-January. They are ready to plant by mid-March and usually survive all sorts of inclement weather under their light cover, which is stretched out on top of the plants, touching them all, and held down by stones on all sides, one every metre (3') or so. As the plants grow, they firmly push the fleece up and it looks like a tight skin on top of the bed. It is better tight than loose, so as not to flap around in the wind.

Even without fleece, young lettuce plants resist gentle freezing, enabling an earlier start and later finish than is commonly appreciated. And over this long stretch of time, lettuce enjoys a 'season within its season', from May to July, when leaf quality is especially high and mildew on leaves is almost absent.

Compared with oriental greens and rocket, lettuce leaves are often pure and unblemished, especially when grown in a compost-rich soil. The compost is less important for nutrients; more for water retention and a certain vitality that is imparted to the plants. For even more healthy vigour, an occasional spraying of liquid seaweed or prior application of volcanic rock dust can make a difference.

Lettuce leaves are mostly water, and in dry weather they will certainly benefit from a good sprinkling every two or three days – not every day, or slugs will enjoy themselves too much. A thorough wetting of the soil once a week is the best method, particularly when plants are being left to form a heart.

Varieties of leaves and hearts

Here are some commonly available varieties, with my observations of their behaviour in Somerset.

All except Webbs Wonderful can be treated as a leaf lettuce, with frequent picking of outer leaves. Some will make hearts if left unpicked.

Amorina (Plate 7) A slightly larger and light cherry-coloured version of Bergamo, one of the prettiest to grow and it adorns any flower bed. Like Bergamo it is slow to flower, so you can enjoy a long season of picking; it also grows well in the darker days of autumn.

Belize Oakleaf A variety with masses of vibrant, yellow-green leaves for up to three months of picking.

Bergamo A bright green, deeply crinkled 'Lollo Biondi' (as opposed to 'Lollo Rosso') type that grows steadily for a long period. If sown in April it should keep cropping, when regularly picked over, until late July, being one of the slowest to rise to seed. The first leaves are a little tricky to pick as they lie close to the soil.

Bijou One of the darkest red cultivars whose depth of colour will enliven the garden, especially if contrasted against some lighter-green lettuce or other vegetables. It crops steadily but at a slower rate than green lettuces. A rule of thumb is that the darker the leaf, the slower its growth. The intensity of colour more than compensates.

Catalogna Vigorous mid-green Italian lettuce with long serrated (oak-shaped) leaves, a top cultivar for early sowings as its speed of growth through April is second to none.

Chartwell, Claremont (Plate 2) Two green cos varieties, suitable for picking of leaves over a long season, or to make a sweet heart.

Cocarde Like a bronze version of Catalogna, almost equally vigorous and large-leaved but a little quicker to flower. Easier to pick than many oak-leaf varieties because there is a little more space between each leaf, allowing access to the fingers.

Freckles (Plate 6) Exactly as its name suggests: small spots of dark red to brown on light green leaves. Some plants have disappointingly few freckles; some have a lot and they all produce over a long season. I have picked Freckles' leaves from the same plants between mid-April and mid-July – three whole months. Slugs like them more than other varieties.

Grenoble Red or Rouge Grenobloise (Plate 3) Firm, crisp, green and bronzed shiny leaves. My favourite for its winter hardiness and ability to resist slugs and mildew. It is normally sold as a hearting lettuce, with a pale crisp heart not unlike a crinkly iceberg, but I have found it suitable for cropping as a leaf lettuce, and regular picking of leaves can make it remarkably long-lived. For example, my last sowing of the year is in early September, for planting in a polytunnel in early October. A few leaves are picked in November and a very few from December to mid-February. Then production increases, reaching a long peak in May and June. When the plants rise to flower in late June, they are 10 months old and have yielded about 100 leaves each. I grow Grenoble Red less in the summer, since so many other cultivars come into their own then, and in high summer, if allowed to grow a heart, it is prone to tipburn (see page 70).

Little Gem Probably the most well known, small and sweet cos type, it takes two to three months to develop a heart. Its outer leaves may look old and diseased by then, but when they are peeled away, a fine, crunchy heart is revealed. Space closer at 15cm (6").

Lobjoits Like a much larger Little Gem and with smoother leaves. Can be pleasantly sweet in well-blanched hearts but prone to tipburn.

Maravilla di Verano High yielding Batavian variety with thick, crunchy, bronzed leaves over a long season.

Marvel of Four Seasons A fine butterhead with waxy and attractively mottled leaves, bronze on light green. As the name suggests, it is hardy and can be sown in mid-August for an attempt at overwintering.

Salad Bowl Found in all seed catalogues. Green or red oak leaf, and somewhat prone to mildew.

Webbs Wonderful The original crisp lettuce, making a large crunchy heart. Leaves are a little more crinkly than those of a true iceberg such as Saladin, which are brittle, thin and glassy.

Winter Density Often grown as an overwintering lettuce from an early September sowing for hearting in spring, but it is a favourite of slugs. When sown in the spring it grows quickly and can be picked as a leaf lettuce, which keeps slug numbers down. The flavour is excellent.

Harvesting lettuce

(See box, ‘Charles Dowding’s Lettuce Method’, page 65.)

The regular harvest of leaf lettuce can continue outdoors from May to late October, unless a frost arrives earlier. First harvests of hearts are usually Little Gem in June, others in July, and continuing until the first frost. Cutting a lettuce heart is often terminal for the plant, although some regrowth may happen and it can be worth waiting for the small new shoots if you have no other lettuce available.

Problems

Slugs are the number one pest of lettuce. Here are some tips to lessen their numbers, also applicable to all slug-tender crops, including most other salads.

- Keep soil clear of weeds.
- Grow or buy strong, healthy lettuce plants.
- If sowing directly in soil, if nothing is visible after a fortnight you will need to re-sow, because slugs must have eaten the baby seedlings. Setting out plants is more reliable.

- Do not plant too close to walls or areas of long grass and thick vegetation, where slugs will be abundant.
- Regular picking of larger leaves, with bare soil between plants, definitely keeps slug numbers down. It also keeps **mildew** at bay: in damper autumn days especially, many of lettuces' lower and older leaves can be covered on their undersides by this white powdery fungus that saps their goodness and turns them yellow.
- In patio pots, a strip of copper around the outside top rim of the pot can prevent the arrival of marauding slugs.
- Collecting slugs and snails by torchlight is a highly effective way of reducing their numbers.

The critical moment is always sowing or planting time. Baby seedlings and newly set out plants are highly attractive to slugs, so lessening their numbers by having soil bare for at least a week beforehand will always help. Planting under fleece or cloches in cold weather can enable young lettuces to establish more strongly and resist slug attack.

When slug numbers are controlled, there is always a little damage to a few older leaves, but if their numbers are allowed to increase too much some damage to younger leaves will occur. One can never relax too much where slugs are concerned, and growing more resistant lettuce varieties, such as Grenoble Red, is another option. A fair rule of thumb is that the redder the leaf, the less slugs eat of it.

LETTUCE HEARTS

These take two to three months from sowing to maturing. As they firm up, watering is important in dry weather to avoid rotting of leaf ends (tipburn) and to help the heart grow to a good size. Hearts often break out into a flower stem quite quickly, so grow just a few from each sowing. Heart leaves are sweeter and paler than outside leaves, because they have 'self-blached' as the heart expands.

Some summers there may be invasions of **lettuce root aphid**, which becomes apparent when plants of any size suddenly wilt and die quite quickly. Once arrived, the aphids travel only within soil but unfortunately can spread easily to adjacent plants, and I know of no organic remedy at present. They survive the winter on poplar trees.

One other problem can be **tipburn**, a browning of leaves' outer margins, but this happens only to certain hearting lettuces in hot, dry conditions, when their

roots are unable to supply sufficient moisture to all of every leaf. Regular and ample watering of large, hearting plants is important. Smaller plants, regularly picked over, rarely suffer tipburn.

Salade composée

Take an attractive selection of salad leaves – some endive, radicchio, lettuce and parsley. Cut a couple of rashers of bacon into fine strips, and fry them until crispy and set aside. Next make some croutons – cut some stale (or fresh!) bread into cubes and fry them in the pan with the bacon fat and some olive oil till crisp, chop some garlic and add it to the pan. Allow to cool. Make a vinaigrette in the bottom of your salad bowl:

1 teaspoon wholegrain mustard, a couple of grinds of a salt mill, 2 tablespoons of vinegar, 6 tablespoons of olive oil. Dissolve the mustard and salt in the vinegar, then add the oil. It is now ready to receive the leaves. Put the croutons and bacon on top of the leaves to serve, and toss well at the table. Variations can include walnuts and cubes of cheese; in fact the possibilities are endless.

ORIENTAL LEAVES

Season of harvest: August-November

Follow with: n / a

<i>Species</i>	<i>Character</i> <i>Special considerations</i>	<i>Sow</i>	<i>Spacing (cm)</i> <i>First harvest</i>
MIBUNA / MIZUNA	Long, mild-tasting leaves Rapid growth, pick regularly	Jul-Sep	3x25 or 20x20 3-4 weeks
MUSTARDS	Hot, spicy leaves Few plants needed, many varieties	Jul-Sep	3x25 or 20x20 3-4 weeks
PAK CHOI	Crunchy stems Needs slug-free environment	Jul-Sep	Min. 10x10 6 weeks

Sow later for reduced pest damage

Oriental leaves are tender, fast-growing members of the cabbage family (brassicas) that really expand the range of salad flavours after midsummer. They are easiest to grow as autumn, winter and early spring leaves, in which seasons they make healthier leaves that are less prone to insect attack than leaves from sowings in springtime, which are usually disappointing because the plants often rise to flower quite quickly and suffer badly from flea beetles. Multitudes of these small black insects hop around on most brassica leaves in spring and early summer, eating small round holes in them, which become larger as the leaves grow.

Various organic remedies for flea beetles have been suggested, and the most effective is to cover any susceptible crop with fine fleece or mesh so that the beetles are excluded. Even then a few will always do some damage, so the best solution is to sow susceptible plants in late July and August, by which time flea beetles are much less common. August sowings of rocket, for example, provide some of the best rocket leaves of the year – from September through to April in mild areas. Rocket is not strictly an oriental leaf, but has a similar pattern of growth because it also belongs to the brassica family. Chapter 14 (Brassicacae) has further information on the difficulties and rewards of growing them.

As a rule, the later the sowing the cleaner will be the leaves, up to about the middle of August, by which time there are only just enough growing days left for outdoor plants to make a worthwhile size before winter. One sowing in late July and two in August will provide a range of interesting flavours for much of the late summer and autumn. As with lettuce, sowing seed thickly provides many small leaves, or thinning down to plants at 20-25cm (8-10") apart will provide larger leaves and thicker stems over a longer period, suitable for stir-fries as well as salad.

Chinese cabbage Usually grown for hearts, sown in late July and harvested in October before any notable frost. One heart can provide a number of salads, and since they store well I describe them fully in the next chapter, Winter Salads.

Leaf radish Faster growth than any other salad, with leaves tasting slightly of radish. If left unpicked, a long white root will develop as an alternative harvest. Quality declines in December and through winter, except in a tunnel or greenhouse. Sow from mid-July to early September, and thin plants of first sowings to 5cm (2") apart in 30cm (12") rows.

Mizuna (Shown in Plate 9) Probably the fastest and most productive salad plant of all, with long feathery leaves, thin white stems and a mild but spicy flavour. Best kept for winter but if you like it in summer too, and don't mind some holes from flea beetles, regular small sowings after mid-July will provide abundant leaves. Cutting is possible within a month of sowing and about 3cm (1") above soil level. Second and third cuttings may be had at ten-day or two-week intervals. If left to grow large, the leaves become rather long with spindly stems, except for the variety Waideo whose leaves are shorter and fatter, more suitable for individual picking and with a longer harvest period.

Mibuna Long, thin, dark green, smooth leaves have an appealing mild

taste, possibly the least peppery of all oriental leaves. No varietal distinctions; sow as for mizuna.

Mustard Comes in red, green and golden colours, with quite long and more-or-less serrated leaves. The common attribute is a hot, pungent flavour and fast growth, so regular picking of small leaves is definitely a good idea. Any larger leaves can be added to stir fries, in moderation. Best sown in August for picking from late August. Red Frills is my favourite, for its slightly milder flavour and gorgeously dark red, deeply indented leaves, which resist some frost: under cover it is a really excellent winter salad – see next chapter.

Pak choi An increasing number of varieties is now being offered. For summer salads, green-stemmed pak choi is worthwhile because it tends to make more, smaller leaves than the white-stemmed kinds. I find that any sowings before August are prone to flower quite quickly, except for Joi Choi (see page 92). Pak choi's mild and succulent taste is unfortunately appreciated enormously by slugs, the large outer leaves especially. So, once again, pick small leaves regularly – and also carefully, because pak choi grows so fast that it has a very fragile root system that can be uprooted if leaves are pulled off too roughly.

Shugiku Also called chop suey greens, this is a member of the chrysanthemum family with no named varieties on offer. Its pungent flavour is quite different from anything else and if you like it, keep picking the vigorous new shoots before they flower, over quite a long period.

OTHER LEAF FLAVOURS

Season of harvest: April-November, depending on type of vegetable or herb
Follow with: it depends on crop chosen

<i>Vegetable / herb</i>	<i>Character Special care</i>	<i>Sow</i>	<i>Spacing (cm) First harvest</i>
BASIL	Great range of flavours Keep warm and on the dry side	Apr-Jun	25x25 12 weeks
BROAD BEANS	Bean taste in leaves Pinch out growing points at flowering	Nov-Apr	10x20/25 16-20 weeks
CHARDS red, yellow, white	Vibrant colour Darker colours are less vigorous	Mar-Jul	20x20 8 weeks
DILL	Fresh clean flavour Keep picking leaves and flowers	Mar-Jul	20x20 8-10 weeks
ENDIVES / CHICORIES	Bitter taste, rich colours Late summer crop	Jun-Aug	25x25 6-12 weeks
PARSLEY	Rich flavour, vitamins Long lasting, esp. curly parsley	Feb-Jul	25x25 10-12 weeks
PEAS, many varieties	Leaves have fine flavour Keep picking growing points	Feb-May	5x20 or 20x: 6-10 weeks
PURSLANE, Green or Golden	Succulent fleshy leaves Sow direct, green lasts longest	May-Jul	8x25 6-8 weeks
ROCKET, many kinds	Peppery taste Small leaves are milder, flowers taste good	Aug-Sep	8x25 4-6 weeks
SPINACH	Deep green Keep picking small leaves	Feb-Jul	20x20 or 5x: 6-8 weeks
TREE SPINACH	Gorgeous magenta colour Pick new shoots regularly, larger leaves are tough	Feb-Jun	30x30 10-16 weeks

Lettuces grow fast between May and September so, from not many plants, you should have enough leaves. To add extra interest, flavours and appeal to summer salads, try leaves from any of the following.

Basil The ultimate taste of summer, basil is ready to pick by about late June from April sowings indoors, continuing until late summer, or longer if nights stay warm (see Chapter 17, page 192, for more details). Basil is a Mediterranean plant, appreciative of steady warmth and strong sun, with not too much moisture on its leaves. Best results are always in the greenhouse or polytunnel, or in pots on a sheltered sunny patio. If planted in an open garden, it just needs a long hot summer.

The standard sweet basil (Genovese) is productive and good for making pesto; keep picking its larger leaves and any shoots with flower buds. There are many other worthwhile varieties, some of which are less quick to flower: Greek basil is a favourite of mine, providing a steady flow of small-leaved shoots over a long period. It will grow into a fair-sized bush of bright green leaves, and its outermost stems can be trimmed with a knife, similar to pruning box or privet. Lemon and lime basil are true to their names, offering green leaves with a pungent citrus aroma and taste: I find that lime basil lasts for longer than lemon. Sweet Thai has small leaves streaked with dark red and a strong taste of aniseed (see Plate 37). Red basil of various names have a slightly bitter flavour but a

deep rich colour. Certain catalogues list an even more extensive range, and it is fun to discover what they all taste like.

Broad Beans Less tender than peas and with a stronger flavour; pinch out the very topmost cluster of leaves. This is best done when flowers are appearing on the stem, to encourage filling of the bean pods. Almost any variety will serve this purpose, sown either in November or from February to April. Grow as for beans to eat, as described in Chapter 13 (page 127).

Chard Leaves of chard in salad need to be small. Some salad growers even use them as a large proportion of their leaf mix, sown thickly and harvested as babies. Or you can raise plants in groups of three to five and set them out about 30cm (12") apart, then pick individual leaves as they grow rapidly through many months. Sow from March to June, for harvesting six to eight weeks later. Rainbow Chard or Bright Lights are common mixtures of different-coloured chard seeds. In summer, I recommend using only the red and yellow, because white- and pink-stemmed plants grow almost too fast and big. To achieve this, either sow four or five seeds of rainbow chard per 3cm (1") module, then remove the colours you do not want as they grow, or buy packets of one-colour chard, or of Bulls' Blood Beet, whose leaves are ruby red, with the bonus of an edible beetroot by the end of summer. Chapter 15 (see pages 179–80) has more tips on chard and spinach.

Dill Gives a lovely fresh zest and aroma to early summer salad. Sow as early as March, either direct or with four seeds per 3cm (1") module. Dill makes a stem up to 90cm (3') high and rises to flower quite fast, especially from later sowings, so you may want to sow again in May and perhaps in July. Keep picking the lower leaves and any flower buds that form: they are edible and tasty. If allowed to set seed, dill can become a native of the garden, popping up here and there. There are few named varieties of dill.

Endive or Chicory Strictly speaking these are better in autumn, but can be sown in early June to provide some strong, bitter tastes through the summer. They can all be grown for leaf or for hearting, and allowing a heart to form makes the leaves sweeter and with pretty colours. Endive Frenzy has thin deeply cut leaves and can be sown as early as late May for cutting every week or ten days right through the summer, or for repeated picking of outer leaves. Chicory Treviso Red has mostly green leaves in summer warmth, turning red as temperatures drop in the autumn. Regular picking or cutting will keep leaves small and often more healthy. Palla Rossa radicchio (a kind of chicory) sown in early June will make beautiful deep red hearts

by August, which can be dissembled into a bowl of mixed salad for extra luminosity and crunchiness. See the next chapter for advice on growing these into hearts and on cropping them in winter (pages 77-81).

Orache and Amaranth Neither of these has a taste to marvel at, but their intensity of dark red colouring is remarkable, especially on the undersides of all leaves. Orache – often of no named variety – is a spring plant, best sown from February to April, and regular picking of its many leaves and shoots continues until early July, by which time it will be keener to set seed than to make leaves. Amaranth (try Garnet Red) is a summer plant, best sown late May to July, and its leaves are best picked small. If allowed to grow large, it will send up attractive flower stems with tiny edible seeds.

Parsley Normally listed as a herb, I treat it as a vegetable for its deep green flavour and high vitamin C content. Pick whole stems rather than fragments of them, to encourage new growth and to avoid unattractive yellowing older leaves.

Curled The most common kind in Britain, slow to germinate and slow to develop: it is sometimes said that only the head of the household can get parsley to grow. One sowing in March or April should last the season; another one in July should give plants that have a fair chance of surviving the winter in milder areas. Moss Curled is the standard variety and hard to improve upon.

Flat More common in mainland Europe, some people prefer its flavour to the curled. It grows more quickly at first and rises to seed more rapidly as well, so a sowing in March should be followed by a sowing in May. Overwintering is possible from a July sowing but not guaranteed. It is often sold as plain-leaved or French, while Italian is not vastly different!

Parsley

Keep a pot by the kitchen door so you can run out to pick some before dishing up. A bit of chopped parsley and garlic will cheer up any plainly cooked vegetable.

Parcel A new variation – celery-flavoured parsley: more suitable for soups and stews as the flavour is strong, almost metallic. Nonetheless, a useful way to introduce a little celery flavour to salads.

Peas Sow these more thickly than usual in March to mid-May, to provide delicious edible shoots from May to July. Later sowings run the risk of having mildew on their leaves. About six to eight weeks from sowing you

need to pinch out the plant's main growing point, or top 6-10cm (2.5-4") of stem, which has a fine taste of pea. Several new shoots should then appear, and the successive harvests of these new growing points can last for up to two months, by which time there may well be some peas as well. Many cultivars are suitable, I find the tall growing ones such as Tall Sugar Snap and Alderman do best as they make more vigorous, longer and easier-to-gather shoots.

Purslane Purslane's unusual round and fleshy leaves make it stand out in any salad. Do not sow before May, as it thrives in warmth and tolerates dry soil, within reason. See Chapter 17 (page 197) for more details; also winter purslane in the next chapter (page 93).

Rocket There are many different leaf shapes, sizes and flavours. Salad rocket has larger leaves and a higher yield than wild rocket, whose leaves are thinner, more serrated and with a particularly strong taste that is appreciated by rocket connoisseurs. Wild rocket flowers more readily, with yellow flowers as opposed to white ones on salad rocket. Until recently there were few named varieties available.

All rocket leaves are dark green and quite peppery to eat, especially in summer, so be sparing with how much you sow. You will get best results from sowings in August, by which time flea beetles are disappearing. Also, more leaves and fewer flower stems are produced from late summer sowings. Home-grown rocket tends to have more bite than the bought kind, which has probably been grown very fast with plenty of water and fertiliser. Usually home-grown rocket crops for about six weeks before rising to seed, at which point pinching out the flowering stem will encourage more, smaller leaves to grow. The flowers are edible and a beautiful ornament to any salad (see Plate 39).

Spinach (For Spinach beet, see pages 82-83.) A valuable addition to any salad, especially as it grows rapidly in the spring and early summer. Delicious dark green leaves are reckoned by some to be most nutritious raw, because the iron is more available. Spinach plants resist moderate frost so can be sown in late summer, before about mid-August, to overwinter outdoors. I find Medania reliable in this respect: about half my plants usually survive and produce large pickings of dark green leaves.

For best results, grow different varieties at different times, because each one excels at a certain time of year. For example, sow Tardy in February and March, and Toscane from April to July. Whereas Toscane sown in February grows more slowly than Tardy, Tardy sown in April rises to flower much more rapidly than

Toscane. Leaves are best picked small and frequently for salads, and can be cooked up if they grow too large.

Note that true spinach, more than spinach beet, is adored by slugs and you may need a night patrol to pick them off.

Tree spinach This plant is a relative of orache and fat hen, and produces many small shoots with glowing magenta colouring. Larger leaves are mostly green and tougher, so for salad leaves you need to keep picking the tender young shoots. One plant would provide enough: sow in early spring and pick from May or June until September, by which time it can be 2m (6') high.

Spinach salad

Another valuable spring addition to the diet. The first leaves we enjoy as a salad with bacon, croutons, and sometimes a crumbled hard-boiled egg.

Chapter 10

Winter salads

Leaves to lighten the dark months



Although new growth in winter is slow, there are ways around this and it is definitely possible to enjoy fresh salad leaves. The effort involved can sometimes feel disproportionate, but those few tender leaves are so precious and health-giving that eating them always makes it feel worthwhile.

There are four different ways to fill the salad bowl through the coldest months, from November to April. You could try all or some of growing and storing hearts, cropping leaves outdoors, forcing chicory roots indoors, and growing salad in a polytunnel or greenhouse. Each method produces leaves of different taste, colour and texture.

HEARTS

<i>Vegetable</i>	<i>Character Harvest</i>	<i>Sow</i>	<i>Spacing (cm)</i>
CHINESE CABBAGE	Loved by insects, fleece advisable Sep-Nov*	15-30 July 3-4 weeks	30x30
ENDIVE, Scarole types	Rots if too advanced! Sep-Nov*	20-30 July 2-3 weeks	30x30
RADICCHIO, Palla Rossa types	Many varieties, colours mostly red Sep-Dec*	1-15 July 6-8 weeks	30x30
SUGARLOAF CHICORIES	Heavy hearts, best leaves at centre Sep-Dec*	1-10 July 6-8 weeks	30x30

*frost permitting

Timing of sowing is vitally important so that hearts mature firmly in late October and early November, to be in good condition for keeping over a couple of months. In areas of only mild frost, some may be left growing until midwinter and harvested fresh.

Seeds need sowing in high summer to have had time to grow into substantial plants with masses of firm, blanched leaves that will keep fresh over a long period. Salad hearts are not frost hardy (much less so than many loose leaves), so

they must be picked before any frost of more than about -3°C (27°F) is expected.

RADICCHIO

These are the red-hearting members of the chicory family – hardy and deep-rooting plants that offer many kinds of leaves for winter salad. Their often-bitter flavour is significantly moderated by allowing them to develop tightly folded hearts, whose blanched leaves take on a slightly sweet taste to offset the residual bitterness, creating a delicious tension between the two.

Northern Italians have had the sense to breed a fine selection of beautifully coloured, crunchy and fresh-tasting radicchios of many shapes and shades, whose luminosity alone will brighten plates and hearts in winter. In northern Italy they are eaten as a cooked vegetable, braised in butter or oil for example. I learn more about growing and eating them every winter and become steadily more intrigued. Here I offer the story as I currently know it.

Much of the seed I use is from Franchi or ‘Seeds of Italy’, and I have asked the company why it does not translate the valuable information on its seed packets into English. The reply was that it plans to, after the current stock of many million packets is used up.

Even if there was a translation of the language, the techniques for successful growing of radicchio also need translating to British conditions. Some parts of Britain are actually milder in winter than northern Italy, but are also darker and damper, meaning that leaves can sometimes rot with little provocation.

Varieties

One or two specially bred varieties can be sown as early as late May to make a worthwhile heart in early autumn: an F1 hybrid called Indigo is extremely reliable in this respect. But mostly we are looking at sowing after the longest day to reduce any risk of premature seeding instead of hearting, and any of the Palla Rossa (‘red heart’ in English – but of intriguingly varied colouring) varieties will do, although some are designed to mature a little earlier and some a little later.

Sowing

Sowing in modules is definitely easier than sowing direct, because slugs are partial to young radicchio seedlings, and to baby plants as well. A good time to sow is the first half of July, before about the 10th to be sure of a fair-sized heart. Sowing later, say in the third week of July, can see nice hearts form by November if it is a mild autumn, but they will usually be

somewhat smaller, and it is rare to have good hearts from sowings in late July or beyond.

Growing

Clear the growing space of all previous crop residues and weeds, preferably a week or so ahead of planting. As plantings are in late July and up to mid-August, they can follow any of peas, broad beans, onions, spring salad, early potatoes, beetroot, calabrese and so on. Spreading a little fine compost before planting makes growth more abundant. Some watering will be beneficial in dry summers, especially in September as growth becomes substantial.

Hearting up

Many catalogues offer seed of unspecified Palla Rossa, which makes the familiar round red hearts, while Franchi offers varieties such as Agena and Marzatica (Plate 8), with round but white-streaked hearts, and Lusìa, which is more green than red. The first two have especially thick and crunchy leaves, whereas Lusìa's are softer and have a gorgeous spectrum of pink and yellow colours.

By September you should have quite large plants, having given them a little more space than lettuce – at least 30cm (12") in all directions. Then hearts will start to develop, at variable rates, becoming tighter and firmer until ... a few of them start to rot. Yes, I am sorry to say that radicchio hearts do not just sit patiently waiting to be gathered, although some will last well. This is why timing of the sowing is important: if too early, they mature before needed; if too late, they barely make a worthwhile heart. You may have a few failures before discovering the best dates for your soil and climate. It will be worth the effort. Lusìa has shown some promise in hearting as late as December, as long as the weather stays mild.

Harvesting

When a heart is reasonably firm to the touch, and before it is too tight, slip a knife underneath it, leaving the outer leaves, whose taste will be bitter. The heart may contain up to forty or fifty leaves and they can be unpacked one by one, sometimes chipping away at the stem to release them. Or quarter the whole head if you are feeling extravagant, to make a fine starter or accompaniment to any meal, raw or cooked.

When cutting hearts to store, cut the plant lower to keep a few outer leaves

around it, as a wrapper to help keep moisture in. Pack them in a wooden or cardboard box lined with plastic, ideally at any temperature between freezing and about 10°C (50°F). If this can be achieved, the inner leaves should stay in fair condition until after Christmas.

Hearts that are loose and still developing at the first frost can be left to continue growing; covering with fleece on frosty nights is a way of giving them more time to mature. Some may survive the winter outdoors in milder regions. Once harvested, take the remaining leaves and any weeds to the compost heap. The root crown also needs removing with a trowel, unless you leave it to make baby spring leaves (see page 82).

SUGARLOAF CHICORIES

Potentially a large and solid plant, with hearts weighing up to 2kg (4lb 6oz). I know of only two varieties – ordinary Sugarloaf, which is often over 30cm (12") long, and Bianca di Milano, which makes a rounder heart with shorter, somewhat crisper leaves.

Sowing

Sow from late June to late July, bearing in mind that later plantings will be smaller and less solid.

Growing

Similar to radicchio except that it needs extra watering in dry weather.

Harvesting

By October the hearts should be folding tightly, their interior leaves a pale cream colour, still slightly bitter. They can be cut and kept, in cool dampness, for up to two months, except that the outer leaves will dry and rot a little. The flavour and texture are less interesting than those of radicchio, but easier growing and storage makes Sugarloaf a reliable base for winter salad. Later sowings made in mid-July often heart up in November, and in a frost-free autumn may stand outside until Christmas.

CHINESE CABBAGE

Sowing

Check the details on the seed packet to make sure that you have a hearting variety such as Yuki F1, Wa Wa Sai F1 or Green Rocket F1. Resist the temptation to sow before July, whatever the instructions say. Best sowing

dates are even a little later than for chicories, up to early August; beyond that and the plant will grow all right, but with a much lighter, looser heart.

Growing

Although extremely fast growing, Chinese cabbage is vulnerable to almost every pest in the garden: caterpillars, flea beetles, pigeons and slugs. By midsummer there are fewer of some of these, but it is definitely worth the effort to cover a clump of plants with a piece of fine mesh or fleece: rain and light come in; insects stay out. Expensive mesh is supposed to be strong and usable for a few years – or a few days if dogs and cats run across it! Fleece is cheaper but warmer and generally easier to use. Even though one hole is enough to admit enough butterflies to cause significant damage, it is still worthwhile for Chinese cabbage.

Harvesting

Harvest around Hallowe'en, before slugs make too many holes, and store as for chicories. A lot of outer leaves will need to be trimmed off, leaving a tight white heart, if all has gone well! The leaves are a great asset to late autumn salad for their texture alone – firm and crunchy. By December however, unless kept in a fridge, they will start to grow mouldy.

ENDIVE

Hearts of endive are really delicious but they do not keep for a long time. I find the broad-leaved kind (Scarole) easier to grow for hearts, Bubikopf is a highly reliable variety with plentiful, smaller leaves. Frizzy-leaved endives, sometimes called Frisée, can easily rot within a week of achieving a nice pale heart in autumn.

Sowing

Small sowings through July and even into early August will provide a succession of self-blanching leaves, as late as December if there is no hard frost.

Growing

Growth is rapid after planting out in early to mid-August. One hoeing may suffice, and some watering can be necessary in a dry September.

Harvesting

Until the night temperature drops below about -2°C (28°F), hearts should

stand until over-mature, which will be indicated by a browning of their extremities. Trim off all imperfect leaves and keep as cool as possible, which should give you two to three weeks of eating nice hearts. Some of the same plants can be picked as for lettuce, removing outer leaves as needed, and this may continue through a mild winter – see below.

NEW LEAVES OUTDOORS

<i>Vegetable</i>	<i>Character Spacing (cm)</i>	<i>Sow Harvest</i>
CHARD & SPINACH BEET	Keep picking small leaves 4x20 or 12x12	Jun-Aug Mostly spring, Mar-May
CORN SALAD (lamb's lettuce)	Best leaves from regular picking 6x30 or 15x15	Aug-Sep Oct-Apr
ENDIVE	Tender leaves in mild weather 25x25	Aug-Sep Oct-Apr
KALE red / green / red Russian	Young leaves for salad 20x50 or 35x35	Jul-Aug Feb-May, new shoots
ORIENTAL VEGETABLES	Good only in mild winter variable	late Jul-Sep Feb-May
RADICCHIO	New rosettes after heart is gone 30x30	Jul (as for hearts) Mar-May
ROCKET	Abundant growth in mild winters 6x30 or 20x20	late Jul-Sep New growth from Mar
SORREL	Fresh flavoured baby leaves 30x30	Apr-Jul Mar onwards
SPINACH	New spring leaves are sweet 30x30	Jul-early Aug Mar-May

In the middle of winter, new leaves are little and grow only slowly, especially in frosty weather. It must also be said, if you have not done it before, that it is not much fun to pick small amounts of cold, wet leaves on cold, windy days. However, these outdoor plants are worth tending carefully as they will spring into life with the first relaxing of winter's grip.

There are actually two separate and quite short seasons for outdoor winter leaves: late autumn and early spring. Sandwiched between them is a midwinter lull of dormancy, whose duration will vary every year and from place to place. In Somerset it can be just three weeks of frosty weather over New Year, or it may be three months starting in early December. One never knows in advance, and there is nothing to lose in being prepared for a mild winter by making a few extra sowings in late summer and early autumn.

CHARD AND SPINACH BEET

Varieties

Plants of chard and spinach beet that survive the winter can be a good source of small salad leaves in April, when they surge back to life. The flavour is rather acid – less appealing than true spinach – but in April one is glad for any new leaves. Red and yellow chard are less frost hardy than white chard, while perpetual spinach / spinach beet survives best of all.

Sowing

To be in peak condition at the start of winter, a July sowing is probably best, although anytime between May and August is all right. Either sow lines across a bed, 30cm (12") apart and thin plants to 6-8cm (2.5-3"), or sow four seeds in modules planted 30cm apart in all directions.

Growing

Any leaves that grow too large for salad can be picked for cooking, and the first proper frost may damage larger leaves, but hopefully not the new central growth. Plants often look half-dead over winter and some may die, but new growth should appear in early spring.

Harvesting

Pull off frost-damaged leaves and keep picking new growth until flower stems predominate sometime in May, when a spade may be needed to dig out the main beet-like root (not edible); small feeder roots can be left to decompose in situ.

CORN SALAD (LAMB'S LETTUCE)

Varieties

This is probably the hardiest of all salad plants, and possessed of the greatest ability to recover from frost with spurts of new growth. However, new leaves are mostly small and fiddly to pick, and unlikely to fill a salad bowl unless you have some long rows or beds of plants. Seed companies are now offering greater choice, and the best one I have tried so far is D'Orlanda, whose leaves are larger and easier to gather than, for example, the darker green Vit, whose virtue is more hardiness than size.

Sowing

Seed is best sown direct from late July to early September, bearing in mind that lamb's lettuce is slow growing and may be overtaken by weeds if your soil is not too clean. A good average date for sowing in southern Britain is

the third or fourth week of August, to have a first picking before Christmas and several more before Easter, when plants will start to produce small, pretty, pale blue flowers.

As with rocket, seed catalogues and packets claim that sowing is possible 'from March or April'. I beg to differ, finding that spring and early summer sowings offer only small yields of mildew-prone leaves before flowering. Even July or early August sowings will attract mildew if it is a warm autumn.

Growing

If you have kept the soil clean of weeds for the preceding crop, success is more likely. Chickweed, for example, can swamp low-growing lamb's lettuce. Hoe in September when dry enough and hand-weed thereafter. Roots are very superficial and make a thick mat on top of the soil.

Harvesting

Leaves are best cut, not individually but as small rosettes of six to eight leaves. The first cut will be about 1cm above soil level, leaving some outer leaves and stem below the cut, whence several new rosettes will re-grow. In a mild winter, one plant with about 15cm (6") of space around it can grow to fill most of that and produce a good number of small, succulent pickings. Leaves are glossy, waxy and vibrant, of mild flavour and a great tonic for the middle of winter.

ENDIVE

Varieties

Try either a scarole such as Bubikopf or a frizzy such as Frenzy.

Sowing

Best sown late August for planting by the end of September.

Harvesting

A few outer leaves may be picked off before Christmas, otherwise start in March and remove any slugs. Carefully twist off the larger outer leaves, as for lettuce, and there should be plenty of them through April until mid-May.

KALE

Varieties

For mild-tasting leaves of raw kale in salad, try Red Russian, also called Red Winter, or green-leaved Sutherland. Both varieties have flat rather than curly leaves.

Sowing

Best sown in modules in July to early August, two seeds per module as germination is often about 60 per cent, and thinned to one plant after about a fortnight.

Growing

Plant at 30x30cm (12x12") apart. You can cover with mesh or fleece to protect the crop from pigeons and autumn caterpillars, but kale is quite hardy and should survive well, even if many leaves are full of holes. This does not matter because the most edible leaves appear in spring when insects are not around to eat them. However, through the winter you may need to protect the plants with netting against pigeons.

Harvesting

Remove most of the old and rotting leaves in early February to make picking easier. In February or March new shoots will appear with beautiful pale red, deeply serrated and extremely tasty leaves. Picking of both these leaves and new stems should be possible until early May, when new growth becomes thinner and more stringy with less leaf and more flower bud. Pull plants out and chop into 20cm (8") lengths with a spade before composting.

ORIENTAL GREENS

Varieties

I find that few of these are likely to survive outdoors through a whole winter, but some do well from a winter sowing in the greenhouse, to be planted out in February and March under fleece. Mizuna is probably the most worthwhile for its ability to grow at a time when so many plants are dormant. Komatsuna is another rapid grower, but less able to defend itself against slugs than mizuna.

Sowing, growing and harvesting

Sow about six seeds per module in late January, plant them in March at a spacing of 20cm (8"), cover with fleece and keep the fleece on throughout, and cut three worthwhile handfuls of leaves from each clump through April,

before the plants flower in early May. Later sowings will give a later and smaller harvest because spring is flowering time for all oriental leaves.

RADICCHIO

(See pages 78-79 for general growing method.)

Most long-leaved Trevisos (Plate 5) are not intended for tight hearting, and their leaves of deep red colours become more intense as the temperature drops. They can be cut in one harvest or picked individually through some of the winter, although not in hard frost. Before March it is good to finish picking and to remove all leaf debris, to allow clean new growth in spring, when the same roots send out new baby hearts, rather like a forced chicory but growing outdoors. All kinds of radicchio will do this, to varying extents. Remove the crowns of roots in May when leaves give way to flowering stems.

Another variety, called Grumola, offers the chance of overwintering quite large plants from an August sowing, which make small hearts in early spring. There is a green variety, Verde, and a red one, Rosso, and their flowering shoots are also edible.

ROCKET

Sowing

Sow 4-8 seeds in 2-3cm (1") modules or direct in rows about 20cm (8") apart. From a sowing in late August or even early September there is a fair chance of some plants surviving to produce new leaves in any milder periods, and quite a few leaves in early spring. Wild rocket lies dormant in winter but can be prolific in spring when the roots awake.

Growing

Growth should be rapid and insect-free until the first notable frost, which may damage some of the larger leaves. Only severe frost kills the plant itself.

Harvesting

Either cut all leaves from a few plants or clumps of plants at a time, about 2cm (1") above soil level, or keep picking larger leaves from the whole patch. New growth will be occasional through midwinter, but significant re-growth in March and April should precede flowering, and flower stems can

also be eaten. Wild rocket will continue producing healthy leaves through May and June, although the quality declines in summer.

SORREL

Sorrel is perennial and possessed of large enough roots to produce quite a number of new leaves in late winter and early spring. They have a zippy bite, reminiscent of lemon juice – a great taste for clearing away some winter cobwebs. Broad-leaved varieties are the most reliable and productive.

Sowing

Sow any time from March to July, aiming for a spacing of about 30cm (12") in all directions.

Harvesting

Clear away old leaves (and slugs!) before winter, so that any new growth from late winter is easily visible. Slugs can do some damage, so keep the soil around plants free of weeds and mulch. Regular picking of small leaves will spice up the salad bowl for a couple of months or longer (see pages 189-190 for more details).

SPINACH

Sowing

Certain varieties seem to almost like really cold weather. Two I will mention are Giant Winter for large leaves and Medania for small leaves. There may be others as hardy, and you have nothing to lose by sowing a few rows in late July or August (preferably before about the 20th August) so that plants have time to reach a size where they can grow away from damage by frost and slugs.

Harvesting

Much depends on the winter: for example, in the frosts of 2005-6 and of 2010 about two-thirds of my late July sowing of Medania died. But the third that survived went on to produce masses of new leaves in April, with regular pickings of a delicious taste for eating raw. By May there was even an abundance of large leaves for cooking. Medania's leaves are of high quality – dark green, glossy and slightly sweet, especially in springtime, when they always taste especially good. A cold, dry winter is better for

spinach than a wet, mild and slug-infested one.

FORCED LEAVES

A third possibility is to grow leaves indoors from chicory roots that have been dug up in late autumn and brought into some part of the house, shed or garage that is dark and frost-free. Yellow chicons will grow out of these, crunchy and bittersweet, and the roots can keep producing them for much of the winter. There is little tradition for this technique in Britain, perhaps because our climate is milder than continental Europe, but I find it a reliable source of crisp, yellow, mildly bitter leaves. Note that chicons require complete darkness, because any light on forcing roots will encourage florets of open, pale green leaves.

Varieties

Make sure that the chicory you sow is for forcing: usually it will be called Witloof, which I find as good as F1 varieties. Many radicchio roots can also be forced indoors, but with less regular and smaller chicons.

Sowing

Sow either one seed per 3cm (1") module indoors, or direct in the soil in May, or as late as early July for smaller roots. Module-grown roots will be more branched but this does not matter for forcing, except that they may leave more root fragments in the soil after harvest, and these will grow as vigorous weeds in the following year.

Growing

Give plants about 30cm (12") of room to make fair-sized roots. Plants should make plenty of leaf, but make sure no weeds are going to seed underneath. Watering is rarely necessary.

Harvesting

Use a spade to lever out the main roots in November or December, before any really hard frost. Aim to dig out all roots thicker than your finger.

Forcing

Harvested roots can be placed in pots of moist compost in an outbuilding or garage, preferably frost-free, or wrapped in a polythene bag. They can be brought into a warm dark part of the house for more rapid production at any

stage. Firstly you should see small yellow buds around the top of each root: rub out a few if you want large chicons or leave them all for smaller heads and leaves.

After as little as three weeks at room temperature, some pointy hearts will be growing and can be cut or snapped off when a little firm. Take care to remove all their leaves, allowing room for more chicons to appear.

If roots are kept moist and allowed to develop new roots in pots of compost, they will keep sending out smaller, thinner-leaved chicons until mid-spring. Their bright colour and crunchy texture are a good contrast to the softness of most other fresh winter leaves.

INDOOR-GROWN LEAVES

<i>Vegetable</i>	<i>Character</i> <i>Spacing (cm)*</i>	<i>Sow</i> <i>Harvest</i>
CHARD	White chard best for new midwinter leaves 4x20 or 12x12	Aug Oct-May
CHERVIL, CORIANDER	Long season of richly flavoured leaves 25x25	late Aug to Sep Nov-May
'DANDELION'	Red-ribbed has vigorous, attractive leaves 10x30 or 25x25	Sep Oct-May
ENDIVE	Choice of scarole or frizzy, pick as leaf lettuce 20x20	Sep-Oct Nov-May
LAND CRESS	Low-growing, leaves of powerful flavour 20x20	Sep-Oct Nov-Apr
LEAF RADISH	Remarkably rapid growth of hairless leaves 20x20 or 5x30	Jan-Mar Feb-May

* the first figure is for module-sown plants: all 2-4 seeds, except one seed for lettuce and endive

<i>Vegetable</i>	<i>Character Spacing (cm)*</i>	<i>Sow Harvest</i>
LETTUCE	Pick new larger leaves for 8 months, same plant 25x25	Mid-Aug to Sep Nov-Jun
MIBUNA	Long leaves, liked by slugs, edible flowers 20x20 or 10x30	Sep-Oct Oct-May
MIZUNA	Extremely fast growth, becomes ragged 20x20 or 10x30	Sep-Oct Nov-Apr
MUSTARD	Keep picking small leaves, very spicy 20x20 or 10x30	Sep-Oct Nov-May
ORIENTAL MIXES	Entirely depends on seed company rows of 30cm	Sep-Oct Nov-Apr
PAK CHOI	Less frost- and slug-hardy, crunchy leaves 25x25 or 10x30	Late Aug-Sep Oct-Apr
PARSLEY	The hardiest herb 25x25	Jul Oct-May
ROCKET	Many leaves, flowers in April 20x20 or 6x30	Sep-Oct Nov-Apr
SORREL	A zappy taste of lemon 25x25	Aug-Sep Nov-May
SPINACH	Dark green leaves but liked by slugs, pick regularly 25x25 or 10x30	Aug-Sep Oct-May
TATSOI	Small round leaves, early flowering 20x20 or 10x30	Sep-Oct Nov-Apr
WINTER PURSLANE	Unusual round leaves, thrives in cold 25x25 or 15x30	Sep-Oct Nov-Apr

A fourth source of leaves is from plants that can be grown in protected spaces, such as conservatories, greenhouses, polytunnels and even under cloches, right through winter and into spring. It is not necessary to protect from freezing since the plants mentioned are frost hardy to -10°C (14°F) or more, as long as they have shelter from the combined forces of cold rain and wind.

In a polytunnel, cloche and greenhouse, night-time temperatures are often as low as outside, but with a little sun by day the relatively dry soil and calm air can warm up enough to allow a little growth. Even when plants are not growing, they are at least surviving and keeping ready to benefit from any milder spells. Even a well-managed small greenhouse can provide surprising amounts of leaves to bring health and colour through winter, and even more so as days lengthen in early spring, when better light levels bring a noticeable increase in leaf quality.

March and April can be highly productive if winter salad plants have been well looked after, and hence I include this time of year in the winter section. Also, by then most other winter vegetables such as cabbage, celeriac and carrots are running short. In the middle of winter they are a fair alternative to fresh leaves, grated in coleslaw to bulk up the few leaves available, but by early spring

there is not much left from the previous season.

You can grow all the plants mentioned here in pots, large seed trays, old mushroom crates and polystyrene fish boxes with holes in the bottom. Fill the containers with multipurpose compost, sow or plant at the required date, then picking is easy if the containers are on staging. By the spring they will need daily watering as their root systems will have filled most of the compost.

Many of these plants have already been mentioned, but I will deal with them all again to explain the different sowing dates and altered patterns of growth under cover. Check the table on the previous page carefully for sowing dates, bearing in mind that these are based on my experience in southern England, and other regions may be a little different.

CHARD

No other plant reflects the winter more vividly than ruby chard. Sow in late August to have some leaves before Christmas, then with frost the luminous green of the leaves between red veins changes to a dull, almost crimson colour, and there is only a little growth. But towards the end of February a wonderful change occurs as the fresh green colour reappears and leaves become fuller and fleshier. When this happens I always feel that spring is around the corner.

White or yellow chard is less affected colour-wise, and is more vigorous through cold conditions.

CHERVIL, CORIANDER

These wonderfully hardy herbs produce many new leaves in both autumn and spring, until they flower in early May. Chervil's aniseed-flavoured leaves complement the pungency of winter mustards.

DANDELION

'Red-ribbed dandelion' (actually a member of the chicory family) will grow fast from a September sowing, offering worthwhile numbers of leaves by November, although they become small in midwinter. The long stem and chewy leaf are bitter enough to keep you really healthy in winter.

ENDIVE

You can have attractive leaves over a long period from an early September sowing of a variety such as Bubikopf, a broad-leaved scarole type, or Frenzy, with more fiddly and frizzy leaves. Lower leaves can be picked off

from November to early May, as for leaf lettuce. The flavour is a little bitter and pleasantly different from everything else at that time.

LAND CRESS

The dark round leaves of this very hardy plant have the same iron-rich taste as watercress, and a few leaves will add zest to any salad. Two or three plants may suffice; keep picking larger leaves once they are established, although they hug the soil and are not easy to pick. Variegated land cress has attractive mottled leaves. Beware: pigeons love land cress!

LEAF RADISH

Leaf radish grows as fast as root radish, and is similar except that its leaves are pale green and only slightly hairy, with a fine, mild flavour that is just recognisable as being radish. It should overwinter from a late September sowing, or can be sown in January/February to crop in March and April for four to six weeks, before the leaves are suddenly replaced by a briefly edible stem with white flowers.

LETTUCE

Grenoble Red, of Alpine origin, will survive most frost from a late August or early September sowing. Keep picking the larger leaves as for summer lettuce, starting in November, less frequently between Christmas and late February, then with increasing regularity as the leaves become larger and more prolific. First pickings in the autumn can be difficult as the plant is small and tender and holds its leaves right at ground level. Treat plants carefully and by March leaves become much easier to twist off – each plant having the capacity, in well-composted soil, to produce a hundred or more leaves by time it flowers in mid-to-late June.

Other leaf lettuce varieties can also be sown through autumn and winter to make later crops and to fill any gaps. Many, such as Cocarde, will survive a surprising amount of frost, but one can never be too certain and I would not recommend cos varieties for winter.

Other winter lettuce varieties are mostly butterheads, for example Arctic King or May Queen, which make hearts in early spring from a September and October sowing.

MIBUNA

A fast grower and long-stemmed like mizuna, but with darker green and

non-serrated leaves. Through midwinter it is more productive to pick individual larger leaves rather than cutting everything. Keep plants tidy to reduce slug habitat and enjoy the flowers in spring, as with all oriental vegetables.

MIZUNA

Mizuna is the salad speed champion, so one sowing will not cover the whole winter. You can sow in late September to crop before and over Christmas, in late October for winter picking, or even in January to early February for the spring. There is always a choice between cutting small leaves occasionally, picking outer leaves more frequently, or allowing a larger plant to grow with the long white stems. Larger leaves are more susceptible to damage by frost and from mildew. Production of new leaves is less vigorous after three cuttings, when you are more likely to see flowers, which are also extremely tasty.

MUSTARD

A few plants will probably suffice, as the occasional mustard leaf in a salad is enough for most people. The main varieties are Green in the Snow, Golden Streaks and Ruby Streaks: the feathery Streaks varieties are also known as Green and Red Frills. Their names tell it all, and their vigour means that regular picking is possible, except in the coldest weather. Let the Frills leaves grow larger than Green in the Snow, which is best picked small otherwise it becomes quite fiery.

PAK CHOI

The top winter variety to grow is Joi Choi F1 for its resistance to frost, and steady production of white-stemmed, dark green leaves over a long period. Cutting leaves carefully rather than trying to pull or break them off is helpful, in order not to dislodge or uproot the whole plant, whose roots are thin and fragile. Regular picking of small leaves will help to keep on top of slugs, which are always attracted to pak choi: remove any that you find while picking.

PARSLEY

It is definitely worth having an odd corner of parsley, curly or flat, from a July sowing, to be well established by winter. I prefer curly parsley for its better health and vigour, also for its longevity – it lasts about a month longer than the flat – until mid-May on average. Pick leaves carefully and

sparingly in cold weather to allow enough leaves to nourish the roots and help new growth.

ROCKET

As well as growing fast, salad rocket tends to flower quickly, even in the middle of winter. Keep removing the stems: new leaves will be smaller but they should keep coming until mid-to-late April and there will be no flea beetle holes. Wild rocket behaves differently, going dormant in midwinter before the arrival of many healthy new leaves from about March, which may continue for three months or more.

SORREL

The delicious tanginess of small sorrel leaves is an excellent complement to fiery mustards and bitter endives in a bowl of winter leaves. A few plants sown in August will keep producing for much of the autumn, winter and spring, but keep them tidy to reduce slug numbers.

SPINACH

Although a favourite of our slimy friends, regular picking will help to keep slug numbers down. August sowings can be grown indoors for larger or very plentiful leaves through the autumn; otherwise the early September sowing in 3cm (1") modules is good for small salad leaves through winter. Plants are then ready to go in after removal of tomatoes and other summer crops in early to mid-October. First pickings may be possible in November, and a lot of leaves should be produced from late February to early May, depending on the variety. I find that Medania works well, or try Bordeaux (Plate 32) for its attractive red stems, although the leaves are longer and thinner.

TATSOI

This has smaller, more crinkly leaves than pak choi, slightly harder to pick. The variety Yukina looks like savoy cabbage but is much more tender and keenly appreciated by slugs, so pick off all damaged leaves and keep the soil around it very clean. It thrives in cool conditions and sometimes flowers as early as March, after producing leaves in deepest winter when few other plants are doing much. As with pak choi, the flowering stems are edible and of good flavour.

WINTER PURSLANE

Also known as Claytonia, this has a very different growth habit from summer purslane (see page 197), although the leaves are equally juicy and succulent.

Like mizuna, it is most feasible to harvest with a knife *around* the plants' edges, not across the top, when there are leaves falling downwards at the sides. Aim to have a few clumps and cut them in turn, until white flowers start to appear in late March and April. These are edible and extremely pretty but will herald a stiffening of the stems and reduced numbers of new leaves, so there may be little left to eat by the end of April. Beware of leaving plants in the soil after that, as they seed readily and numerously!

ORIENTAL SALADS / SALAD MIXES

Packets of mixed seed can be a cheap and simple way of growing many different flavours, but one never knows exactly what will come up and in what proportions. 'Saladini' means small salad leaves, often cut from rows of young plants. Harvesting in this way does not usually allow plants to live as long as when they are more carefully looked after as individuals, so extra sowings are required. I recommend using commercial seed mixes for fun and interest, to see how different plants grow, and for when you are unsure about exactly what you do want to grow.

PESTS AND GENERAL TIPS

Slugs are undoubtedly the chief pest of winter leaves. Bare soil around plants with no weeds will help, as will removing any slugs you see. An occasional night-time foray with a torch may be invaluable, especially at planting time in autumn, when one slug can destroy a lot of potential harvests.

Mildew on older leaves can be a problem, but regular picking of smaller leaves for salads usually prevents it because there are then no old leaves for mildew to grow on. When harvesting the good leaves, have another container for the nibbled and mouldy ones in order to keep plants clean, healthy and with less slug habitat around them. Winter leaves reach maturity at a smaller size than in summer, because there is not enough light to sustain a large leaf.

Spreading compost It is best in greenhouses and polytunnels to spread compost annually and on the surface in springtime, before tomatoes, etc., so that it has mostly been taken in by autumn, leaving a barer soil and less

habitat for slugs.

Watering Be careful not to over-water in midwinter when growth is extremely slow, and plants stay healthier when the soil or compost around them is dry on its surface. I do a thorough watering in the polytunnels fortnightly from mid-November to about mid-February, then weekly until about early April and increasingly after that. Pots on staging need more frequent watering because they hold less reserves.

Chapter 11

Alliums

Magnificent flavours for all times of year



Alliums are staple vegetables – onions, salad onions, leeks, garlic, shallots – which, until recently, were some of the easiest and most reliable to grow. They are scarcely bothered by slugs or low temperatures, mature at different times of the growing year, and offer reliable additions to many meals. Just in the last few years, however, the arrival of leek moths in southern England and the prevalence of onion mildew have caused problems.

Alliums and weeds

Alliums' thin and mostly vertical leaves mean that weeds can thrive all around them. In the case of onions especially, weeds are difficult to hoe or pull out by early summer, when their leaves start to fall over a little. So use any fine day in April and May to hoe off any weed seedlings, then hand-weed in summer, and every time you do so the soil is becoming cleaner because more weed seeds have germinated and then died without creating new seeds. In this sense, alliums are a good cleaning crop (see also potatoes, page 122).

ONIONS

Onions are the basis of almost every soup, appear in possibly more recipes than any other vegetable, and are a fine vegetable to grow as well as to eat. The sight of their long round leaves, noticeably longer and stronger every day in the spring, always gives me a lift: an upright habit of growth makes them stand out and is somehow strangely inspiring.

YELLOW ONIONS FROM SPRING-PLANTED

SETS

Season of harvest: July-September, use until April *Follow with:* autumn /winter salads

<i>Variety</i>	<i>Character</i> <i>Height (cm)</i>	<i>Planting date</i>	<i>Spacing (cm)</i> <i>First ready</i>
STURON	Globe shape 35	Equinox	5-10x30 July
STUTTGART GIANT	Flat bulbs keep well 35	Equinox	5-10x30 July
TURBO	Longer neck 35	Equinox	5-10x30 July

Planting

The easiest way to grow onions is by planting immature baby ones called sets. These will have been sown late enough the previous summer to make immature onions no bigger than cherries, which on being re-planted will carry on growing for another whole season, into full-sized adults. At planting time they have enough food reserves to propel themselves into more rapid growth than onions grown from seed.

However, if onion sets are planted too early in the year, many of them will ‘bolt’ rather than make a bigger onion. Exposure to any length of significant frost makes them register that winter has happened, instead of which we want them to believe that they are simply carrying on growing from the year before – so be patient at planting time! Then you may benefit from their potential to grow large bulbs.

In Somerset I find that the equinox around 21 March is a good time to plant sets, giving almost no bolters and a good yield of onions by the middle of summer. Any time between the equinox and mid-April will be all right; any later, and some growing time is lost, meaning smaller onions.

There is no golden rule about how to space them. The more room they have, the larger they grow, so it all depends what you want. I give them 60-70cm (2-4") between sets, in rows across the beds that are about 30cm (12") apart. This provides a bountiful harvest of medium-sized bulbs, as long as the soil is in good heart. It is best to have spread some compost by midwinter, to ensure a reasonable tilth for planting time.

Make sure you put the sets in with the little rooty end going down; the pointy end upwards. Sometimes you can be guided by a small green shoot already appearing out of sets’ tops, although it is better that most of them are still

dormant at planting time.

Growing

Weeding may keep you busy: if weeds are regularly hoed or pulled up, so that none are allowed to set seed, it will be much easier to grow winter salads, or any other crop, after the onions have gone.

Harvesting

Onions can be gently pulled out of the ground or levered from below with a trowel, once their tops are more yellow than green and start to fall over 97 – usually from mid-July to mid-August. Once lifted, bend their necks hard and lie them root-down on the soil to dry for a few days or longer, depending on the weather and if you have space indoors – see page 102 for storage suggestions.

Problems

See pages 101 and 103.

YELLOW ONIONS FROM SEED

Season of harvest: August-September, use until April

Follow with: corn salad or autumn-sown broad beans, for example

<i>Variety</i>	<i>Character</i>	<i>Sow</i>	<i>Spacing (cm)</i>
	<i>Height (cm)</i>	<i>First ready</i>	
SANTERO (see Plate 11)	Resists mildew 30	Feb-Mar August	25x25* or 5-10x30
KELSAE	Huge bulbs 40	Jan August	25x25*
STURON	Resists bolting 30	Feb-Mar August	25x25* or 5-10x30

* 25x25 spacing is for multi-sown modules

Sowing

Starting from seed is a less easy way to grow onions, but is rewarded with bulbs of superior quality, which may also keep better, especially as their thinner necks often dry more thoroughly.

A tricky aspect is the two months it takes for seed to grow into plants that are large enough to set out. In a greenhouse they can be sown in February or early March, for planting mid-April to early May. If 3cm (1") modules are used, six or seven seeds can be sown in each one, for planting and growing together in a clump. Outdoor sowings have to wait until March, close together in a line to

make lots of small plants for later planting out.

Growing

Final planting distance is the same as for sets, except for multi-sown modules (see table above). There must be sufficient room for a hoe to pass, unless a thick mulch is used. Personally I prefer a thin mulch of well-rotted compost, through which a hoe can pass, to leave the soil in perfect condition for autumn salad.

To make champion-size onions, sow the variety Kelsae by early January, for maximum growing time. They grow surprisingly fast: I tried some out of curiosity, mainly to see how they tasted, and was pleasantly surprised at both their enormity and the mild yet rich flavour.

OVERWINTERED ONIONS

(Also sometimes called Japanese onions, as the Japanese were the first to develop viable varieties.)

Season of harvest: May-June, use by Christmas *Follow with:* any late summer or autumn vegetable

<i>Variety</i>	<i>Character</i> <i>Height</i>	<i>Sow / plant</i> <i>Special care</i>	<i>Spacing (cm)</i> <i>First ready</i>
RADAR	From sets 30	Sep-Oct Clean soil	5-10x30 late May
SENSHYU SEMI- GLOBE YELLOW	From seed 30	Late Aug Clean soil	5-10x30 late May

A third option when growing onions is to sow seed or plant sets of certain adapted varieties in late summer or autumn, to grow into small plants for overwintering. Onions are amazingly hardy, and although the leaves will go quite yellow and shrivelled at the tips in hard frost, come spring they will shoot away and make bulbs by late May or early June. The idea is to have onions at a time when they, and other vegetables, are otherwise scarce.

Planting

From sets, there is a fair planting period of about a month from mid-September. Try it only if you have reasonably clean soil, because hoeing is near-impossible for much of the winter and small onion leaves can easily become overgrown. Well done if you manage it: fine early onions should justify the effort.

Sowing

From seed it is vital to sow in late August, but not before about the 23rd, or the plants will bolt in May. Sowing can't be delayed much beyond the month's end, or plants may be too small to survive a cold winter. I use 3cm (1") modules with seven or eight seeds in each, planted out in late September after French beans or salad.

Harvesting

Some can be used as spring onions from late March, while bulbs are fully formed by about mid-June. They do not keep all winter and need using before December. Also, *consider not growing them if your onions are suffering mildew* (see page 101).

RED ONIONS

Season of harvest: July-September Follow with: autumn salad

<i>Variety</i>	<i>Character Height</i>	<i>Plant / sow</i>	<i>Spacing (cm) First ready</i>
ELECTRIC	Autumn planted 30	Sep-Oct	5-10x30 May
LONG RED FLORENCE	Long bulbs, mild flavour 40	Feb-Apr	5-10x30 Jul
PURPLETTE	Small bulbs, many uses 25	Feb-May	5x20 Jun
RED BARON	Fine colour, good keeper 30	April	5-10x30 Jul

Definitely more tricky than yellow onions, red bulb onions show less vigour and more inclination to bolt. They seem to prefer hot summers, but I find them maddeningly inconsistent in many ways, although definitely worth growing a few for the rich flavour, sweetness and medicinal quality of successful bulbs.

Planting

Probably the simplest method is to plant sets that have been 'heat-treated', so that bolting is reduced. Usually they are available later than ordinary sets, in about mid-April. Planting, growing and harvesting are as for yellow onions.

Recently some overwintering red onion sets have become available, usually Electric, and I had one year's superb crop, followed by another year's poor one. They are something of a gamble, depending on weather above all.

Sowing

Growing from seed is possible and results in much less bolting, with the same caveats as for yellow onions of early sowing and slightly later maturity. Red Baron is available in both seed and sets and is an excellent variety. Purplette can be left in its seedbed and selectively pulled as salad onions, with the remaining plants left to make small pretty bulbs, suitable for pickling.

Harvesting and storing

These are the same as for yellow onions.

WHITE BULB ONIONS

These are onions of continental style, sweetest of all and more tender, with thin pale skins, so they are not for storing. Grow and harvest in the same way as for bulb onions, just eat more quickly. Paris Silverskin can be sown 100 like salad onions (see below) and used quite small, for pickling as well. Walla Walla has the interesting quality of great mildness, for those who like raw onion, and it will make a large onion if given the space of ordinary bulb onions. Note that salad onions such as White Lisbon will also turn into white bulb onions if allowed to grow on.

Onion soup

If one of us feels a cold coming on we make a 10-minute onion soup. Slice a couple of onions (1 per person) and soften in butter, add a bit of chopped garlic for extra medicinal effect, stir in a wooden spoonful of flour, and add stock or yeast extract. Simmer for as long as you are prepared to wait, then pour into bowls and inhale the steam before eating/drinking!

SALAD ONIONS

Season of harvest: April-November

Follow with: depends on time of harvest, say with French beans after a June harvest

<i>Variety</i>	<i>Character</i> <i>Height</i>	<i>Sow</i> <i>Special care</i>	<i>Spacing (cm)</i> <i>First ready</i>
RAMROD	Does not bulb up 40	Jan-early Sep Jun	1x25
WINTER HARDY	Autumn-sown	Aug-early Sep	1x25
WHITE LISBON	30	Diligent weeding	Apr
WHITE LISBON	Stem and bulb 30	Jan-Jul	1x25 Jun

Salad onions are really just immature or still-leafy onion plants, of varieties that have been bred to make a strong stem with firm leaves. Their common name of ‘spring onion’ reveals how they are at their best in spring, before leaf diseases appear, and because they were often the only onion available in spring, between the old and new crops. That was before overwintered onion bulbs became possible to grow, in Britain at least.

Sowing

Imagine delicious fresh green onion leaves and stems as early as April – a fine way to enliven early salads, soups and many other dishes. You need to sow a salad onion variety such as White Lisbon Winter Hardy in mid-to-late August. Spring-sown onions, sown February to April, will not be ready until May at the earliest, more likely June, depending how large you want them to grow.

White Lisbon and other old varieties will gradually develop bulbs if left to grow. They are still tasty as larger raw salad onions, or cooked. But if you prefer a thick stem and no bulb, try any derivative of the tall Japanese 101 salad onions, such as Ishikura, whose energy keeps on going into leaf and stem rather than bulb. A drawback is their tendency to orange spots of rust on the leaves, usually in dry weather, lessened by regular watering.

Sowings in May to July will give salad onions through the summer and into autumn, if you want them then. However, remember that they are more prone to rust and mildew in summer and autumn.

Red salad onions

In many varieties of red salad onions on offer, the red colouration does not continue into their stem, apart from a dark outer sheath that is usually too tough to eat. So one ends up with a slightly pink spring onion. One way round this may be to sow a row of red bulb onions such as North Holland Blood Red and eat them when small, then if there are too many for salad the rest can grow into bulb onions.

Problems with all onions

(See also page 103)

Birds An early hazard to growth may be birds pulling sets out of the ground as they start growing, not to eat them but perhaps in search of worms underneath, because worms like allium roots. So it may be necessary to lay some netting on top of the soil for a month, until there is about 75cm (3") of leaf growth, indicating that roots are sufficiently developed to hold the set in place if a bird pulls on it.

Mildew Onion mildew is a grey mould that develops on leaves from about mid-May onwards. It can happen in both wet and dry years, triggered by mould spores arriving out of nearby infected soil. They will eventually cover all leaves in black sootiness, and subsequent growth is usually poor. The best solution is to lift mildew-infected onions early, before all greenness disappears, then to leave them on top of the soil for as long as it takes the tops to become thoroughly dry. At this stage they can be stored in shallow boxes, taking care not to damage their skins or necks, which might allow fungus to infect the inside of the onion. The aim is to prevent any mildew spores from penetrating through the dry skin's surface. The official advice is to burn infected leaves. Recent observations suggest that overwintered bulb onions may be hosting the spores, enabling an otherwise minor disease to become much more widespread. I have recently stopped planting onions in the autumn and have, indeed, noticed much less mildew on the summer onions. But if your plot is close to somebody growing overwintered onions, this may not make a significant difference. Some varieties are now being bred for mildew resistance and Santero shows promise.

White rot A significant potential problem for all alliums is white rot, a pale fungus that weakens and then kills the stem base and roots. Become suspicious if you see yellowing leaves too early: gently pull on the plant, which may come out easily and reveal its roots succumbing to a white fungus. It exists in odd places in my garden, and I am never too clear how it arrives – possibly from my spreading of infected compost, after inadvertently putting some infected onion or leek on the compost heap. Once it is in a patch of ground, the fungus lies dormant for up to seven years, ready to infect the next onion, leek or garlic.

The common solution is to grow alliums in clean parts of the garden while waiting seven years before next growing them in soil that is infected. However,

the white rot fungus is weakened (not killed) by brassicas, so growing any of them in the months before alliums may make it possible to grow onions, leek, garlic and shallots in infected soil.

STORING ONIONS

If there are warm, sunny days after lifting, skins and tops will dry, leaving a pleasant golden or red ball, wrapped up for the winter. When dry and crinkly, onions can be stacked in boxes or nets or hung on string, and should keep until the following spring.

Should it be wet at harvest time, with the tops staying rather green, an option is to gather up bunches for hanging in a dry airy place or in the house. Or make a rope: hang a stout string at head height, tie about four onions to its bottom by looping and tying the string securely around their necks, then drop onions one by one from on top, held in place by one loop of their necks around the string. Finally cut off all the tops that are sticking out, and hang the heavy rope in dry warmth until needed.

SHALLOTS

Season of harvest: July-August

Follow with: late brassicas, autumn salad

<i>Variety</i>	<i>Character</i> <i>Height (cm)</i>	<i>Sow / plant</i> <i>First ready</i>	<i>Spacing (cm)</i>
BANANA SHALLOT	Long, large, thin pink skin 30	Seed: Feb-Mar Jul	5x25
ECHALOTE GRISE/ GRISELLE	Small dark bulbs, fine flavour 30	Bulbs: Oct-Dec Jul	10x30
RED SUN	Round, reddish brown 30	Bulbs: Mar Jul	10x30

A few decades ago, most vegetable gardens included a row of shallots, but now they are rare. Is it because they are smaller than onions and take 103 longer to prepare? Surely we need to remember them in our vegetable plantings, for an extra range of cooking qualities and flavours that are especially apparent in many interesting sauces.

Planting and sowing

As with onions, either seed or bulbs are the starting point. One seed makes one new bulb, while one bulb makes a clump of at least six new bulbs and up to twenty. It is worth thinning each clump to a maximum of ten seedlings in May, to avoid having tiny shallots.

The Banana Shallot is intriguing for an elongated shape and large size, making it sought after in many kitchens. It has a milder flavour and is fast growing, best sown before mid-March and available only as seed. Jermor is a large elongated shallot that can be purchased as a bulb for planting.

Look at the three varieties on the opposite page and notice how they all have different sowing or planting dates for best results. Red Sun is a standard British shallot, essentially round and quite dark in colour, but it does have a tendency to bolt if planted too early, hence the wait until March. Echalote Grise, also sold as Griselle, deeply esteemed by chefs in France, is best planted in late autumn and matures a little earlier.

Growing

Grow as for onions; regular weeding is the most important job.

Harvesting and storing

Watch for the leaves falling over: harvesting is best done as soon as this happens for best keeping qualities, especially with Echalote Grise. Lift them carefully, shake soil out of the roots and leave bulbs on top of the soil for an initial drying. They can then be tied into bunches and hung in a shed or your kitchen, whatever is most convenient. At room temperature they should keep well until spring, but separate any larger bulbs for re-planting.

Problems

Shallots suffer all the same potential difficulties as onions – see page 101.

LEEKS

Season of harvest: August-May

Follow with: any of root vegetables, brassicas, salads, etc. the following year

<i>Variety</i>	<i>Character Height (cm)</i>	<i>Sow / plant First ready</i>	<i>Spacing (cm)</i>
AUTUMN MAMMOTH	Reliable, best before Xmas 40	Apr-Jun Sept	10x30
BANDIT	Hardy, long, late to flower 40	Apr-Jul Feb-Apr	8x30
MUSSELBURGH	Shorter, hardy, dark flag 30	Apr-Jul Dec-Apr	8x30
SWISS GIANT (see Plate 10)	Earliest, longest, dislikes frost 50	Mar-Jun Aug-Nov	8x30

As summer cedes to autumn, leeks are quietly growing and then suddenly

appear prominent in the garden, when summer crops fade. They have sweet white stems, and sometimes also offer the only fresh green leaves in frosty winter weather. Their season of maturity lasts for nine months, and best results come from sowing the right variety to harvest in the four seasons within this time.

Varieties for the four seasons

Note that some varieties make short stems (Musselburgh) and some make very long ones. There is a leek for eating in summer called King Richard, whose stems are magnificent, but it is now rarely found in mainstream catalogues. Swiss Giant is slightly fatter and grows fast – for harvests before November – while most autumn Mammoth varieties are consistent croppers from September to Christmas and beyond, as they tolerate moderate frost. The choice of variety for autumn is considerable: besides Autumn Mammoth (of different strains, such as Tornado and Goliath), I have had good results with Porvite, Jolant and The Lyon.

Any long stems above ground are most vulnerable to hard frost: hence the shorter winter and spring varieties such as Musselburgh, although they elongate by late March and through April. At some point in early to midspring they will form a flower stem inside, which soon becomes too hard to eat, so harvest any remaining leeks if you see small flower buds appearing. St Victor is a spring variety whose pretty violet-coloured leaves look nice at a bleak time of year.

Sowing

Leeks grow quite slowly from seed, with thin, grassy stems. Do not sow before late March, and around mid-April is often better, to avoid bolting in autumn. Aim to sow about 40 seeds in rows across a 1.2m (4') bed, to provide about 30 plants per row. Many seed packets contain enough for about four such rows, but leek seed shows its age, and occasionally I have had poor germination from seed that was past its prime.

Planting

By June the young leeks should be nearly as thick as a pencil and ready to be planted out. In dry weather it can be helpful to water the seedbed before carefully loosening the roots with a trowel and lifting clumps of plants. Divide them up, discarding any tiddlers, and set each one in a dibbed hole about 12cm (5") deep, then water them in so that wet soil covers the roots. The depth of hole will affect the length of white stem (the sweetest part),

but if planted too deep they grow less strongly and are more difficult to harvest. Stems can be earthed up if you want more white on them.

The spacing of leeks will have an effect on their final size, although summer rainfall and soil quality are equally important. I plant at about 8×30cm (3×12”).

Growing

Leeks are responsive to thick dressings of manure or compost, both for nutrients and for moisture retention. Moisture is necessary: this must be one reason for leeks to be celebrated in Wales, with its higher rainfall than England. Undoubtedly they grow bigger in wet summers, and with less rust on their leaves.

Harvesting

If grown in well-composted soil, leeks can often be pulled gently out of the ground, their roots cut off and flag trimmed. Push the disturbed soil back down with your boot. If they are too firmly embedded, a spade will be necessary to loosen some roots before lifting.

Summer / early autumn leeks Most will want harvesting before the first severe frost of about -6°C (21°F); this may be in late November or after Christmas. Frost damage will not be apparent for a little while, and usually reveals itself by plants leaning over as their stems start to rot. Harvest as soon as possible if you see this.

Winter leeks Although resistant to severe frost, leeks are difficult to extricate from frozen soil. In eastern Europe leeks are harvested before winter sets in; sometimes then rooted in moist sand in an outbuilding. I mention this to make the point that in cold weather, harvested leeks keep for a long time and can be gathered in large batches, to save having to go out in bitter conditions.

Spring leeks Some varieties such as Apollo, Bandit and St Victor carry on into early May and are then most welcome at a time when few other vegetables are available. They are also growing fast through April, so yields increase rapidly, and quite a few worthwhile meals may be had from a small patch.

Problems

Leeks are affected by **white rot** as much as onions and shallots – see page 101.

Rust is not pretty but nor is it too serious; watering usually helps, and a soil with plenty of organic matter holds more moisture.

A new pest in southern England is the **leek moth**, which lay eggs deep inside young leeks in high summer, leading to maggots eating all baby leaves, which stops most growth and may even kill the plant. One remedy I know is almost too drastic: chop the leek off about 5cm (2") above ground, compost all debris, caterpillars included, and wait for re-growth. Alternatively, place a mesh cover on the newly planted leek bed by the end of July, so that moths cannot reach the plants, and keep it there until about mid-September.

SAVING LEEK SEED

Seed can be saved by allowing a good plant to flower in its second summer, then gathering the whole dry head in early autumn. Hang it upside down by its stem in a dry place and knock out the seeds when it feels dry and crisp to touch.

Gratin of leeks

5 or 6 leeks

3 or 4 slices of ham (optional)

20g (10oz) butter, 20g (1oz) flour, a teaspoon wholegrain mustard,

250ml (9floz) creamy milk or single cream nutmeg, salt & pepper

150g (5.5oz) cheese

Lightly steam the leeks for about 5 minutes. Drain, reserving the water if any is left. Make a white sauce, mixing the mustard into the flour and butter, add the milk, and if the sauce is too thick add some cooking water from the leeks. Oil a gratin dish; cut the leeks into finger lengths and wrap in ham if you are using it. Lay the leeks in the dish and smother with sauce. Grate the cheese over the top, and bake in a hot oven (180°C / 360°F) for about 20 minutes till the top is brown and bubbling.

GARLIC

Season of harvest: June-July, then store until spring *Follow with:* French beans, late brassicas, autumn salads

Variety	Character		Flavour	Sow / plant
	Spacing (cm)	Height (cm)	Special care	Harvest
ELEPHANT	Stalk, huge bulbs		Mild	Oct-Nov
GARLIC	30x30	80	Lift before flowering	Jul
GERMIDOUR	No stalk, purple skins		Average	Oct-Dec
	15x15 or 10x25	40		Late Jun / Jul
OSWEGO WHITE	No stalk, large white bulb		Average	Oct-Dec
	15x15 or 10x25	40		Late Jun / Jul
SPANISH ROJA	Stalk, average bulb, thin skin		Strong	Oct-Feb
	15x15 or 10x25	40	Cut stalk when 15cm	Jul

Garlic is relatively easy to grow, and with usually impressive results. The best thing about home-grown garlic is its rich and pungent flavour. Less is needed because the flavours and aromas are much stronger. Half a clove may be enough for breakfast instead of a whole clove.

There is a fascinatingly broad range of growing styles and flavours, some of which are shown in the table. Outside the kitchen, garlic has impressive abilities to lower blood pressure and cholesterol, and is an antiseptic. To grow it, consider these three essential pieces of information.

- Young garlic is extremely hardy, and will come through very cold winter weather. Plant cloves in the autumn, and see how much bigger the bulbs grow by July.
- Garlic fits well with other vegetables because much of its time in the ground is when other vegetables are out of season. Plant cloves when summer crops finish: nine months later, after lifting bulbs in July, there is still time to plant French beans, beetroot and winter cabbages, or to sow winter salads.
- It is fun and interesting to try different varieties, but I have enjoyed as much success, in terms of yield, from planting the greengrocer's eating garlic as from planting named varieties that are virus-free and certified. My best results are often from garlic bought in the grocer's shop, years before, and now replanted every year.

Different types

Hardneck garlic grows a flower stalk between its cloves. Cutting this in mid-spring, when about 10-15cm (4-6") high will encourage more growing of bulbs, while these tender stems (also known as 'scapes') are delicious raw or cooked. Hardneck varieties often keep better and have a stronger and different flavour from more common softnecks.

Softnecks do not make stems and flowers, are milder in taste and usually start to sprout by the end of the year. They need re-planting in autumn for

best results.

Elephant garlic is akin to a giant hardneck crossed with a leek and has enormous, mild-tasting cloves. It is tasty as a roasted accompaniment to meat or vegetables, on a kebab or to chew on raw. It needs more space, about 30cm (12") in all directions, looks like a medium-sized leek when growing, and produces a large flower bud by early July, on average. This is harvest time, before the sheath breaks to reveal hundreds of pale blue flower buds.

Planting (see Plate 13)

A rule-of-thumb planting date is late September to mid-October, after any summer crop has finished. Buy nice-looking bulbs from a shop or catalogue, then break them up into cloves. Most shop garlic is the higher yielding 'softneck', and will not flower.

Largest bulbs grow from largest cloves, usually those forming an outer ring around the interior cluster of smaller cloves. Keep the inner ones for cooking. Use a dibber to make holes 5cm (2") deep, at a similar spacing to leeks, and push the cloves in firmly, with their pointy end upwards.

It is good to have some soil covering the clove tops and hiding them from curious birds, who may pull them out. Also, if cloves are planted too shallow, they may later be lifted almost out of the ground by frosts, which cause topsoil to lift and loosen. Compost can be spread on the soil before or after planting, or even in spring between the rows of leaves.

Growing

By Christmas there may be a few centimetres of spiky green leaf to reassure you that all is well. Any mild spells in winter will see this leaf grow and multiply, or in a cold winter it will simply sit there, although new roots will be forming, ready for a surge of growth in spring.

Any winter weeds need removing by early April to leave the soil clear for garlic's main season of growth. This is normally trouble-free, and your plants, by early June, should have the appearance of small leeks. If the weather is turning dry, rust can now turn the leaves yellow and bring maturity forward. Good garlic weather is plenty of moisture until mid-June, then drier towards harvest time. Usually this is late June to mid-July.

Harvesting

Garlic can be harvested from about the middle of May and the whole plant used, rather like a spring onion. Then, after the middle of June, poke under the soil in late June to see if bulbs are well swollen. Bad cases of rust can make it better to pull bulbs out then, after loosening the soil with a trowel or spade. Handle them carefully because they bruise easily and may then rot, rather than keeping until Christmas or beyond. Shake all soil out of the tenacious and numerous roots, revealing indented bulbs with the shapes of its cloves under layers of white or purple skin.

Bulbs for storing should not be beautified, but when needed for table an outer layer or two of skin can be carefully peeled off and the roots trimmed to reveal beautiful, shiny new bulbs.

The outer sheath of thin skins will gradually rot if bulbs are left in the ground for too long after maturity. Their cloves are still all right to eat, but bulbs look less attractive and may sprout sooner rather than later.

Storage

Remember that most garlic is ready for re-planting in October, so storage in warm, dry conditions can fool it into thinking that summer is going on, and there is no need to sprout just yet. Bulbs can be kept hung up in bunches, or trimmed off once their leaves are dry.

Set the best bulbs on one side for re-planting, since large healthy cloves make larger healthy bulbs. If for some reason you do not manage to plant in October, or even November, cloves can still go in as late as March, but the harvest will definitely be smaller. There is a risk that late plantings give insufficient exposure to cold weather for bulbs to properly develop, i.e. the new bulb may have very few cloves.

Problems

For **white rot** see under 'Shallots', page 101; for **rust** see under 'Leeks', page 106.

Charles's mayonnaise

You may not believe the amount of garlic in this recipe, and might like to try using less garlic the first time you follow it. You will notice that garlic is stronger at different times of the year; freshly harvested, it packs a powerful punch.

2 whole eggs

10 cloves of garlic

3. teaspoons wholegrain mustard

1 cupful vinegar

1½ teaspoons salt

pepper

4-6 cupfuls olive oil

We use a hand-held blender to whizz together all the ingredients except for the olive oil. Add this gradually.

As a variation you can make green mayonnaise by adding herbs from the garden – tarragon or basil and parsley.

Chapter 12

Choice of roots

An exploration of amazing flavours



Visitors to my garden, when looking at healthy crops in undug soil, are often surprised that the carrot and parsnip beds have not been ‘aerated’ or loosened in any way. We have been indoctrinated to believe that roots need man-loosened soil to descend!

I garden on clay soil, which is very sticky in springtime, although just on top there is a crumbly tilth, thanks to compost and winter frosts. Seeds can be sown into this frost tilth and tiny seedlings are happy to push straight through it and into the clay below. Carrots and parsnips grow straight and long with very little forking. Only potatoes are sometimes challenging for a no-digger, because they do prefer loose soil, and benefit above all from being earthed up.

Like all other vegetables, roots have seasons, but such long ones that we barely notice them. Last year’s potatoes and carrots are barely finished when this year’s are beginning. But the taste of a new-season root, freshly harvested, is a remarkable experience for the gardener and is always an exciting event. Beetroot, for example, is usually in the background as a kind of plodding vegetable, always there and much the same, even pickled. Yet the first beets in late May are utterly gorgeous, a reminder to winter-jaded palates of fresh, sweet flavours that somehow always impress, as if discovered for the first time ever.

In terms of vegetable rotation, remember that roots are from many different plant families and are not a rotation category in their own right, although you may often be advised differently. I have grouped them together in this chapter for ease of classification: for working any rotation, check the table of plant families on page 31.

BEETROOT

How to grow such a fine flavour? The soil, the seed, timing ...

Season of harvest: June onwards

Follow with: depends on harvest date, e.g. kale and autumn salad after early Boltardy

<i>Variety</i>	<i>Character</i>	<i>Sow</i>	<i>Height (cm)</i>
		<i>Harvest</i>	<i>Spacing (cm)</i>
BARBIETOLA	Pink 'moon rings' on white flesh	Apr-Jul	30
DI CHIOGGIA		Jul-Nov	5x30 or 30x30*
BOLTARDY	For earliest sowings, sweet flavour	Feb-Jul	30
(see Plate 17)		Jun-Nov	5x30 or 30x30*
CHELtenham	Long and sweet, resists frost	June	40
GREEN TOP		Oct-Mar	5x30 or 30x30*
GOLDEN	Yellow, fine flavour	Apr-Jul	30
		Jul-Nov	5x30 or 30x30*

*5x30 when sown direct, or 30x30 if planted in modules

EARLY BEETROOT

For the very earliest, Boltardy is excellent, providing sweet beets by late spring. It was bred so as not to bolt when sown in the cold of late winter. Fortunately it tastes good as well.

Sowing

First sowings are most successful indoors. I sow three or four beetroot seed into 4cm (2") modules of a tray of 40, but variable numbers of seedlings germinate from each seed, so thin them to four or five per module when still small.

Timing of the sowing depends on your facilities. I have 'electric sand' in the greenhouse, a thermostatically controlled cable running through wet sand underneath all the module and seed trays. Set at 20°C (68°F), this allows beetroot to be sown by mid-February, planted out in early April as clumps of seedlings, and a few golf-ball-sized roots can then be harvested by late May or early June – one of the first fresh vegetables of the season.

Alternatively, sow in modules in March in a cold greenhouse, or outdoors in late March or early April, depending on the weather.

Growing

Growth of the scarcely visible dark leaves will be slow at first, but the leaves are not too sought-after by slugs and ought to survive; fleece can be used to bring the harvest forward a week or two. Remember that fleece makes weeds grow faster too!

Harvesting

Beetroots in modular clumps always grow at different speeds, so individual larger roots can be gently twisted out as you need them, leaving the three or four remaining beets to grow on. In this way a small, well-weeded and well-composted patch can be producing over a long period, for two months or more.

There is also the possibility of eating beetroot leaves, in a similar way to spinach beet (page 81), as long as they have not grown tough with age.

AUTUMN AND WINTER BEETROOT

From the table on the previous page, you can see that there is a long season of sowing and harvesting. Sown as late as early July, there is still time for a medium-sized, tender root to develop before winter arrives, and the wide range of shapes, colours and flavours makes it interesting to try new possibilities every year.

MOON RINGS (see Plate 14)

All beetroots have rings, but Chioggia's pink ones on white flesh, like tree rings but more vivid, are highly visible when cutting roots both horizontally and vertically. By working back from picking date to sowing date, I find that there is usually a ring for each lunar month. Here is a good example of the importance of moon cycles to plant growth (see Chapter 8). In red beetroot the rings are faintly present, but scarcely visible.

Problems

The first, tiny leaves of outdoor sowings are sometimes eaten by **birds** or **woodlice**: if this happens you need to raise plants indoors. Flocks of sparrows nibble larger leaves too and fleece may be required.

Autumnal dampness can encourage dark, **fungal rots** on some varieties, especially yellow roots. I know of no remedy and recommend harvesting as soon as you see it – cut out the black bits and eat the rest raw.

Storing

In mild areas and winters, roots often keep best in the ground. But in seriously frosty weather they risk freezing right through and then rotting, so you have to make an assessment in mid-autumn. Semi-long varieties with more root underground are less damaged by frost. On balance, I pull most

roots and store them in paper sacks in an outbuilding. Larger ones dry out less. Salads of grated raw beetroot are valuable live food in the winter, with a much earthier flavour than cooked beetroot.

Beetroot, carrot and apple salad

People are sometimes confused about the length of time beetroot needs to cook. Young spring beetroot needs no more than 20 minutes, while an older winter root might need up to an hour in a slow oven. This recipe avoids the problem by using raw beetroot.

1 or 2 beetroots, depending on size

1 or 2 carrots

1 apple

parsley

a handful of walnuts

dressing: either vinaigrette or yoghurt

Grate the beetroot, carrot and apple, chop the parsley and stir in the walnuts and dressing.

CARROTS

Season of harvest: June to November

Follow with: depends on date of harvest, e.g. late beetroot, kale, French beans after early carrots

<i>Variety</i>	<i>Character Height (cm)</i>	<i>Sow Harvest</i>	<i>Spacing (cm)</i>
AMSTERDAM FORCING	Early, long and thin, deep rooting 25	Mar-May May-Jul	1x25 or less
BERLICUM	Maincrop, round ended, high yielding 40	May-Jun Sep-Nov	2x30
EARLY NANTES	Early, round ended, easy to pull 40	Mar-Jul May-Nov	1x30
RAINBOW MIX	Colourful, range of flavours & vigour 40	Apr-Jun Jun-Oct	1x30
ROTHILD	Maincrop, extra sweet, deep orange 40	May-Jun Sep-Nov	2x30

This is one of the tastiest vegetables you will grow, and one of the most difficult to establish. Once growing, there is a mouth-watering range of flavours to anticipate. Both sweetness and earthy aroma are enhanced in freshly pulled carrots. They express the ‘taste of your soil’ almost more than any other vegetable.

Sowing

Early sowings from about late March are the riskiest: about half of mine are eaten by slugs as soon as they emerge in damp springs. But I persevere! (see 'Problems', page 115).

Carrots sown in the relative warmth of May and June will usually (not always!) manage to grow away successfully. Rows can be along or across a bed, about 30cm (12") apart. In dry years, draw out a drill and then carefully water it before sowing, so that only the U- or V-shaped hollow is wet, not the soil on either side of it. After sowing, fill in with the dry soil and firm gently with feet or a spade. Do not water again for two weeks at least.

To sow the seed, I firstly shake seed into cupped fingers and then dribble seed from these into the drill. I rub backwards and forwards with my thumb against the first two or three fingers, as my hand moves steadily over the drill. Aim for about four seeds per centimetre; if in doubt, sow a little more thickly. In a month's time any excess seedlings can be thinned by careful pulling, depending on how well they have germinated.

Growing

Weeding is important throughout, especially so that weeds do not smother baby seedlings. Use hands, trowel or hoe, whatever is most comfortable. Later sowings are easier because you will have had time to hoe off the first germinations of weed seedlings and are thus sowing into cleaner soil.

Harvesting

The first baby roots are ready in about eight weeks, when a little investigation at surface level should reveal shoulders of small carrots. Larger ones can usually be eased out to leave more room for remaining roots to grow. The long variety Amsterdam, and others in dry soil, may need a trowel to gently lever them out.

After about ten weeks, less in summer, the whole row may be of edible size, depending how large you want them. There is a wide range of possibilities, according to season, variety of carrot, success of sowings and their thickness, spacing within and between rows, soil type, soil fertility and so on.

Too-thick sowings will look good initially but ultimately tend to grow more leaf than root, so thinning to recommended spacing is always worthwhile, above all for autumn harvests. Larger roots keep better than small ones, and involve less cleaning as well.

Carrots resist some frost but are damaged after about mid-November in temperatures below about -5°C (23°F). Also there will be increasing amounts of slug and maggot holes as growth slows in late autumn, so a mid-October harvest is late enough in most areas of Britain. A spade may be needed to gently loosen roots, though not if possible not in wet weather. Shake or scrape off most soil, leaving some to help carrots keep moist in a paper or hessian sack. Ideal conditions for storage are a damp 0-7°C (32-45°F).

Problems

Weeds, slugs and carrot root fly are the three challenges to deal with. Not digging is a first step in reducing germination of new weed seeds, as well as in conserving moisture. Bare soil in the vicinity of carrot seedbeds is vital in keeping slug numbers down. Damage from root fly maggots is harder to prevent, but some suggestions are made below.

Slugs The first month of a carrot's life is always tricky. Small carrot seeds beget tiny seedlings that can easily be devoured overnight in damp weather, should there be just one slug on the prowl. But after the first true leaf appears, the plants become stronger and grow away more readily from occasional nibbles. Here are three suggestions.

Think ahead. Prepare the carrot bed before winter by clearing and keeping clear both the bed and a fair area around it. Slugs live in weedy areas and will happily forage outwards from these to your newly sown carrot seedlings.

Do not sow too early. A fair guide is to wait until the first small weed seedlings appear on any bare soil, indicating sufficient warmth to germinate early crops. These can be hoed off before sowing, making a cleaner seedbed. Mid-April is a fair estimate, but if it is continually wet you will do better to wait longer. Carrots always start best in dry springs. An alternative option is to cover the carrot bed with a cloche in mid-March – an artificial way of ensuring dry, warm soil.

Do not water the seedbed or baby seedlings ('Sow in dust, grow they must'). Keeping the soil surface dry will help it to warm up and deter slugs.

In some springs it rains regularly enough for slugs to predominate. Sowing again is the only solution. If one knew of a wet spring in advance, cloches would be worth the trouble, but they are extra work in dry or normal conditions and can occasionally make the soil too dry.

Carrot fly After slugs, the maggots of small carrot flies are a most troublesome pest. Flies are on the wing from mid-spring, usually in two or

three batches until October.

Certain weather and soil conditions at certain unknowable times are more or less favourable to the descent of maggots' eggs into soil, so one never knows in advance if damage will be mild or severe. Sheltered gardens with a long history of vegetable growing are most at risk, compared with windy hillsides, which are likely to escape attack, because flies suffer in wind.

Damage shows as dark tunnels on growing or maturing roots, which can sometimes be cut off to leave plenty of good carrot. Occasionally almost the whole root is damaged, and this will be the result in late winter if some damage is seen at lifting time in October, because the maggots carry on eating and tunnelling until spring. They do the same in parsnips and celeriac, but with less dramatic effect because their tunnels are on the surface of much larger roots.

Covering young carrots about six weeks after sowing with a fine netting is worthwhile if you want to be sure of totally healthy roots. A vertical 60cm (24") polythene 'wall' around the whole bed, to keep out low-flying pests, is a little less effective but easier for weeding and picking.

I hope that with this advice you feel more aware of the challenges and encouraged to grow carrots. A successful crop is never assured, but when achieved is a sign of no little gardening skill.

Carrot salad

Grated carrot, juice of a lemon, olive oil, 1 teaspoon coriander seeds crushed, salt & pepper

CELERIAC

Season of harvest: October to November, store until April *Follow with:* spring sowings or plantings

<i>Variety</i>	<i>Sow</i>	<i>Plant</i>	<i>Spacing (cm)</i>	<i>Height (cm)</i>
	<i>Special care</i>		<i>Harvest</i>	
IBIS (see Plate 12)	Mid-Mar to Apr Needs thick compost and moist soil	May-Jun	35x35 Oct-Nov & store	40
PRINZ	Mid-Mar to Apr Needs thick compost and moist soil	May-Jun	35x35 Oct-Nov & store	40

Turnip-rooted celery is a strong-tasting root, bringing the flavour of earth and celery to soups, stews and salads in winter and early spring. Celeriac loves to grow in well-composted soil offering moist conditions, and benefits from some extra watering in a dry summer. Its roots are fibrous and mostly superficial, which limits its growth in drier soils; a heavy clay is

best.

I have grown many varieties and noticed few significant differences.

Sowing and planting

Decent-sized roots require a long growing season, so seed is usually sown under cover between late March and early May, for planting out by mid-June. The seeds are tiny and should not be covered with any compost, so a sheet of glass over the seed tray or modules is beneficial. Nothing will appear for up to three weeks, maybe when you are just about to give up!

The tiny seedlings should be pricked out into 3-4cm (2-2.5") modules, until about 7-8cm (3") high, then hardened off and planted after any risk of late frost, which would weaken but probably not kill them, and might encourage them to bolt before winter.

Growing

Regular hoeing or hand-weeding will probably be necessary until about August. By then, especially if you have planted 'on the square' at about 35x35cm (14x14"), there should be leaves covering all bare soil and preventing much new weed growth.

A thick surface dressing of compost always benefits celeriac immensely, both for a gentle supply of nutrients over its long season, and for retention of moisture in dry weather. Roots grow larger in wet summers.

By September there should be a fair-sized root, mostly above soil level. Some gardeners like to remove all lower leaves, supposedly to help roots to swell. I find this of little benefit growth-wise, but it makes the plants very attractive! I did a trial of one row de-leafed at the bottom, one row untouched, and the latter grew noticeably bigger.

Harvesting and storing

Lifting in November, and before any severe frost, is about right. Masses of fleshy roots make a spade or trowel helpful, together with a knife to sever roots as or after the plant is eased upwards. With the celeriac in hand, trimming of leaves and excess soil should reveal some hints of white flesh, but trim sparingly if you are harvesting to store the roots, in similar conditions to carrots – say in a box or sack in shed or garage, free of significant frost, because a thin layer of soil always helps to keep roots moist and firm.

Problems

Carrot root fly When preparing celeriac to eat, you may see lines of brown across and into its bottom end. These are tunnels of carrot root fly maggots, but as with parsnips the large bulk of the roots means that damage is less important.

Frost is a hazard because so much of the root is above ground and exposed to cold air.

Holes inside the roots can be from dry spells or varietal traits. Slug holes are more significant, often inhabited by woodlice, and many slugs may make an earlier harvest worthwhile.

Celeriac

Celeriac adds an interesting flavour to stews and roast root vegetables with carrot, parsnip and potato. It is also very good mashed with potato – about $\frac{2}{3}$ potato to $\frac{1}{3}$ celeriac.

FLORENCE FENNEL

Season of harvest: June to November

Follow with: depends on harvest date, e.g. beetroot / French bean after early Finale

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow</i> <i>Harvest</i>	<i>Spacing (cm)</i>	<i>Height (cm)</i>
ZEFA FINO	Resistant to bolting	May-Jul Late Jun-Oct	30x30	40-50
ROMANESCO	Large bulbs Do not sow early	mid-Jun-Jul Sep-Oct	35x35	50-60

Florence fennel is not well known in Britain, and deserves to be more widely grown. It is an umbellifer, of the same family as carrot, parsnip and celeriac. Eaten raw, the sweet aniseed flavour is refreshing in summer and lends character to salads of all kinds. Gentle cooking brings out a soft, sweet and creamy quality which is delicious in soups, ratatouille or just on its own. The feathery leaves can also be eaten, and have a mild dill-like flavour, although they are a little chewy.

Sowing

The difficulty in growing fennel has always been its tendency to send up a flowering stem before forming a worthwhile bulb. New varieties such as Finale and Zefa Fino help to overcome this, but I still recommend sowing

after mid-May. Sow direct or in 3cm (1") modules, with a last sowing in mid-July for some large bulbs in autumn.

Growing

If there is too little moisture, bulbs will be smaller and less juicy, so a 5cm (2") dressing of compost is especially worthwhile, preferably spread a couple of months before the fennel is sown or planted.

Harvesting

Bulbs will start to swell on the surface after about six weeks, and if all goes well they will fatten up to over 500g (1lb 2oz). Any bolting tendency will initially show as a notable elongation of small bulbs, at which point they may as well be eaten, since they are unlikely to grow any fleshier. Trim off all leaves and any tough, sinewy stem to enjoy some unusual and rich flavours. Harvest bulbs before any frost and they may keep until about Christmas time.

Problems

Remove any plants that are becoming stemmy while remembering to sow that variety later in the season next year. After swelling, bulbs may show signs of rot on their lower sheaths; harvest as soon as you see this, as the main bulb will grow no more. Any new growth will be of mini-bulbs inside the increasingly fibrous outer sheaths – these are very tasty, however!

Roasted fennel

1 onion, 3 or 4 heads of fennel

3 or 4 tomatoes, 2 cloves garlic

1 glass cider or white wine (optional)

Heat a roasting tin with a thin layer of olive oil. Slice an onion into rings. If the bulbs of fennel are large, slice them horizontally into rings; if small, they can be quartered vertically. Put into the roasting tin and cook in a hot oven c.180°C (350°F) for about 20 minutes. Meanwhile chop some tomatoes and a couple of cloves of garlic. When the fennel looks quite well cooked, add the tomatoes and garlic and return to the oven for another 10 minutes or so. If you now have a rather messy pan you can transfer the fennel mixture to a serving dish and clean up the roasting tin by pouring a wineglassful of cider or wine into the pan and returning it to the oven for 5 minutes. Then scrape it all out and pour over the fennel.

JERUSALEM ARTICHOKEs

See Chapter 16, page 183

PARSNIPS

Season of harvest: September to April

Follow with: nothing that year, e.g. onions the next year

<i>Variety</i>	<i>Character</i> <i>Height (cm)</i>	<i>Sow</i>	<i>Spacing (cm)</i> <i>First ready</i>
GLADIATOR F1 (see Plate 19)	As above & resistant to canker 60	Mar-May	2-10x30 Oct or after frost
WHITE GEM	Reliable to grow, gorgeous to eat 60	Mar-May	2-10x30 Oct or after frost

The three most important things to know are:

- Home-grown parsnips are incredibly sweet and delicious, most notably after frost.
- Always use fresh seed.
- Parsnip seed takes a long time to germinate.

Sowing

It will be difficult to keep the tiny seedlings clear of weeds, unless you have clean soil to sow them in. For best crops I recommend sowing mid-March to mid-April, but if a lot of weed seeds are expected to germinate, I advise waiting until they do and then hoeing them off before sowing parsnips in early May.

This can, however, lead to problems. Sowing later has the disadvantage of a slightly smaller crop, and also of the slowly germinating seed running into a week's dry spring sunshine, which may crisp it up before any root has travelled down to moister zones. It can often be a month between sowing and first leaves appearing, so one is unsure whether they will emerge for a long time. A few radish can be sown in the drill to mark it out at least, and they will be half-ready before the parsnip seedlings appear.

I sow either three or four rows along a 1.2m (4') bed. Squashes or courgettes are good preceding crops if you kept them well weeded, because that will have cleaned the soil and they will have been heavily composted. Most of that compost will have been taken in by worms, leaving a fine tilth for sowing the parsnips, once any debris (dead stems, etc.) of preceding crops has been raked off.

Sometimes I spread some compost in the autumn before sowing parsnips, because they appreciate a humus-rich soil and can be sown into surface-applied compost if it is not too lumpy.

Growing

By the time each parsnip plant has two or three true leaves, it is often worth thinning them to about 7-10cm (3-4") apart, depending on whether you like small or large roots. Bear in mind that, when harvesting, it can be a lot of work to scrape the mud off small roots and you may wish at that point that you had thinned them out.

Young parsnip seedlings will thrive in recently spread compost of top quality, or you can spread more lumpy compost between the rows of larger parsnip plants in June. Its mulching effect ensures larger roots.

After that, occasional weeding is the only requirement. Keep checking for weeds so that none are seeding, keeping the next crop (onions maybe) in mind. Such thoughts should forever be in the back of your mind when gardening – the long-term improvement of your soil, and maintaining it clean of weeds so that subsequent crops are much easier to grow.

Harvesting

Loosening with a fork should be enough, until the tap root snaps, without turning the soil over. The grand moment of first digging is exciting because one is never too sure what may be there. Roots will come out beautifully white in dry autumn weather, but normally they will need at least a gentle rub or scrape before taking to the kitchen.

Parsnips are one of the few vegetables that can safely be left in the garden all winter. Their flavour improves significantly with cold weather as starches turn to sugars, so frost is actually beneficial. By March some leaves will start to grow out of any remaining roots: the row becomes visible again, and the last roots want digging by about mid-April. By June, if left in the soil, they would be making seed heads, which resemble cows' parsley (also an umbellifer). Planting a parsnip root amongst the flowers can make a striking statement!

Frost will knock the lumpiness out of any clods brought up when digging parsnips. Knock these to a tilth with fork or rake, to be ready for sowing or planting next spring.

Problems

Canker In wet winters and in heavy soils the root tops may succumb to canker, a brown fungal rot. Even if this happens, there is usually plenty of good root below. When you grow your own vegetables, grading out the bad bits soon becomes second nature and one never discards something which is even half good.

Carrot root fly will also probably have visited your parsnips, and its tiny maggots usually crawl around the outside of roots. Their damage can be trimmed off unless roots are very small – make a note to thin seedling parsnips next year, so they grow bigger. Also, crops will improve every year if you apply 50cm (1'8") of compost annually.

Poor germination after a month of waiting is almost certainly because of old seed. Buy some more and sow again immediately.

Parsnip soufflé

500g (1lb 2oz) parsnips

300ml (10floz) milk

5 eggs

100g (4oz) cheddar cheese, grated

Cut up the parsnips and steam or boil till tender. Make a white sauce starting with a generous knob of butter, a large spoonful of flour (we use our own home-ground wholemeal). Start by sautéing an onion in the butter before making the sauce. At this point you can add some wholegrain mustard if you wish. Add the milk, and when you have a nice creamy sauce add the cheese, leaving enough to sprinkle on the surface of the soufflé. Now separate the eggs, beating the yolks into the sauce (waiting for it to cool a little so you don't end up with scrambled eggs). Drain the parsnips, and purée them. Season with salt, pepper, nutmeg to taste, and mix into the sauce. Add a pinch of salt to the egg whites, and whisk them. Carefully fold the sauce into the whites and pour into a buttered soufflé dish. Sprinkle the remaining grated cheese on top and bake for 30 minutes at 200°C. Sometimes when we cook this for the family we put the mixture in a shallow, oval 'plat sabot' so it will cook more quickly.

POTATOES

Season of harvest: late May-October (thereafter from store) Follow with: leeks, kale, salad (after first and second earlies mostly)

<i>Variety</i>	<i>Character</i> <i>Height (cm)</i>	<i>Special care</i>	<i>Plant</i>	<i>Spacing (cm)</i> <i>First ready</i>
CHARLOTTE	Waxy salad potato, 2nd early 40	Watch for blight	Mar-Apr	30x40 Jun
REMARKA	Waxy, deep yellow maincrop 50	Watch for blight	Apr	45x45 Aug
SARPO MIRA	Blight-resistant maincrop, red skin 70	Tall leaves may need support	Apr	45x45 Sep
SPRINT	Exceptionally early 35	Lift as soon as leaves yellow	Mar	30x30 May

Far be it from me, a potato amateur, to give extensive advice on this popular crop. I will limit myself to a few observations on general principles, worthwhile varieties I have grown, and on the scope of potato growing in a nodig garden.

Potatoes can be grown in heavily mulched ground where weeds are being killed, but beware of slugs and harvest early, at least before the end of July – I look on potatoes as a half crop in this situation, with another to follow in the season’s second half, once the mulch is cleared. Plant tubers on top of the soil, underneath the light-excluding mulch, and keep checking that the mulch is still thick enough to smother weed growth and keep developing tubers out of the light.

How they grow

Potatoes are classified according to how quickly they mature. First earlies have the shortest life, second earlies mature a month or two later and maincrops carry on into the autumn, offering higher yields and usually larger potatoes.

As a potato plant grows, new tubers (potatoes) form both below and near the soil surface. If left uncovered, surfaces of potatoes exposed to light turn green and poisonous – hence the need to ridge or earth up around their stems. I have used thick wedges of straw to this end, and also have grown potatoes under black polythene for the same reason. Both tended to encourage too many slugs, and even without mulch slugs are a major problem. Most potato farms use slug pellets, especially in wet autumns, whereas I recommend digging any maincrop by late September. They should also be less muddy at this time.

Note that maincrop potatoes take up a fair amount of space and are scarcely viable in small gardens.

First earlies

Most gardeners will do better to grow early potatoes, which are ready from

late spring, because the extra flavour of freshly dug potatoes is most apparent in first earlies. Also there is time to plant other vegetables after them, and less need to earth them up since they make fewer tubers.

Choosing potato varieties

Regarding which variety to grow, the choice is almost daunting, and you will need to consider season of maturity, flavour, and blight resistance. Read catalogues carefully and study the small print! I like Sprint for its incredible earliness, Estima and Wilja (second earlies) and Remarka for their waxy salad-potato quality, and Lady Balfour (Plate 15) or any of the Sarpos for their ability to resist blight. Pink Fir Apple is the classic salad potato maincrop, but is at more risk of succumbing to blight.

Buying tubers

Potatoes grow most easily from last season's tubers, rather than from seed. Often they are sold in 3kg (6lb 10oz) lots of about 30 tubers, which may be too much for a small garden, so consider sharing an order with friends or neighbours. Smaller packs of 1kg (2lb 3oz) are increasingly available.

GROWING IN BAGS

You can grow potatoes in small gardens and patios in large plastic bags with drainage holes, filled with the cheapest compost you can find. I am not convinced that the yield of potatoes justifies all the work involved, and the sprawling leaves can flop over other nearby plants, but it is fun to have a go.

You can save money by using some of your harvest – including any green ones – for next year's planting, but avoid doing this if the crop has been infected by blight (see opposite page).

Planting

I simply make a hole about 10cm (4") into the soil with a trowel and pop seed tubers in, without any soil loosening. Usually I will have spread a dressing of organic matter in the autumn; if not I do it after planting, anything from 5-10cm (2-4") of compost or well-rotted manure. Then placing fleece on top can help bring on early growth, from a March planting, and prevent frost from damaging leaves too much.

Growing

There are two choices for earthing up. Firstly, add either more compost or

bulky organic material such as grass mowings. The former is preferable because it attracts fewer slugs and leaves the soil in beautiful condition for another crop. Secondly, use a hoe to scrape some of the nearby loose soil and compost and pull it towards potato stems in a mound or ridge. This needs doing when plants are growing strongly and a few tubers are becoming visible at surface level. In a year of little blight, this needs doing once for first earlies, twice for second earlies.

Harvesting

By late May, depending on variety, there may be flowers atop the plant and the leaves of first earlies may even be yellowing. Both indicate maturity of tubers – any extra growth is limited when leaves start to die off.

Slip a trowel under the plant, about 15cm (6") away from the stems, pulling on them gently at the same time. As the plant rises up from soil level, a cluster of new potatoes should become visible. Most are near to the stem; sometimes you will see white roots leading to potatoes further away. There will also be the original seed potato, now ugly and rotten.

Eating your tubers on that same day will reveal fine fresh potato flavours that are incomparable with shop-bought produce. A gentle brushing will prepare them for the pot as there is no skin to peel off, and a little mint in the saucepan will add to the wonderful feeling of summer.

Problems

Frost Potatoes are of the same plant family as tomatoes and aubergines, and are equally sensitive to frost. But if leaves are frozen and blackened by late spring frosts, don't despair because the unfrozen roots will quickly send up new shoots and leaves.

Blight appears in wet or damp summers, between June and September depending on the weather. Once any leaves have turned brown and wilted it can take as little as two weeks for the whole plant to die, and by then many roots may be infected, meaning they will rot if stored, as happened in the 1840s Irish potato famine.

So it is best to harvest any crop as soon as blight is spotted, or to cut all stems just above ground level to stop passage of the fungus into potatoes, through the plants' sap. Then dig the roots as needed.

Another possibility is to grow blight-resistant varieties; the best ones I have grown are the Sarpa potatoes, from Hungary. They are extremely vigorous, with

fair-tasting pink tubers that are more floury than waxy. The stems are vigorous and long, so allow space and perhaps run a string around the row or bed to stop leaves falling over nearby plants. They keep growing vigorously in autumn, with the tendency for the potatoes to become more floury if left in the ground too long, after about late September.

Gratin dauphinoise

1kg potatoes, peeled and thinly sliced

3 shallots sliced, 4 cloves garlic chopped

250ml (9floz) full cream milk, 250ml Jersey cream

150g (5.5oz) cheddar cheese, grated; salt, pepper, nutmeg

Parboil the potatoes for 5 minutes. Butter a large gratin dish. Build up alternate layers of potatoes and shallots. Mix together the cream, milk and seasoning and pour over the potatoes. Top with grated cheese.

Bake at about 180°C (350°F) for an hour.

SALSIFY AND SCORZONERA

These are often mentioned together, perhaps because they are equally fiddly to harvest and clean. They have quite thin roots – scorzonera's are black-skinned, and salsify's are creamy in colour – so edible yields are often small. They are delicacies, not staples. Salsify is reckoned by some people to have a taste of oyster – worth a try if you enjoy something different.

Sowing

Sow directly from April to June. Later sowings may produce smaller roots but perhaps with less forking. Scorzonera is inclined to bolt from sowing too early, wait until May at least.

Growing

Thin plants to about 15cm (6") in rows of 30-35cm (12-13").

Harvesting

Sandy soils are most suited to the fiddly work of cleaning soil off thin and tender roots, which snap easily. Leaves will die off before winter but the roots resist most frost. They can be lifted and stored in boxes or sacks in cold areas. Any roots left behind will grow pretty flowers the next spring.

SWEDE, TURNIP AND RADISH

A final mention for swede, turnip and radish. These roots are all members

of the brassica (cabbage) family, and I explain their growing in Chapter 14 since brassicas all have common requirements.

Chapter 13

Savouring summer

Vegetables with fruits and seeds



Most fruiting vegetables are killed by frost and require summer warmth to grow. Wait until the middle or end of May before planting them. The exceptions are peas and broad beans, whose harvest is often the first real taste of summer, after all the leaves of springtime.

BROAD BEANS

Season of harvest: June-August

Follow with: leeks, beetroot, fennel, salad, kale, purple sprouting broccoli

<i>Variety</i>	<i>Character</i>	<i>Special care</i>	<i>Plant</i>	<i>Spacing (cm)</i>
	<i>Height (cm)</i>			<i>First ready</i>
CHARLOTTE	Waxy salad potato, 2nd early 40	Watch for blight	Mar-Apr	30x40 Jun
REMARKA	Waxy, deep yellow maincrop 50	Watch for blight	Apr	45x45 Aug
SARPO MIRA	Blight-resistant maincrop, red skin 70	Tall leaves may need support	Apr	45x45 Sep
SPRINT	Exceptionally early 35	Lift as soon as leaves yellow	Mar	30x30 May

Sowing

Aquadulce does well from a January sowing in pots or 4cm (2") modules in the greenhouse, or from a February/March sowing outside. These dates also work for most other varieties, including green-fruited beans such as Masterpiece Green Long Pod, whose flavour is appealing and somewhat different.

Sowings made in May or June will crop into late summer and autumn, but yields will be low and aphid attack is more likely. Broad beans do best when sown by early spring.

Certain varieties, chiefly Aquadulce Claudia, are so hardy that they can be sown in the ground in late October or early November, to stand the winter as

seedlings about 5cm (2") high. They may be killed by extreme frost or waterlogged soil in a wet winter, but the gamble is worthwhile.

Growing

Autumn-sown beans that survive the winter, often rather bedraggled looking, will suddenly start growing strongly in early spring, when their cousins the spring-sown beans are still very small. Each plant will send out more stems, a process called tillering, and soon the whole four or five feet of each stem will be covered in sweetly scented flowers, whereupon you can pinch out the tops for eating in salads, or lightly steam them as a spring green.

Many broad bean plants grow tall enough to be worth supporting. Before they are more than a metre high, put stout stakes at each corner of the bed or end of the row and others every 2m (6') or so, then run a couple of strings around them keeping the plants within, to help them stay upright. This is not always necessary: in years of quiet weather they look after themselves very well; also, there are dwarf varieties which do not need support.

Harvesting

The first pods of autumn-sown beans should be ready by mid-June, when there are few other vegetables to eat, and they can be eaten whole if picked when the beans are pea-sized. The beans' flavour will change all the time, becoming milder and creamier; eventually starchy if the pods are left until they change in colour from dark to pale green. By the end of July, or later for spring-sown beans, any remaining pods will be black and containing next year's seeds: pick them off, shell out the hard beans and keep them dry until November.

Once the last pods are picked, I recommend cutting the stem at its base, with a knife or spade, rather than pulling up the whole plant. This way, more of the nitrogen nodules fixed by the plant on to its roots will remain in the soil for use by a following crop, which can be planted straight away – think ahead and have some plants ready. The bean stems are best chopped or cut before composting, to help them rot more quickly. This procedure applies to all peas and beans.

Problems

Mice, rooks and **badgers** may eat or pull out seeds and baby seedlings. Netting plants will stop birds and larger animals, while mice are best dealt with by sowing in the greenhouse with some kind of mouse trap primed all

the time.

Black aphids Removing the growing point at the top of the plant, when in full flower, helps to prevent arrival of black aphids that occasionally infest the upper stem of broad bean plants. These aphids are more common on spring-sown beans, probably because faster growth has made them softer and more sappy. If aphids do appear, remove the infested parts to the compost heap as soon as you see them.

Chocolate spot is a fungal invasion, usually restricted to wet years. The yield will be lower but you can still pick the beans, although your hands may be covered in orange-brown mould from the undersides of the leaves.

Rooks and pigeons occasionally peck out fresh beans. Netting such large plants is difficult; try hanging up unwanted compact discs to deter them first.

Broad beans in sorrel sauce

Make a white sauce:

20g (1oz) butter

20g flour

250ml (9floz) creamy milk

salt and pepper or nutmeg

500g (1lb 2oz) broad beans (podded)

Melt the butter, stir in the flour, add the milk a bit at a time, stirring it in well before adding more. If it is warm it will mix in more easily. Season.

Chop the sorrel into shreds and stir into the sauce; it will cook with the heat from the sauce.

Lightly steam the broad beans, drain, and stir into the sauce.

Broad bean tops – the topmost leaves – can be very good in a stir fry or lightly steamed.

COURGETTES

Season of harvest: late June-early October

Follow with: nothing in same year; salad, carrots, beans, etc. following year

<i>Variety</i>	<i>Character Spread (cm)</i>	<i>Sow Days to first pick</i>	<i>Spacing (cm)</i>
DEFENDER F1	Early and prolific 100-150	May-early Jun 60	70-90x150
PARADOR/SOLEIL F1	Bright yellow courgettes 100-150	May-early Jun 70	70-90x150
RONDO DI NIZZA	Round, green courgettes 100-150	May-early Jun 60	70-90x150

When you grow courgettes well, the results can be overwhelming. In summer warmth, each plant produces about one new courgette every day, although some round and yellow varieties are less productive.

Varieties

Choose a variety that is bred to make true courgettes: although courgettes are really baby marrows, some varieties of marrow plant, such as All Green Bush, will produce few courgettes, of an unattractive size and shape. It puzzles me why seed companies offer them as ‘courgettes’.

Most catalogues offer a bewildering range of varieties; I find myself growing different ones each year to try them all out. Most of the pretty round and yellow ones are good for a change of shape and colour, but the flavour is not massively different and yields can be lower. See Summer Squash, page 141, for a broader spectrum of flavours.

Sowing

Seed can be sown in the greenhouse in late April, for planting outside mid-May, at which time a covering of fleece will be a great help to the plant for about three weeks, until it is flowering. Large seeds make for rapid growth, about a month from sowing to planting in reasonable warmth.

Growing

Like all plants of the Cucurbitae family, including cucumbers and squashes, courgettes have large leaves and long stems, and require plenty of room. Their roots will travel a long way in search of moisture and nutrients to keep churning out the daily fruit, so I try to plant them on the edge of the garden, as far as is practical, and the occasional one on a maturing compost heap. Growth will be excellent if you spread plenty of reasonably well-rotted compost where they are to grow, and perhaps some more around their roots in midsummer.

Harvesting

The early flowers are especially dramatic and exciting, usually brilliant yellow, and all Cucurbitae flowers are edible. The first courgettes will be small, even misshapen. They are best picked as soon as their flower is dying so as to encourage new and better fruit, and then the daily or every-other-day picking will continue until early autumn. Let the fruits grow to the size you like; there is more to eat when they are picked larger, but the texture is less firm. Courgettes store better if you harvest by cutting their thin stem; otherwise simply snap them off.

Production will finally stop when a first autumn frost kills the leaves: I then fork the dead plant to one side, remove any weeds, spread compost and put the plant back on top as a winter mulch. By spring, just a few pale fibres will be left of those plants that threatened to take over the garden – they were nearly all water.

Problems

Slugs There are few pests except for the inevitable slugs, which do most damage early and late in the season. A cold, wet May is always bad news and will slow down growth to the point where slug holes in the leaves can outweigh new growth. Planting in early June is better if slugs are suspected.

Mildew By August there will be mildew on many of the older leaves, but this will not prevent the continued appearance of new fruit, sometimes hidden under leaves, until the weather cools significantly.

Courgette soup

Water is the great enemy of courgettes when it comes to cooking – so we never steam them, always fry or bake. The first courgettes are delicious lightly fried with onion, garlic and rosemary. As they get bigger, and less of a novelty we start to use other recipes.

600g (1lb 5oz) courgettes, washed & roughly diced

1 onion, 1 teaspoon ground cumin

250ml (9floz) milk

200g (7oz) potatoes, cubed & peeled

2 or 3 chopped garlic cloves

1 teaspoon oil

500ml (18floz) chicken stock, salt & pepper

Sweat the courgettes, potatoes, onion, garlic and cumin in the oil. Add the milk and chicken stock. Simmer until all the veg are soft. Blend, and season to taste.

CUCUMBER

Season of harvest: July-October

Follow with: Japanese onions, garlic, broad beans

<i>Variety</i>	<i>Character</i>	<i>Sow</i>	<i>Spacing (cm)</i>
	<i>Spread (cm)</i>	<i>Special care</i>	<i>Harvest</i>
PASSANDRA F1	Top flavour and yield 300 (height)	Apr-May Greenhouse	60-80 Jun-Oct
LA DIVA F1	Resists mildew 150 (spread)	Apr-May Outdoor	80-100 Jul-Sep
GREEN FINGERS	Baby cucumbers 300 (height)	Apr-May Greenhouse	60-80 Jul-Oct

Cucumber is one of the fastest-growing plants, with an interesting range of fruits that are usually best picked young, before seeds develop and the skin becomes too firm. As mature, seedy fruit they can be cooked or pickled.

Varieties

My favourite over many years in polytunnel growing is Passandra, for its convenient small size (about 20cm / 8" long), fine sweet flavour and incredible profusion of cucumbers. Otherwise, try a few different ones of various shapes, colours and flavours, and check the details as to whether they are 'outdoor ridge' for trailing over the soil, or 'indoor' for growing vertically in a greenhouse or tunnel. For the latter I definitely recommend all-female (F1) varieties, to avoid bitterness (see 'Growing', below).

Both plants and fruit contain more water than almost anything else, so moisture and humidity are constantly necessary, together with warmth. The easiest to grow are 'outdoor ridge' cucumbers, with long trailing stems, like a smaller version of squash plants. Keep a lookout for fruits that may be hidden by the profusion of leaves; in hot weather there could well be one new cucumber every second day. Growth will slow markedly in September as the temperature drops, but the presence by then of many small fruit can see cropping maintained at a high level until frost.

Sowing

Always be sure to sow in warm conditions and be careful not to over-water small plants, which hate having their roots in cold, wet compost or soil. Outdoor cucumbers are best sown indoors in May. Be sure to handle young

plants carefully when potting on or transplanting, because the sappy stem is fragile and liable to snap, and the roots are also fragile. Outdoor sowing should wait until June, and even then only when there have been a few days of summer warmth.

Greenhouse or polytunnel cucumbers are more work to look after, but highly worthwhile for their quality and yield of fruit, over a longer season. Sow late April, plant late May, and some first pickings may arrive by late June. During July and August there is often a serious surplus.

Growing

Greenhouse plants are usually grown up strings or tied to stakes – always be careful with their brittle stems (see Tomatoes, pages 164-170). Side shoots need pinching out, every four or five days at most, leaving only the baby cucumber at each node. Hybrid F1 varieties are easiest because they set no male flowers, whose presence would mean some pollination of baby fruit and a subsequent bitter flavour.

Plants can grow three or 4m (10-13') long, so when they reach the top of your greenhouse or tunnel the stem can be looped over a wire or support and encouraged to grow down again. Or the growing point can be pinched out, and one or two side shoots at the top allowed to develop into new stems that trail back down.

Outdoor cucumbers require less trimming and training, but can be harder to establish if June is cooler or wetter than usual. Fleece may help initially, but once growing strongly they should flower and fruit profusely.

Harvesting

Greenhouse plants may yield a cucumber every day in hot weather, so don't inspect them weekly! Fruiting outdoors is about half the speed of indoors. Cucumber flavour varies according to maturity of the fruit; more mature means tougher skin and seedy cucumber. 'Middle-aged' cucumbers have, in my view, a fuller and sweeter flavour than very young and tender ones, but as the gardener you can choose for yourself.

Problems

Lack of warmth at sowing or planting time can sometimes diminish growth to the point where slugs may have a chance.

Mildew usually coats the underside of older leaves in late summer and

autumn; these leaves can be removed and plants normally carry on fruiting.

Red spider mite can sometimes kill greenhouse cucumber plants. It is almost too small to see, but will reveal its presence by a yellowing of lower leaves and faint cobwebbing on the undersides. By this stage it may be too established to deal with, and will probably overwinter in the greenhouse or tunnel, so a predator (phytoseiulus) will need to be bought and introduced just after planting next year. Predators come with some of their prey as well, so they don't starve, and one then hopes the two populations will achieve a stable balance.

Cucumber

As a change from eating cucumber in its natural state, try dicing it and mixing it with yoghurt, a little garlic, and tarragon, mint or chives.

FRENCH BEANS: DWARF

Season of harvest: July-September Follow with: salad, garlic, onions

<i>Variety</i>	<i>Character Height (cm)</i>	<i>Sow Days to first ready</i>	<i>Spacing (cm)</i>
CUPIDON	Long, tender beans 40	May-Jul 70-80, long harvest	45x45
PURPLE TEEPEE	Purple beans, easy to pick 35	May-Jul 60-70, short harvest	35x35
SONESTA	Waxy yellow beans, fast cropper 35	May-Jul 60-70, medium harvest	40x40

These are the essence of summer, crunchy in salad, of vibrant colour when lightly steamed and available in green, yellow or purple. The advantage of dwarf bean plants is that no time-consuming supports are needed, and they crop a week or more ahead of climbers. The disadvantage is that their beans hang close to or even touching the soil, so they can be dirtied by storms and holed by slugs. In a dry summer this is not a problem, and they may crop better (with a little watering) than moisture-demanding climbers.

Varieties

There are many good varieties. I especially recommend Cupidon for a high yield of lovely long green beans, and Sonesta for its rapidity of growth, a slightly waxy taste, and for the relative ease of finding yellow bean pods as opposed to green ones. Purple and Golden Teepee have similar advantages but crop for about a week less. Note that purple beans, like broccoli, turn green when boiled.

Sowing

Sowing, even in a greenhouse, should wait until May because, like runner beans and many other plants in this chapter, French beans simply will not grow when soil temperatures are below summer levels, around 20°C (68°F). Sown too early, the seeds may rot. Even if they germinate, growth will be sluggish(!) and prone to slug attacks. Remember that slugs are always on the prowl for weak and dying vegetation.

Outdoors I recommend sowing no earlier than the end of May, on average, with a second sowing in late June or even early July for a late crop. Sowing in 3-4cm (1-1.5") modules on 1 July for example, either inside or out, will see plants ready to go in the ground by mid-month where garlic or early carrots or spring lettuce will just have finished.

Growing

I usually do three or four rows of dwarf beans along my 1.2m (4') beds, about 35-45cm apart in every direction (15-18"), leaving a little room for working around the plants at picking time. In dry weather some water after flowering will increase the harvest.

Harvesting

Once the little bean pods appear, picking will be possible every few days, depending how large you want them to grow. They are quite hard to find, and if missed or left for too long the pods swell with seeds and become rather tough.

On average, after four to six weeks of picking the yield diminishes noticeably, and thereafter bean quality is less fine as they become scarce. Hence my recommendation of a second sowing by early July, while the first one can be pulled out by mid- to late August.

Some varieties are bred for quick development of seed, so that you can let the pods shrivel and then harvest dry beans for cooking in stews. Yields of dry beans are lower than of pods.

Problems

Slugs are keen on both leaves and beans, but can be tolerated in high summer when plants produce more than they can eat. Keep the soil clean with no weeds and do not sow too early; indoor sowings are more reliable than outdoors. Respect the spacings recommended, as planting too close

will create more shade for slugs and also result in a shorter harvest, with more leaf than bean.

Salade Niçoise

225g (8oz) French beans, cooked

4 tomatoes

200g (7oz) tin tuna or a tin of anchovy fillets

1 small onion – red if you have it

4 hard-boiled eggs

black olives

lettuce leaves can be added if you wish

for the dressing:

2 tablespoons wine vinegar

6 tablespoons olive oil

1 garlic clove chopped

1 tablespoon chopped fresh herbs

Lightly steam the beans and drain and cool them under running water. Quarter the tomatoes and eggs, slice the onion. Toss the leaves and beans in dressing and arrange the other ingredients on top.

FRENCH BEANS: CLIMBING

Season of harvest: late July-September

Follow with: garlic

Variety	Character Height (cm)	Sow Days to first ready	Spacing (cm)
BLAUHILDE	Attractive purple flowers & beans 180-250	May-Jun 75-85, long harvest	35x50*
BORLOTTA DI LINGUA FOCO	Pretty flat pods, viable for dry seed 180-250	May-Jun 70-80, medium harvest	35x50*
HELDA	Flat-podded, early cropper 180-250	May-Jun 70-80, short harvest	35x50*

*35 = distance between plants, 50 = distance between rows

Variety	Character Height (cm)	Sow Days to first ready	Spacing (cm)
WESTLANDSE	Many harvests, round green beans 180-250	May-Jun 75-85, medium harvest	35x50*

*35 = distance between plants, 50 = distance between rows

Varieties

There is a wide choice of seed to produce beans of different colours, shapes and maturity – all out of slugs' reach. Four of the many varieties are highlighted in the table above.

Borlotta di Lingua Foco is dual-purpose, meaning that the red-and-cream-striped pods can be harvested as a short flat pod or left to dry on the plant, picked when the pods are crackling and shelled out for a harvest of small freckled beans. Seed of the other varieties can be produced in the same way.

Sowing

As for dwarf beans, sowing in 3-4cm (1-1.5") modules from late May should be a reliable way of starting growth. Wait until June for outdoor sowing.

Growing

I grow two rows of climbing beans along my 1.2m (4') beds, about 50cm (20") apart with 30cm (12") between the plants. Alternatively, one row could be grown up netting on flat ground, or wigwams of 90cm (3') diameter can be created on beds or anywhere with some good, moisture-retentive soil.

The plants will grow to at least two metres, depending how long your supports are: their large size and rapidity of growth are why they need rich soil. Traditionally, a trench is opened out in late winter or early spring to receive large quantities of well-rotted manure or compost. This is optional: I find it works as well to spread manure or compost on the soil surface by about January, giving time for some weathering to make a fair tilth for sowing or planting.

Supports can be put in place before or after sowing / planting. The aim is to have a bamboo or hazel stick about 8cm (3") from each plant, each stick meeting and being tied to another one opposite, for mutual support of heavy plants in all weathers. The climbing stem may need some help to start growing up its nearby stick – some go wandering or fall down at first.

Flowers will take time to appear because initial growth is often slow. Then the excitement begins as little bean pods suddenly appear and proliferate, along with lots more new leaves. By the time some pods are ready, they may be hidden amongst the foliage and need careful picking. Yellow and purple beans stand out more than heavily disguised green ones.

Harvesting

As with most beans, cropping is prolonged by repeated picking of pods before they become seedy, unless you are growing Borlotta or other varieties for their seed. I find that cropping varies from year to year, sometimes continuing for ten or twelve weeks; sometimes half that. Watering in dry weather is especially helpful to such fast-growing plants.

Problems

Early sowings cause some anxieties – cold weather in late spring may cause leaves to turn yellow, but plants will recover in warmth as long as slugs have not eaten them. Dry summers mean that watering will make a huge difference as soon as flowers are open, otherwise only a few will develop into beans.

French beans (haricots verts)

These are very elegant just served with a little chopped garlic and butter. We steam them very little so they are quite crunchy (for a maximum of 6 minutes – sometimes 2 or 3 will do). Once the beans are cooked, add the chopped garlic clove and some butter, and put back on the heat for a minute or two to cook the garlic.

PEAS

Season of harvest: June-July

Follow with: leeks, beetroot, fennel, salad, kale, purple

Variety	Character		Sow	Spacing (cm)
	Height (cm)	Special care		First ready
GREENSHAFT	Conventional peas 75	Sticks or net for support	Mar-Apr	150x4 in rows* 80-85 days
NORLI	Mange tout for pod only 60	Small sticks	Mar-Apr	60x4 in beds 75-85 days
ONWARD	Conventional peas 75	Sticks or net for support	Mar-Apr	150x4 in rows* 90-95 days
TALL SUGAR SNAP (see Plate 20)	Extra sweet, edible snap-pods 150-200	Tall sticks or posts	Mar-Apr	150x4 in rows* 85-90 days

* The rows can be on beds and may be doubled up – see overleaf

Varieties

The choice of variety is important, and there are two main types. Earlies, such as Feltham First, have round seeds, taste less sweet and will crop quickly, say by early June. They can grow without support and will finish

cropping after just two or perhaps three weeks. Greenshaft is strictly speaking a second early but is often called an early maincrop, because it has wrinkled seed and is sweeter and taller. Even taller varieties, such as Alderman, yield most heavily. Maincrops will yield for up to a month, especially if you keep picking mature, pea-filled pods as soon as you see them – and sometimes they need a little looking for! ‘Semi-leafless’ varieties, such as Ambassador, make picking easier, but pea pods are definitely more visible than French beans.

Mange tout and sugar pea

A further two categories of pea are mange tout and sugar pea. These are sometimes confused but are completely different, as a true mange tout, for example Oregon Sugar Pod or Norli, contains only the very tiniest peas, the idea being to eat just its stringless pod. Sugar peas, by contrast, are both tasty pod and full of sweet peas, best picked when the pods are quite fat for a wonderful mouthful of flavour, especially when gathered straight off the plant and eaten raw. There are dwarf varieties such as Sugar Ann or Sugar Bon, and a tall variety, Sugar Snap (Plate 20), which I find will grow to 2.5m (8') if sufficiently supported, as well as cropping extremely heavily when growing in healthy soil and well watered. Note that all tall plants need more moisture to nourish their large number of leaves.

Sowing

I find peas really exciting to grow because they can be so fast, and their crop is so sweet and enjoyed by everybody. Some people advise sowing in November, as with broad beans, but I find that they rarely survive and certainly don't thrive. Sowing from mid-March in the greenhouse and from late March in the soil, until early May, will give best results. Early sowings can be fleeced to help them on and you may have to do this to keep pigeons from pecking off their leaves, most common in early spring.

I sow three seeds per 4cm (1.5") module in mid-to-late March in the greenhouse, or dib three seeds in holes directly, in two rows about 20cm (8") apart down the centre of a bed, with about 15cm (6") between clumps of plants. This affords plenty of room for the roots to develop and for good access to pick the peas, especially if tall maincrop varieties are used (see Plate 22).

Growing

Supporting peas can be done in many ways, the two most common being

hazel branches and netting tied to stakes. For the tall Sugar Snaps I use 2.7m (8') stakes at 1.5m (5') intervals, with stout twine looped between them at intervals of 25-30cm (10-12") vertically.

Peas

One could never tire of eating peas in a very simple way with butter and a bit of mint, but if you want to do something more elaborate add a bit of chopped onion, bacon, parsley, garlic and cream. This applies to sugar peas as well as podded peas. Another delicious way to eat them is to shred a lettuce heart and stir it in to the peas with plenty of butter.

Harvesting

Once pea pods are visible, it will probably be ten days to two weeks before they swell out with peas. After that there should be a steady succession of well-filled pods, especially if you water in dry weather.

There is always the choice of picking pods with super sweet baby peas or allowing them to fill out and become slightly mealy.

After cropping, as with broad beans, the plants can be cut to ground level to leave all the nitrogen nodules in the soil, before replanting with a wide range of autumn or winter crops.

See also peas for salad shoots, in Chapter 9, page 75).

Problems

Caterpillars The main pest is a caterpillar inside some pods, munching on the ingredients. The pea moth does not fly until late spring, so some sowings made by late March may crop before the moths appear, while sowing in late spring can avoid them at the other end of their growth cycle.

However, **mildew** is the other problem: this appears after about the second week of July and can ruin an otherwise fine crop, so late sowings are often much diminished by the white mould covering many leaves. Sow early!

The pea season is June / July, and it really is worth growing them as early as possible, to finish cropping by the end of July, at which time French and runner beans will be starting to develop.

SAVING PEA SEED

Saving pea seed is worthwhile and simple, starting with leaving one or

two plants unpicked. They need to stay in the ground about a fortnight after the rest have finished cropping, until their pods have turned yellow and dry to the point of feeling crunchy. Pick them all, then either pod out the hard seed immediately or keep the pods somewhere dry until you have time to deal with them. I find that germination from my home-saved seed is consistent and rapid, while subsequent growth is strong and healthy. Seed of runner and French beans can be saved in the same way.

PUMPKIN

See under Squash, page 141

RUNNER BEANS

Season of harvest: late July-September, occasionally October *Follow with:* garlic, or spread compost then plant salad in early spring

<i>Variety</i>	<i>Character</i>	<i>Sow</i>	<i>Spacing (cm)</i>
	<i>Height (cm)</i>	<i>Special care</i>	<i>Days to first pick</i>
HESTIA	Dwarf plant can be pot-grown 60	May-Jun Shorter season, sow twice	60x60 60
LADY DI	Long tender pods 200	May to mid-Jun Water after flowering	35x50 70-85
PAINTED LADY	Red-and-white flowers 200	May to mid-Jun Water after flowering	35x50 70-85

Runner beans are the classic British summer vegetable, and barely known in the rest of Europe. This is partly because they need more moisture to crop than French beans, and struggle in hot, dry summers, which are more common on the continent. So they certainly benefit from any extra watering through a long heatwave, and flourish in a moist Atlantic summer.

Varieties

A large choice covers flower colour as well as bean quality. Runner beans look marvellous in their clothing of red, white or red-and-white flowers in late July and August. Read the small print in seed catalogues or on the packet to make sure you get the colour you want.

Many older varieties have strings on each side of the pod, which need slicing off, so look for a stringless variety such as Polestar or Lady Di if you want to avoid that. The average pod length is 25-30cm (10-12"); any longer and they can be tough. But you might win a prize – most horticultural shows have a class for longest runner bean, which is fun to enter.

Sowing /planting

The methods and timing for sowing and planting of runner beans are identical to those for climbing French beans – see page 135.

In warm city gardens or allotments it may be worth sowing some runner beans in July to crop in the autumn, because flowers set pods better when nights are not too hot (below about 14°C / 57°F is good) and less watering will be needed then.

Growing

As with climbing French beans, a thick mulch of well-rotted compost or manure, put out in the winter or early spring so that worms have time to take it in a little, will certainly ensure a better and longer-yielding crop. Once the bean plants are well established and climbing fast, they can be further mulched with part-rotted organic matter, if the soil is prone to drying out quickly.

Harvesting

Picking needs to be regular to encourage continued cropping from about late July until end September, when there will be only a few new beans, and after that the leaves will be killed by any autumn frost. Then dismantle the supports, take the stems to your heap and spread some good compost to overwinter on top, ready for spring sowings and plantings.

Problems

As with French beans, the chief pest is slugs, but mostly in cool wet weather when the plants are scarcely growing. So be patient: if seeds are sown or plants are planted in warm conditions, they should grow away from the odd nibble. Although slightly later than is often recommended, early June is a reliable time to sow or plant in order to avoid slug damage.

SQUASH

This section includes pumpkins and gourds, all closely related. Summer squashes bear fruits that are good to eat when young, tender and rather watery, and strictly speaking they include courgettes. Many summer squashes, such as marrows, will develop hard-skinned fruit if allowed to, and these can be kept into the winter.

Winter squashes bear fruits that develop firm, sweet flesh and hard skins in autumn, and will keep until the following spring. They include pumpkins which are a larger and much more watery version, better for carving and showing than

for eating. Gourds are a pretty but inedible kind of winter squash.

SUMMER SQUASH

Season of harvest: July-October

Follow with: late sowings such as broad beans – or parsnips/onions/beans, etc. next year

<i>Variety</i>	<i>Character</i>	<i>Sow Spread (cm)</i>	<i>Spacing (cm) Harvest</i>
CUSTARD WHITE (PATTY PAN)	Scalloped edges	May-early Jun 150	70-90x150 Jul-Sep
SUMMER CROOKNECK (see Plate 21)	Long curved fruit	May-early Jun 150	70-90x150 Aug-Oct
VEGETABLE SPAGHETTI	Stringy flesh	May-early Jun 150	70-90x150 Aug-Oct

In almost every way, summer squash grow like courgettes; they are mostly trailing bushy plants with long stems.

Varieties and harvesting

Summer Crookneck fruits are delicious when eaten small, like courgettes. Bigger fruits retain a creamy texture and interesting flavour – less watery than marrows. Patty Pan types can be eaten raw when small, or cooked like courgettes when larger.

Little Gem is a tasty round green ball that matures quickly to a sweeter flavour, with more yellow flesh and a much harder skin, similar to a winter squash but harvested in summer.

Vegetable Spaghetti has long stems and large creamy squashes that, after baking or boiling in their skin, can be scooped out in strands that bear some visible resemblance to pasta, although the taste is closer to marrow!

WINTER SQUASH

Season of harvest: September-November

Follow with: late sowings such as broad beans – or parsnips / onions /beans, etc. next year

<i>Variety</i>	<i>Character</i>	<i>Sow Spread (cm)</i>	<i>Spacing (cm) Harvest</i>
BUTTERNUT (see Plate 24)	Wonderful flavour	May up to 300	80-100x150 Late Sep-Nov
UCHIKI KURI (see Plate 24)	Fast and reliable Orange skin	May up to 300	80-100x150 Aug-Oct
CROWN PRINCE F1	Large, good keeper	May up to 300	80-100x150 Sep-Oct

Rapid, rambling growth through summer and early autumn will create a wide selection of fruits to enjoy through the winter; colours become vivid as fruits ripen under the fading leaves. They develop hard skins and dense, mostly orange flesh that boasts a remarkable sweetness and depth of flavour.

Varieties

Of the many varieties, Butternut is a deserved favourite, like a straight fat banana in shape and matt yellow-brown in colour. It has an intriguing way of putting on a spurt of late growth through September, so that its fruit ripen after most other varieties and benefit from being on the plant until the first frost. Easiest sign of ripeness is a shrivelling of the stem that attaches the fruit to the plant, with skins becoming hard and darker. Unripe Butternuts with paler skin have a less rich flavour, more reminiscent of marrow.

Probably the easiest winter squash is Uchiki Kuri, also known as Red Kuri, and Orange Hokkaido – whose bright red onion-shaped fruits mature much earlier than Butternut. Often the plant has completely died off by late September, making the harvest easier. Musquée de Provence and Crown Prince are larger, perhaps sweeter than most other varieties, Marina di Chioggia has extraordinary warty green skin, Blue Ballet (shown in Plate 24) and Blue Hubbard have lovely colour and flavour, and Turks Turban is beautifully true to its name.

Sowing

Winter squash need a whole season to ripen properly, so are best sown in mid-April inside or mid-to-late May in the soil.

For greenhouse sowing use 3cm (1") modules at first, then pot into 7-10cm (3-4") pots when the first leaf is developing. About a month after sowing, depending on the weather, harden plants off for a few days outside before planting, remembering that they will be killed by any frost, so wait a little if any unusually cold nights are looming.

Growing

Water well at planting time, then after a fortnight's settling in the plants should grow rampantly. In a cold May, covering with fleece for two or three weeks makes a worthwhile difference. Weeding is then the main consideration: hoe initially, then poke around and under the squash leaves to pull out any weed plants before they seed.

Harvesting

Usually in October and before any air frost, cut squashes carefully, which is not easy as the stem should be hard – if it snaps off where joining the fruit, mould will set in at this damaged point. An easier way to separate fruit from plant is by cutting all stems and leaves away from the stem, to avoid having to cut through the hard stem itself.

Keep ripe squashes as dry and warm as possible: room temperature is better than in a shed. They will serve as nice ornaments to your sitting room until you can't resist eating them.

Problems

Fruit can be under-ripe, from late planting or lack of sun and heat; if this is the case, use as summer squashes. Mildew on leaves in late summer and autumn is a sign of normal ageing.

Pan-fried Butternut squash

1 butternut squash

4 cloves garlic

1 lemon

Cube the squash. Heat a mixture of olive oil and butter in a large frying pan that has a lid, but don't put the lid on yet. Add the cubes of squash to the pan, stirring from time to time while you chop up the cloves of garlic. Add the garlic to the pan, stir it all up and put a lid on it. Squeeze half the lemon, and when the squash is cooked add the lemon juice.

PUMPKIN

Season of harvest: September-October

Follow with: garlic, autumn-sown beans or any crop next spring

<i>Variety</i>	<i>Character Height (cm)</i>	<i>Sow Harvest</i>	<i>Spacing (cm)</i>
ATLANTIC GIANT	Huge, requires much space 80	May Oct	200x200
JACK O' LANTERN	Classic Halloween pumpkin 60	May Oct	100x150

Sowing and growing

This is the same as for other squashes, except that all pumpkins make long stems and the more these stems run over bare soil, where they can send down roots, the heavier will be the harvest. So to grow monster pumpkins, you need a large area of bare soil.

Harvest

Harvest as for winter squash (see page [143](#)), being careful not to break the stem. After carving for Halloween, pumpkin flesh will rot within a fortnight or so, and you may have difficulty eating that much soup!



Garlic cloves from own bulbs, ready for planting in October.



Beetroot 'Barbietola di Chioggia', sown in June, pictured November. Each ring is one lunar month.



Potatoes 'Lady Balfour' grown on undug pasture.



Carrot 'Camberley'.



Beetroot 'Boltardy'.



Fennel 'Zefa Fino', sown late June, pictured October.



Parsnip 'Gladiator F1', harvested November.



Pea 'Tall Sugar Snap' in flower.



Summer squash 'Yellow Crookneck'.



Tall sugar peas growing fast by late May.



Yellow courgette 'Parador F1', July.



Harvest of winter squash in October: 'Butternut' (light orange/brown, front left), 'Buttercup' (dark green), 'Blue Ballet' (light blue/grey) and 'Uchiki Kuri' (bright orange). The other fruits are gourds.



Purple sprouting broccoli, mid-March.



Brussels sprout 'Noisette' in manure on no-dig old pasture.



Spring cabbage in October, netted against pigeons.



Cauliflower 'Graffiti', late June.



Kohlrabi 'Purple Danube', late May.



Pepper 'Orange Baby' in a pot in the greenhouse, mid-September.



Spinach 'Emilia'. Sown early March, pictured late April.



Red spinach 'Bordeaux' in September.



Typical growth of tall cherry tomato.



Melon 'Sweetheart F1' in July, growing up a string in the polytunnel.



Asparagus 'Connovers Colossal' in May.



The same asparagus plant in July.



Basil 'Sweet Thai' in the polytunnel in August.



September - all second crops: (from front) bulb fennel, amaranth, chard, leek, kale, carrot, pak choi, French bean



Salad rocket in flower in May, from a February sowing.



Apple 'Jupiter' in early October.



Three-year-old apple tree 'Red Falstaff' on M9 rootstock, early October, on the hen-run fence.



Redcurrant 'Rovada', half-standard bush, early August, netted against blackbirds.

SWEETCORN

Season of harvest: late July-early October *Follow with:* salad (after early crops only)

<i>Variety</i>	<i>Character Height (cm)</i>	<i>Sow Days to first pick</i>	<i>Spacing (cm)</i>
EARLY EXTRA SWEET F1	Early supersweet 100-120	May-Jun 75-80	30x30
MINIPOP F1	Baby corn 150-200	May-Jun 65-80	20x20
SWEET NUGGET F1	Fantastic flavour 150-200	May 90-110	35x35

Surely one of the most rewarding vegetables – adored by children of all ages for a sweetness that is accentuated by eating as soon as possible after picking. Home-grown is far superior every time in comparison to a bought cob that is already relatively old, with some of its sugars turned to starch.

Varieties

Recent plant breeding has developed ‘supersweet’ varieties that are true to their name and worth a try: I warmly recommend Sweet Nugget for both flavour and reliability. Don’t be tempted to grow two or more varieties together, because they often cross-pollinate and share out their different characteristics. This was vividly illustrated when I grew blue maize about 20m (66’) from some ordinary sweetcorn. The resulting cobs were an extraordinary mish-mash of sweet yellow kernels and blue starchy ones.

Sowing

Mid-May is a good average sowing date, or mid-April in the greenhouse for early crops. Earlier sowing is risky, because in any cold spell the baby plants will turn yellow from being unable to photosynthesise in cool conditions. Slugs may cause damage as well. Last sowings must be done by about mid-June, although much depends on the summer.

Sweetcorn can be harvested in July from early varieties such as Swift F1, but may raise the problem of cross-pollination – unless their flowering is well finished before any later and different varieties grow their tassels. It may be safer to grow one variety from two sowings, say early May and early June, if you want sweetcorn over a long period.

Growing

Sweetcorn grows well on beds because four rows in a ‘block’ all together, 30-35cm (12-14”) apart in all directions, ensure an even fall of pollen from the loping tassels on top of the plants on to the emerging hairs of baby cobs. Each hair is attached to a kernel; the pollen that falls on to it allows proper growth rather than an annoying gap on the cob.

In hot weather the corn grows magically fast and may be ready up to a month earlier than in a cool summer.

Harvesting

Usually there is one good cob per plant and one smaller one, ready to pick when the hairs sticking out of their ends turn brown, although baby corn varieties can produce up to about four immature cobs per plant.

If proper sweetcorn is picked when it is immature, the kernels are creamy in colour, smaller, less sweet and of a delicate flavour not unlike baby corn. Then a week or two later they become bright yellow and richly sweet, while the lapse of another fortnight will see the colour become deep yellow, with some of the sweetness turning to chewy starch, like an African 'mealy'. So you have plenty of choice in what to harvest.

Cook them very lightly, if at all: fresh sweetcorn from the garden is really tender and tastes good raw. You can slice kernels off raw cobs and add them to tomato salad, for example.

The second cob is much smaller and less well developed, unless plants have been grown at wider spacings.

Once the last cob is harvested, chop the plant off at soil level or just below with a sharp spade, and further chop it into small lengths for better composting. Even then its high cellulose content will mean it rots very slowly, and I often find half-rotted stems in the compost heap a few months later. These can be re-composted, or used as a mulch for pathways if they are flicked out of the compost after it is spread.

Problems

Badgers Readers in rural areas may already be aware of sweetcorn's chief pest. The badger often eats his way through large sections of farmers' maize and sweetcorn, and if he notices yours, look out! Only a solid wall or fence buried into the soil will keep badgers out, and they always seem to arrive just before the cobs are ready for us. It can be a nerve-racking wait for the harvest to sweeten: will the plants be ransacked in the night?

Birds The main other scavenger is small birds, who sometimes perch on ripe cobs and peck away at their kernels, but the damage is far less significant.

Slugs Most slug damage occurs in spring when the soil is too cold for proper growth, so later sowings are more reliable for gardens prone to slugs

or with cold, heavy soil.

Chapter 14

Brassicas

The considerable cabbage family



This chapter looks at cabbage and its many relatives, the traditional mainstays of older kitchen gardens, and includes many fine winter vegetables such as kale and Brussels sprouts. They are less common now – perhaps gardeners venture out less than they used to in winter months, preferring summer crops such as courgettes and French beans. Yet brassicas are well-suited to our damp climate, especially from autumn to early summer: many resist frost extremely well, and Brussels sprouts even taste better in cold weather. Many can be grown as a second crop to follow early vegetables such as broad beans or new potatoes.

Treat yourself of a winter evening to perusing one or preferably more seed catalogues (see Resources), because there are plenty of exciting brassica varieties. Deep red kale, or purple kale with frilly leaves; cauliflowers round or pointed, and green, purple or white; crinkly or smooth cabbages for almost any season; purple sprouting for spring above all; unusual radishes for spring and winter; kohlrabi; and all the old mainstays, including swede and turnip, which are covered at the chapter's end.

BRASSICA PESTS

Pests love brassicas. I mention them here for you to know the difficulties, some organic solutions and whether you feel it is still worthwhile. The main problem is all those caterpillars, flea beetles and cabbage root flies, which can't wait for you to grow some nice brassica plants. They can wreak major damage between June and about September, which is most of the growing season. In dry years, when insects and butterflies thrive, plants can be so weakened and diminished by losing much of their leaf area and some root as well that there is nothing for gardeners to harvest, unless they have used pesticides.

Furthermore, many gardens and allotments are patrolled by pigeons, whose favourite fare is leaves of almost any brassica plant – mostly in winter but increasingly in summer.

Are there viable organic solutions? I cannot say an unequivocal ‘yes’, so brace yourself for some losses, but there are certainly ways of minimising insect attack. A few to consider are outlined in the box below.

MINIMISING INSECT ATTACKS ON BRASSICAS

1. SOW EARLY OR LATE

Sowings of early cabbage, calabrese, cauliflower, spring radish and turnips, before about early April, can mature in spring before brassica insects are too numerous.

Kale, late winter cabbage, autumn calabrese, winter radish, turnips and purple sprouting broccoli can all have time to make worthwhile growth from sowings in early July. They are much better started off in a greenhouse because outdoor sowings will lose too much leaf to flea beetles, unless it is a wet summer. Planted outside by early August, there is a good chance of enough healthy growth by winter to ensure a fair crop.

Spring cabbage can be the best of all, maturing in April to June when the coast is relatively clear. But crops will almost certainly require covering with a net, held up by wooden posts or cloche hoops, to protect against pigeons.

2. MESH AND FLEECE

Mesh is better than fleece in summer because it has less warming effect (if you buy fleece, make sure it is at least 25g/m², and is sewn). They both come in different grades, some fine enough to exclude flea beetles, although insects will readily pass through any torn areas. Fleece and mesh are usually white, not so nice to behold as vegetables, and may need to cover the plants for many months. Animals (dogs above all) can sometimes make a few holes in the covers and render them much less effective; otherwise they will last for many years.

3. BRASSICA COLLARS

These may not be necessary except in gardens or allotments where cabbage root fly is on the wing, laying eggs on soil near brassica stems, which are then eaten by maggots, sufficiently for young plants to die.

Collars can prevent the maggots from devouring plant roots. Tuck them around the stems of new plants.

4. MAXIMUM FERTILITY

Having soil at full potential, bursting with life and health, gives plants more chance to resist and grow away from attacks by pests. Regular applications of good compost, minimal tillage and careful observation are the essence of good gardening and the basis of vigorous plant growth. (See Chapter 1.)

5. MANUAL CONTROL

If all else fails, and caterpillars of the dreaded white butterflies are chomping through your leaves, they can be squashed or picked off into a bucket and buried in the compost heap. Usually they lurk on undersides of leaves so may need a little looking for; any egg clusters can also be rubbed out. Caterpillars that fall off must also be removed, as they will simply climb back. Plants need checking every week or so in the height of summer.

Weather extremes

Just occasionally comes a year of unusual pestilence or weather that is unfavourable to certain vegetables – while helping certain others. Hot, dry summers are difficult for moisture-loving brassicas, under the cosh of huge numbers of flea beetles and caterpillars.

On the other hand, heat and drought – within reason – are beneficial to tomatoes, cucumbers and courgettes. Spread the risks of weather extremes by growing a wide range of vegetables, as well as by sowing some brassicas later than usual.

General tips

It is often said that brassicas like firm soil to anchor their significant bulk or tall stems. I find that undug soil suits them well, with a good dressing of organic matter in winter or spring.

Note that brassicas are usually planted rather than sown direct, because initial growth is slow and final planting distance is mostly wide, so a small seedbed or a few modules will suffice for quite large areas. Using indoor-raised plants also saves growing time and is important in combating pests, by allowing full use of the year's second half, when they pests are less numerous. If you have no greenhouse or protected space to raise plants, see if you can cooperate with a

friend who has.

BROCCOLI FOR ALL SEASONS (includes calabrese)

Season of harvest: July-May

Follow with: leeks, carrots, autumn salad, etc., depending on final harvest

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow</i> <i>Harvest</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
BELSTAR F1	Suitable for early heads Fleece for early harvest	Mar-Jun Jun-Oct	35x40 75
GREEN SPROUTING	Main season all-rounder Pinch out caterpillars	Apr-Jul Jul-Oct	40x40 90
PURPLE SPROUTING (see Plate 25)	Small-medium shoots in spring Sow late, net in winter	May-Jun Mar-May	40x40 90

There is broccoli and broccoli. What you grow in the garden will probably not be an exact replica of the large, blemish-free supermarket heads. It will come in a range of sizes and colours, with occasional discolourations and probably some caterpillars living inside it – in summer and autumn at least. But the sense of achievement and extra waves of flavour will make it worthwhile.

Varieties

Much depends on the season you are aiming for, so read the small print carefully to be sure of growing a variety that is best adapted to your sowing and harvesting dates. Most calabrese is F1, for instance Belstar, Fiesta and Marathon, and they make a larger first head. For repeated cropping of smaller shoots, open-pollinated varieties such as Green Sprouting are good. Purple sprouting is mainly grown for spring cropping, but a few varieties have been bred to produce in autumn.

EARLY CALABRESE

Sowing and growing

Early harvests are most feasible with greenhouse sowing. Sow from early March indoors, plant out in April under fleece to provide warmth, and keep pigeons at bay. In May the fleece can be replaced with a net if pigeons are still around.

Harvesting

First heads may be ready in mid-June, hopefully before caterpillars, while secondary heading will depend on the weather, and a wet summer is best. See extra advice on picking under 'Late calabrese', right. In hot, dry

weather it may be best to remove plants soon after the first heading, to have time for another crop such as leeks or autumn salad, whose demands for water, although critical, are smaller until about September.

LATE CALABRESE

Sowing

Sow from May to July. Later sowings are good for autumn harvests.

Growing

Late calabrese is almost more weather-dependent than early crops, and definitely prone to caterpillar damage. Covering with mesh after planting is highly worthwhile. Sometimes they live in the heads, completely out of sight and hard to deal with. If plants head up in October and November, when it may be too wet and windy for butterflies, you can hope for a fair harvest of one large and several smaller heads, until any moderate frost, sometimes as late as December. These plants do not survive the winter.

Harvesting early and late calabrese

Watch how the small growing leaves at the plant's centre give way to a small bud, which then develops into a head of up to 400g (14oz) as the florets increase and a stem elongates. The best time to harvest is before the stem grows too long or the flower buds show any sign of opening. Be careful to make a clean cut and to minimise damage to leaves; then within two to three weeks new heads should appear lower down, similar to the first one but smaller. Cropping can last for about two months, but any drought will decrease the plant's yield and any frost will damage remaining buds in the autumn.

PURPLE SPROUTING BROCCOLI

This generic term applies to winter-hardy broccoli, which starts to send out spears in late winter and continues shooting until mid-spring. There are varieties for early and late seasons within this time span, such as Early Purple and then Cardinal; also varieties for white spears, such as White Eye.

Sowing and growing

Sowing in June and as late as July is possible and advisable. Insects make it difficult to succeed with outdoor sowings, so I recommend sowing two

seeds per 3-4cm (1.5") module under cover, thinning to one plant in each and setting out by early August, after broad beans or early roots or salad. Note that netting or other protection against birds may be needed.

Harvesting

The first shoots are the largest, usually in March but varying according to variety and weather. Later pickings become more numerous and thinner-stemmed as the plant tries harder and harder to flower. Any mild weather in late winter can trigger growth of first spears and it is exciting to find these – often the only fresh green harvest of that season.

Problems

Autumn **caterpillars** are not usually too troublesome, but **pigeons** are another story, because they are often very hungry in spring, just as we too are keenly anticipating some fresh green vegetables. Netting must be thorough and well clear of the plants, I have known fat pigeons land on my net and happily peck through it at both leaves and broccoli. *Severe frost* (say -10°C or more) may kill plants.

Broccoli and bacon tart

Pastry:

150g (5.5oz) plain flour

150g rolled oats

150g butter

1 egg

a pinch of salt

Filling:

250g (9oz) broccoli

4 rashers bacon, cut into strips

1 onion

30g (1oz) butter

110g (4oz) hard cheese (our neighbourhood cheese is Keen's Cheddar)

4 large eggs

300ml (10floz) full-fat milk or single cream
salt and pepper

Make the pastry, and line a deep 23cm (9") tart tin. For the filling, blanch the broccoli. Fry the bacon and onion in butter until the onion is translucent. Spread over the pastry, then add the broccoli and two-thirds of the cheese. Whisk the milk/cream with the eggs and season, and pour over the filling. Sprinkle the remaining cheese on top and bake for about 30 minutes at 190°C (375°F).

BRUSSELS SPROUTS

Season of harvest: October-March

Variety	Character Height (cm)	Sow Harvest	Plant	Spacing (cm)
NOISETTE (see Plate 26)	Small, nutty flavour, old variety	Apr-May	May-early Jul 70	60x60 Oct-Mar
RUBINE	Red colour, stronger after frost 80	Apr-May Oct-Mar	May-early Jul	60x60
TRAFALGAR F1	Reliable firm buttons 90	Apr-May Oct-Jan	May-early Jul	60x60

Sprouts are really small heads of cabbage, growing up a long stem and maturing at different dates, according to variety.

Flavour is the goal

Brussels sprouts in our gardens may not look like the impressive photographs in seed catalogues, but I have a feeling they taste better. A freshly picked, organic sprout is a midwinter treat, as nice raw as cooked – in the eyes of many children too.

Varieties

The table above encompasses a range of maturity dates and even of colour. Check the details on seed packets before buying, and bear in mind that more effort has been invested in breeding F1 hybrids, whose buttons are often firmer than many of the current selection of open-pollinated varieties.

Sowing, planting

Early spring sowings give the earliest sprouts, even on 'late' varieties. A fair sowing date is mid-spring, from about early April to mid-May: early June is possible, but plants will be smaller. Wide spacings at planting time give opportunities to crop lettuce between, and I have found that sprout

plants grow better for some company until they are larger and well established.

Staking of tall plants is optional, necessary only if you want the garden tidy and orderly, and also for keeping pathways clear.

Harvesting

Growth of tall stems should be fast through the summer and early autumn, then slow as buttons begin to grow and firm up. The bottom few are often poor and best removed; thereafter they can be picked as soon as their accompanying leaves turn yellow. Remove these leaves even if you are not ready to pick sprouts, so they do not dangle down and spoil the harvest as they decay.

By late winter, any remaining sprouts will open out and produce a rapidly elongating flower stem. This is also edible, as is the top of each sprout plant, before or after it begins to flower, so long as pigeons can be kept off. Tall stakes are needed for netting, or something bright and mobile such as children's mini-windmills or old CDs.

By May there will be almost nothing left to eat: the stem can be twisted out of the ground and chopped into lengths before composting.

Problems

Apart from all the suspects already discussed, slugs can damage sprouts, especially old ones, hence the advice to pick regularly and also to remove all yellow leaves. Various fungal diseases such as 'black spot' can spoil some outer leaves in wet weather. The cook may well need to do some extra trimming.

There can also be some 'blown sprouts' of open leaves, with no tight button. These are delicious, with a slightly different flavour.

Stir-fried Brussels sprouts

1 onion

500g (1lb 1oz) Brussels sprouts

200g (7oz) chestnuts

2 rashers bacon

1 clove garlic

soy sauce

The slowest part of this dish is peeling the chestnuts, so start with them. Prepare all the ingredients before you start frying. Chop the onion, slice the bacon into matchsticks, and slice the sprouts finely. Heat some sunflower oil in a wok or large pan. Start with the onion and bacon, then add the sprouts and chestnuts, and finally the garlic. Keep it all moving so the sprouts cook but still remain crunchy. Finally stir in soy sauce to taste.

CAULIFLOWER

Season of harvest: April to November

Follow with: variable, e.g. beans, leeks after spring cauliflower

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow</i> <i>Harvest</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
ALL THE YEAR ROUND	Medium size, hardy	Jan-Jul	45x45
	Fleece helps early crops	Jun-Nov	40
<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow</i> <i>Harvest</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
GRAFFITI (see Plate 28)	Summer heading, rich colour	Mar-Apr	50x50
	Water in dry springs	Jun-Jul	40
SNOWCAP	Large, late maturity	May-Jun	50x50
	Perhaps fleece in late frost	Nov-Dec	45

Consider the following before growing cauliflowers:

- They are large plants, and for a worthwhile head require more space than most other brassicas.
- They like a rich, well-composted soil.
- They are inclined to all head up at the same time – a true feast-or-famine vegetable.
- Once in head, they must be picked and eaten, otherwise the florets open into stems and flowers.

Varieties and sowing

I recommend a late winter sowing indoors of All the Year Round, or Graffiti for lovely purple heads, to pick in early summer, hopefully before caterpillars arrive. Or try a late spring sowing of Snowcap for heading in late autumn, as it has some frost resistance. A third option is varieties such as Maystar or Purple Cape, as overwintering cauliflower plants that mature the following spring, from sowing in early summer.

Another variation is mini-cauliflowers – special fast-maturing varieties such

as Igloo, which can be planted as close to each other as lettuce, 22x22cm (9x9") apart. The last word goes to Romanesco, an Italian broccoli with exquisitely pointed, pale green minarets in a dome-shaped head. Caterpillars love it too, unfortunately.

Harvesting

As harvesting time approaches for the variety you are growing, watch out for tightly curled leaves at the centre, which are probably hiding a baby curd. A further week or fortnight should see the larger curd become visible; let it grow until its surface becomes slightly uneven on a longer stem, indicating a change from growing larger to first thoughts of flowering. In warm weather, do not delay picking beyond this point or you will soon have long tough stems and flowers opening.

One curd per plant is the whole harvest, so it pays to remove plants as soon as possible afterwards, to prevent them taking more moisture and goodness out of the soil, and to give more time for planting a following crop.

KALE (also called borecole)

Season of harvest: September-April

<i>Variety</i>	<i>Character Height (cm)</i>	<i>Sow Harvest</i>	<i>Spacing (cm)</i>
DWARF GREEN CURLED	Deeply curled, prolific 60	Jun-Jul Sep-Apr	45x45
RED RUSSIAN	Soft young leaves for salad 50	Jun-Jul Feb-May	45x45
REDBOR F1	Dark red, ornamental 95	Jun-Jul Sep-Apr	45x45

Kale is fun to grow, and slightly easier than many other brassicas. It used to be looked down on as the greens one had to eat when nothing else was available. This is a clue to its hardiness in winter. Add to this the recent access to a range of different kale varieties offering more flavours, colours and possibilities in the kitchen, and kale becomes a worthy addition to any garden.

Varieties

Red varieties seem less interesting to insects than green ones. Redbor has an especially dark and appealing colour, mostly lost in cooking, when its flavour is similar to green curly kales – a little ordinary, but mouth-watering with some garlic and butter.

Red Russian (also called Red Winter), more pink than red, has flatter serrated leaves that are milder in flavour and really tasty in salads, mainly in winter and spring, when it can be a real star of the garden. Sutherland is another tasty flat-leaf variety.

Nero di Toscana (also known as Black Cabbage, Laccinato Blue and Cavallo Nero) is popular for its long, dark green, indented leaves. They can be eaten small; when larger you may need to cut out the sinewy central vein of each leaf.

Sowing

Because of pests, and also to allow a spring crop of lettuce or carrots beforehand, I recommend sowing under cover in June to early July, for planting by early August. These sowing dates enable kale to be grown as a second crop after an early summer harvest of carrots, broad beans, lettuce and so forth. Sowing even later can work, but plants will be much smaller. If kale is sown in April, as recommended on seed packets and in most books, it will grow larger but may struggle with caterpillars, especially in hot summers.

Harvesting

In any spells of mild winter weather, kale plants will grow a new leaf or two, enough to provide occasional meals. Green kales are more productive than red ones, and all varieties should offer small leaves in March and April before and during flowering.

Red Russian comes into its own in the new year, because by March it should be sending out new stems with tender baby leaves – excellent in salad – whose regular picking will encourage more of the same until about early May, when stems elongate and flowering shoots replace most leaves. These are nice to eat at first, but soon become tougher. Before composting old kale plants, cut stems into 10-15cm (4-6") lengths.

KOHLRABI

Although it looks like a root, kohlrabi is a swelling of the plants' stems, just above ground level, with a sweet taste and delicate texture as long as it is picked when about the size of a tennis ball. Any extra growth results in woodiness. So it is a half-season crop, maturing about ten weeks after sowing.

Sowing and growing

An early sowing in April for cropping in June/July should avoid most brassica pests. Either raise plants in 3cm (1") modules or sow direct and thin to about 25x25cm (10x10"), watering in dry weather to reduce woodiness. For a second sowing, a variety of note is White Superschmelz for its ability to grow large roots without turning woody. It can be sown as late as July, thus avoiding most pests, for harvesting as late as December if nights have not gone below about -3°C (27°F).

Kohlrabi with mustard

Kohlrabi tastes something like a cross between a turnip and a cabbage. If it has a coarse skin this may need removing, otherwise cut the kohlrabi into large chunks. Steam in a very little water for about 5 minutes and test with a fork to see when it is soft. If cooked, drain and add a generous knob of butter to the pan so all the cubes are coated, then add a teaspoon or two of wholegrain mustard.

ORIENTAL LEAVES

These are a large assembly of fast-growing brassicas, best sown late summer to give leaves through autumn and sometimes into winter. Some frost hardiness is partly offset by quite slow growth in cold, wet soil, and increased levels of slug damage. This is explained more fully in Chapter 10, which emphasizes the value of oriental leaves for salad leaves in winter.

Sowing and growing

To grow these brassicas into large leaves for cooking, it is mostly a question of starting at the right time and of allowing extra space between plants. Pak choi is one of the best varieties and a late July sowing, planted at or thinned to 30x30cm (12x12") should produce quite a number of chunky but imperfect leaves from September until frost arrives. Joi Choi, as for winter salad leaves (see page 92), is my variety of choice. Water will be needed in dry summers. Green pak choi has somewhat smaller leaves than white-stemmed varieties.

Almost all oriental leaves grow imperfectly, with small flea beetle holes and perhaps some larger pieces eaten by slugs. Most of this damage will be lost in cooking, while the notable flavour will remain.

SPRING CABBAGE

Season of harvest: April-June

Follow with: almost any other vegetable

<i>Variety</i>	<i>Character</i> <i>Spacing (cm)</i>	<i>Sow</i> <i>Harvest</i>	<i>Plant</i>
DURHAM EARLY	Small, early pointed hearts 20x30	Aug Apr	Sep-Oct
OFFENHAM FLOWER OF SPRING	Good for greens, later hearts 20x30	Aug Apr-May	Sep-Oct
SPRING HERO F1	Solid round heads 40x40	Aug May-Jun	Sep-Oct
SPRING-SOWN DERBY DAY	Small round heads 40x40	Mar Jun	Apr
SPRING-SOWN HISPI	Pointed hearts, fast growing 30x30	Feb-Mar Jun	Apr

Spring cabbage was almost obligatory in old kitchen gardens, providing tender green leaves between April and June, well before most other vegetables are ready. It is equally important in a modern organic garden or allotment, because it crops when there are few insects causing trouble.

First attempts may yield some impressive pickings, or suggest better methods for next year. Weather obviously plays a major part, and extreme winters can very occasionally kill spring cabbages – but not often.

Sowing

Sowing date is important, the aim being to have plants large enough to deal with winter weather, yet small enough that no heart is attempted before winter, which might cause death by frost and no cabbage in spring. Local knowledge must play a part in deciding on a sowing date between early and late August. Variable autumn weather can make this tricky; in Somerset my preferred date is between 20th and 25th August.

Harvesting

Well-filled rows of small cabbage plants by late October, netted against pigeons (see Plate 27), will provide possibilities come early spring of cutting some for 'spring greens'. These are simply leaves of unhearted cabbage, full of lovely dark chlorophyll that is so welcome at winter's end. Offenham is good for this. Plants left to grow should heart up later, depending on the variety. Wait until you see a noticeable round heart (Spring Hero) or pointed heart (other varieties), mostly in May.

Further sowings of Hispi and Derby Day in late winter can yield tender leaves on your plate in June, again at a time of few cabbage pests apart from birds.

WINTER CABBAGE

Season of harvest: December-March *Follow with:* next year's vegetables

<i>Variety</i>	<i>Character</i>	<i>Sow</i>	<i>Plant</i>	<i>Spacing (cm)</i>
<i>Special care</i>		<i>Harvest</i>	<i>Height (cm)</i>	
HOLLAND	White cabbage to store	May-Jun	Jun-Jul	50x50
WINTER WHITE			Nov	50
JANUARY KING	Red-blushed hardy hearts	May-Jun	Jun-Jul	50x50
	May rot before winter if sown too early		Nov-Feb	50
MARNER	Red cabbage to store	May-Jun	Jun-Jul	50x50
LAGERROT	Cut dense heart in November to store		Nov	50
TUNDRA	Crunchy crinkled heart	May-Jun	Jun-Jul	50x50
	Patrol caterpillars, net against pigeons		Oct-Jan	50

Year-round cabbage is possible, but in summer and autumn there are so many other delicious vegetables that I concentrate here on cabbage for winter.

Varieties and growing

A glance at the table above reveals that there are cabbages of varied colour and texture, all grown in much the same way. May is the best month for sowing coleslaw cabbages to store, as they need time to form dense heads, best harvested before any hard frost. Sowings in June of Tundra and January King should ensure slightly looser, frost-resistant heads that mature from late autumn and through the winter.

SAVOY CABBAGE

There are also savoy cabbages, such as Ormskirk, whose texture is the most crinkled and whose leaves are among the darkest green – even its heads are pale green rather than creamy white. Sometimes without a dense head or with only a small one, the leaves of savoy are a delicious winter – and even spring – green.

Savoys are perhaps the most winter-hardy cabbage, so late sowing can be worthwhile up to July, but a June sowing is better for more chance of good hearts in winter. Keep an eye on them from November because their time of hearting varies a little with different weather. It is a wonderful treat to cut a savoy heart in midwinter, and sometimes as late as March or early April, at the beginning of the hungry gap.

BRASSICA ROOTS

Some brassicas grow large roots that are a fine addition to winter meals. You may not think of radish, swede and turnip as being closely related to cabbage and broccoli, but they have so much in common that I include them here rather than in the Roots chapter. Above all they share a vulnerability to the same pests, meaning a careful look at sowing dates and some use of fleece, mesh and nets to ensure more successful crops.

Problems for brassica roots are explained at the end of this chapter, because the same ones apply to all of them.

RADISH

Season of harvest: April-November

Follow with: almost any vegetable may follow spring radish

<i>Variety</i>	<i>Character Height (cm)</i>	<i>Sow</i>	<i>Spacing (cm) First ready</i>
CHINA ROSE	Heavy pink winter root 35	Late Jul-Aug	10x30 Oct-Nov, will store
FRENCH BREAKFAST	Fast, long red & white 20	Mar-Jul	1x25 40-50 days
SPARKLER	Fast, bright red & round 15	Mar-Jul	1x25 40-50 days

Varieties

Radish has declined in popularity over the years, but for sheer speed of growth it deserves a small place in gardens, especially in spring. Round red varieties (Rudolph or Sparkler) or long pink-and-white ones (French Breakfast) can be sown late winter to mature by about mid-April in some areas. The taste is usually milder in early spring, then heats up as plants age and as the weather warms up.

Winter radish Minnowase grows large, white and cylindrical, and can be used fresh or stored, as can China Rose, which is pink-skinned and rounder. Both are good for grating or pickling, or for braising in stir-fries, but are often tunnelled into by cabbage root flies.

Sowing

Sow thinly, direct into the soil. Sowing after May will see more cabbage root fly damage. Winter radish such as Minnowase and China Rose must not be sown before July or they risk bolting.

Harvesting

Spring radish can be pulled as soon as you wish, depending partly on how

spicy you like the flavour. Larger radishes tend to be hotter. Thickly sown rows can be successively thinned of larger roots to allow growth of small ones, but if left too long, radish become hollow and soft.

Roots of winter radish just grow and grow until killed by hard frost. They can be pulled in November and stored in cool dampness until needed.

SWEDE

Season of harvest: September-December

<i>Variety</i>	<i>Special character</i> <i>Height (cm)</i>	<i>Sow</i>	<i>Spacing (cm)</i> <i>Harvest</i>
HELENOR	Fine yellow flesh 50	Jun-early Jul	20x40 Sept onwards
BRORA	Excellent flavour 50	Jun-early Jul	20x40 Sept onwards
MARIAN	Reliable cropper 50	Jun-early Jul	20x40 or 30x30 Sept onwards

Varieties

I have not noticed a huge difference between the growth and flavour of different swedes.

A great ability to resist frost makes them a valuable winter vegetable, if their sweet, cabbage-like flavour is to your liking. After frost they become sweeter, and are delicious boiled then mashed with a little butter, salt and pepper.

Sowing

Do not sow before May: June is better, and midsummer's day is about right, due to flea beetles decreasing thereafter and also to the tendency of early sowings to flower before making a root of any size. The late sowing date means that swede, like kale and purple sprouting broccoli, can be a useful second crop after harvests of early lettuce, carrots and other early sowings. Swedes need room to grow, about 30cm (12") distance from their neighbours, so they can either be sown in 3-4cm (1.5") modules and planted out, or thinned in late summer.

Harvesting

Frost hardiness means they can stay out until April, but if it is more convenient, pull them and store until spring. Large ones keep best, in boxes or sacks in a cool shed, even in below-freezing temperatures.

TURNIP

Season of harvest: May-June and October-December

Follow with: leeks, French beans, beetroot etc after spring turnips

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow</i> <i>Harvest</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
MILAN PURPLE	Reliable early & late, flat	Mar & Aug	5x30
TOP	Keep thinning, eat before too large	May & Sep-Nov	25
PRIMERA F1	Rapid growth Keep thinning, eat before too large	Mar & Aug-Sep May & Sep-Nov	5x25 25
GOLDEN BALL	Globe-shaped, winter root Large roots will store	Aug Oct-Dec	10x30 35

Varieties

The main variation is in root shape and skin colour. Milan and Primera are both flat with pretty purple and red tops respectively, while Golden Ball (yellow) and Manchester Market (white) are rounder and grow large with less risk of becoming woody.

Sowing

Turnips grow almost as fast as radish and have two similar dates for successful sowing – see the table above. Late winter sowings, thinned to 3-5cm (1-2") apart, will give baby turnips by mid-spring. The young leaves can be used as a welcome green at this time as well, and should be mostly clear of flea beetle. In Somerset I can sow turnip as late as early September, although August is more reliable, making it a useful catch crop after summer carrots, salads, onions or whatever else finishes in August.

Harvesting

Spring turnips are best eaten by June before pests arrive in force, and they may become woody in heat. Autumn roots will stand some frost, but are best harvested before Christmas and will keep for a few weeks – in a cool shed, for example.

PROBLEMS OF BRASSICA ROOTS

Cabbage root fly is often a damaging pest, its maggots tunnelling around some or all roots. The only sure way to prevent damage is by covering with fleece or mesh, soon after sowing. Another strategy is to grow large roots by respecting the sowing dates, spreading good compost, watering if necessary, etc., so that a lot of good flesh remains after cutting away the damaged outer parts.

Flea beetle will devour many late spring and early summer sowings, so the

aim is to work either side of this period. You can either harvest a fast-grown crop from an early sowing – especially radish and turnip – or a late autumn crop from sowings after midsummer’s day or thereabouts. Again, fleece can be useful.

Caterpillars will almost certainly appear at some point, but by avoiding midsummer growth their damage should be limited and does not affect the part of the plant being eaten.

Birds like these leaves as much as those of other brassicas, so some netting may be needed, especially of turnip and swede in late autumn and winter.

Chapter 15

Tomatoes, greenhouse vegetables and unusual vegetables

Exotic colours and sweet flavours



Even if you are without a sheltered structure, this chapter will be of interest because some of the vegetables described here can also be grown outside. Perhaps reading about the intriguing possibilities will inspire you to build or buy a shelter.

THE KEY INGREDIENT OF SUCCESS

Spread a good 7cm (3") of compost or well-rotted manure before or just after planting indoor summer crops, whose rapid growth requires a lively soil with plenty of nutrients and moisture-holding ability. See 'Preparing the Soil' on the opposite page for advice on minimal supplementary feeding.

TOMATOES

Varieties

Choosing the right variety, to suit both your palate and the conditions in your garden, is a key part of successful growing. I recommend reading the whole section on tomatoes here before committing yourself. Varietal choice has to be considered alongside growing methods, such as whether plants are grown indoors or out, on the ground or tied to a stake.

For most of us, tomatoes are the number one summer crop. I even find them exciting in winter, planning which to grow and imagining their flavours – which we, as gardeners have much better access to than shoppers. We can grow tasty, non-commercial varieties, and use cultural methods that enhance flavour ahead of yield.

Breeders are now working hard to improve flavour; sweetness especially.

Small F1 hybrid tomatoes such as Sweet Million, Rosada and Sungold have pleasing balances of acidity, sweetness and extreme fruitiness, but many of these top-tasting varieties do not yield sufficiently well to be grown for sale – so its up to us!

In a similar vein, large beefsteak tomatoes, so-called for their dense, ‘meaty’ flesh, nearly all come from abroad because they need more sunshine and heat than is commonly found in Britain. But to make the journey they need tough skins and an unripe condition. Even when we lived in France, not far from the French tomato headquarters of Marmande, it was difficult to buy good tomatoes at market.

At that time I was fortunate to find a fruity beefsteak variety growing in an old lady’s garden, from which I saved seed. It had soft skin, dense flesh and an unrivalled sweetness, so that I could sell it for twice the price of other growers’ standard fruit at market. Although it is difficult to grow that variety in British conditions, Super Marmande and Country Taste F1 are good substitutes.

Preparing the soil

I include this extra section on soil preparation because I feel there is some misunderstanding about the perceived need to use proprietary tomato feeds. Tomatoes grow fast and require plenty of nutrients, but in most soils a thick (5-7cm / 2-3") dressing of good compost or well-rotted manure, spread any time from winter to just before planting, should provide these. The resulting plants may not be the biggest, but they have an excellent chance of bearing fine crops and of being healthy.

The nutrients in compost become available as plants ask for them, making for more balanced growth than when artificial, soluble fertiliser is applied. Tomatoes are reckoned to ‘need high potash fertiliser or liquid feed’. This may be so, but I feel that the risk of concentrating on any one nutrient is a relative depletion or imbalance of many others. My tomatoes grow steadily and healthily, i.e. without any extra feed, with the compost helping to ensure nutritious fruit and excellent flavours.

Grow bags

Growbags will benefit from some liquid feeding, and they are the easiest solution for paved greenhouses, especially now that organic ones are available. Go for larger sizes because otherwise watering can become a chore, as mature tomato plants can suck small grow bags dry in half a day of hot sunshine.

Sowing seed and raising plants

Whichever sort of tomato you grow, the methods are similar. Sow by late March in gentle heat, about 20°C (68°F). Initial growth will be slow and can be in a seed tray on the windowsill, but not for too long or the stems will become lank and flimsy.

After four or five weeks the large seedlings can be carefully pricked or moved into 5cm pots, giving them more compost for roots and daylight for leaves. After another ten days or two weeks, they can be re-potted into 8-10cm pots. Growth is strongest when small plants are successively repotted to gradually larger pots because it avoids them becoming waterlogged in large ones. Plants do best when they have just a little extra compost and space.

You will know if they are too close together and in need of re-potting because stems will be long and thin, with pale leaves, rather than short and fat stems with broad, dark leaves.

INDOOR TALL TOMATO (also called 'cordon' or 'indeterminate')

Season of harvest: July-October

Follow with: winter salad such as spinach, rocket, mustard, lettuce

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow</i> <i>First ready</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
ALICANTE	Reliable, red, medium-sized	Feb-Mar Jul	50x50 200
GOLDEN SUNRISE	Yellow, tasty fruits, medium-sized	Feb-Mar Jul	50x50 200
ROSADA	Red, cherry plum, fine flavour Water moderately	Feb-Mar Jul	50x50 200+
SAN MARZANO	Dense red plum for bottling	Feb-Mar Jul	50x50 200
BLACK CHERRY	Glossy dark fruits, sweet	Feb-Mar Jul	50x50 200
SUNGOLD	Orange, cherry-sized, top flavour Give room to grow	Feb-Mar Late Jun	50x50 250+
(SUPER) MARMANDE	Large, red, dense, sweet beefsteak Loves heat, stop at 3 trusses	Feb-Mar Aug	50x50 160

All of the above will make a long central stem, sometimes to more than 10m (33') metres in commercial greenhouses. They also send out new stems or side shoots all the time, which need removing.

Planting and supporting

Planting holes can be made with a trowel, slightly larger than the rootball

and deeper too, especially if the stem is long: new roots will grow out of it below soil level. As support, a cane or stick can be firmly pushed in near to the roots, or a string buried under the rootball at planting time; its other end tied vertically above to a polytunnel bar or greenhouse roof. As plants grow, their main stem is gently twisted around the string, saving the need to keep tying it to a stake.

Side-shooting

If side shoots are not removed, cordon tomato plants become a bushy jungle of leaves with many trusses of small fruits. So watch for any new stem growing between leaves and the main stem: these should be rubbed out or gently snapped off. You need to continue removing side shoots right through the season, as well as pinching off occasional shoots at the end of trusses, where new growing points may emerge, and at the top of plants where they sometimes fork.

Flavour and fruiting in summer

I remove the first truss of flowers, because its fruit often sit at soil level and are nibbled by slugs as they ripen. This may happen even at the bottom of the second truss, which can be shortened. In any case, the quality of the earliest fruit can sometimes be poor in cool weather.

Many books advocate artificial pollination but I have never practised it and have always enjoyed plenty of fruit. They swell quickly as the plants elongate rapidly in June and July, but can take a frustrating length of time to ripen.

Flavour will depend partly on how ripe or over-ripe the fruits are when picked; acidity is increasingly balanced by sweetness, then almost disappears into a mellow softness if fruits are extra-ripe. Under-watering increases depth of flavour and sweetness, but means fewer fruit later on. Irregular watering, especially on dry soil, can make ripe tomatoes split open. Learning to water for the growth you want can take a year or two of experimentation.

Flavour and fruiting in autumn

With falling temperature and light levels, both growth and ripening will slow, most noticeably in October. A good remedy is to 'stop' plants in August by pinching out their main growing point, to focus their resources into the development and maturing of fruit. Continue pinching out side shoots and water less. Finished trusses and all leaves up to (not above) the lowest fruiting truss can be removed to increase light and air-flow around

plants.

By time of the first frost, any trusses with unripe fruit can be cut off and brought into the house to ripen, but flavour will be less impressive. Pull out the plants and cut them into pieces to aid breakdown in a compost heap or bin. Then plant some winter salad, for example from seed you have sown into modules in early September (see Chapter 10).

Problems

Aphids Compost-grown, correctly watered tomatoes should maintain a healthy state. Planting marigolds nearby is a deterrent to whitefly, which can occasionally be numerous enough to slow growth as they suck plants' sap.

It is possible to buy aphid predators, but they are quite expensive and last only one summer. Spraying with soapy water can reduce aphid numbers; also, plants often outgrow them, partly because aphids are most numerous in late spring. Some seasons are simply worse than others.

Potato blight can be more problematic (see Chapter 12, page 125), but only if water has been regularly sprayed on the leaves. After about mid-July, *aim to water the soil or grow bag only*, especially in a damp, overcast summer.

OUTDOOR TALL TOMATO

Season of harvest: August-October

Follow with: autumn-sown broad beans or mustard green manure

<i>Variety</i>	<i>Character</i>	<i>Sow</i>	<i>Spacing (cm)</i>
	<i>Special care</i>	<i>First ready</i>	<i>Height (cm)</i>
ALICANTE	Good cropper, medium red fruit Stop by early Aug	Mar-early Apr Aug	60x60 130
FERLINE F1	Some blight resistance, red fruit Stop by early Aug	Mar-early Apr Aug	60x60 130
SUNGOLD F1	Small sweet red fruit Best in sheltered spot	Mar-early Apr Jul/Aug	60x60 150

There are several differences between growing tall tomatoes indoors and outdoors. When growing outdoor tomatoes:

- Sow after mid-March and plant a month later, at the end of spring, usually in early June.
- Use a 2m (6') cane at most, and tie in the growing stem every fortnight or so.
- Grow only early-cropping varieties that are recommended for outdoor use.

- Pinch out the main growing point after four to six trusses have appeared, probably in early August. Even then, the top trusses may yield more green than ripe fruit.
- Total yield will be much less than from indoor-grown plants, and more dependent on summer weather.
- In wet or grey summers, blight will affect leaves and cause all fruit to rot. Some varieties claim blight resistance, but this can be overcome by continual rain. Unfortunately, one never knows in advance.
- Sweetness may be lacking in wet summers.

In spite of these drawbacks, it is always fun to try outdoor tomatoes and sometimes the rewards are significant.

Another possibility, for cool and wet areas especially, is smaller bush tomatoes that can be cloched all summer to keep their leaves dry.

OUTDOOR BUSH TOMATO (also called ‘determinate’)

Season of harvest: July-September

Follow with: as for outdoor tall tomato

<i>Variety</i>	<i>Special character</i> <i>Special care</i>	<i>Sow</i> <i>First ready</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
RED ALERT	Early, prolific, tasty Pick off slugs	Mar-Apr Jul	45x45 50
ROMA	Dense plum fruit for cooking Minimal watering	Mar-Apr Mostly Aug-Sep	45x45 50
SUB-ARCTIC PLENTY	Extremely hardy and early Can be cloched	Mar-Apr Jun	45x45 50
TUMBLER F1	Compact habit for baskets Regular watering	Mar-Apr Jul/Aug	30

Varieties

These varieties produce quite small fruit at ground level, with no staking or side-shooting. Growing is less work than with tall varieties but picking is more work, with fruit often underneath leaves and stems, sometimes damaged by slugs where they lie on the soil.

Success depends on weather above all, with many promising crops lost to blight after late July. Sub-Arctic Plenty is worth trying in cooler or wetter regions, for its ability to set and ripen fruit in cooler early summer weather, even before blight arrives. Red Alert somehow combines early fruiting with a good, sweet flavour. Roma and other plum tomatoes tend to crop a little later, with a

dense flesh making them better for cooking and bottling than for eating raw.

Growing

Polythene cloches are extra work and expense, but can repay the effort and will ensure a worthwhile harvest. Fleece will help plants to fruit early but cannot prevent blight later on.

Most bush varieties can be grown in containers as long as they are in a sunny position. Any lack of sun will delay picking and reduce sweetness of the fruit.

Even hanging baskets can be made productive: tumbler and other basket varieties yield well, and are of good flavour but not top-rate. Avoid over-watering to maintain sweetness, although large plants in small containers need regular watering to survive, let alone grow. These plants will definitely benefit from some liquid feed of comfrey leaves or stinging nettles soaked in water (very smelly) and diluted about 20:1, or of a proprietary organic liquid feed.

Problems

Slugs can spoil much fruit; tall tomatoes are better in slug-prone areas.

Blight is the main problem (see page 125) – cloches will help.

Tomato soup with apple

This is good for using up the glut of tomatoes at the end of the season when the plants need to come out to make room for the next crop. It is also a time when the apple trees are groaning with fruit. I find the apples add a bit of sweetness and body to the soup. No precise measurements here. Work on the basis of 1 onion and 1 apple to 1kg (2lb 3oz) tomatoes. Garlic, celery and a good stock help enormously.

Sweat the chopped onion in a large saucepan, add chopped celery, apple and tomatoes, a couple of cloves of garlic, and then add the stock. Bring to the boil then simmer for about 20 minutes. Liquidise, and if you don't like tomato skins, sieve the soup.

AUBERGINE

Season of harvest: July-October

Follow with: winter salad such as spinach, rocket, mustard

<i>Variety</i>	<i>Character Height (cm)</i>	<i>Sow First ready</i>	<i>Spacing (cm)</i>
BARBENTANE	Crops in cooler conditions 100	Feb-Mar Jul	50x50
MONEYMAKER F1	Relatively easy, long black fruit 100	Feb-Mar Jul	50x50
ROSA BIANCA	Round, white, tasty fruit 80	Feb-Mar Jul	50x50

The key factor for aubergines is heat, so they are most reliably grown under cover. Without sufficient warmth, growth is slow and fruiting inconsequential.

Aubergine fruits come in many shapes, sizes and colours. White or violet ones such as Rosa Bianca are no more difficult to grow than standard dark purple ones, but may yield a little less. Growth of all varieties is significantly slower at temperatures below about 20°C (68°F).

Sowing

Sow in February or March, with a temperature of 20°C or higher if possible. Seedlings emerge and grow more slowly than tomatoes; their potting-on requirements are the same. If you have no reliable source of heat in the greenhouse, you could buy small plants to arrive in April or May, then grow them on before planting.

Growing

By planting time in late spring, an already flowering plant about 15cm (6") high will give the best chance of a fair crop by midsummer, rather than late summer.

Although aubergine plants vary in height according to variety, most will benefit from a stout cane near their stem, around which some string can be looped to hold branches up and keep fruit above soil level.

Correct watering makes a big difference. Initial slow growth, above all in grey, cool weather, means care must be taken to avoid drowning the roots. But any hot sun on larger plants will result in rapid evapotranspiration, such that soil or grow bags can dry out enough to diminish fruiting. Be generous with water in a hot summer.

Harvesting

Aubergines are best harvested before they become too seedy and bitter. This can be hard to judge and varies according to variety but watch for any dulling of skin colour and any abnormality of shape, such as swelling

across the middle, which reveal the end of growth and beginning of seeding.

Some weather conditions encourage so much fruit-set that the harvest, even on large-fruited varieties, consists of many small aubergines rather than a few large ones. If you want the latter, some thinning of baby fruit will be necessary. This should not be necessary with varieties bred for small fruit, which will thrive in pots on a warm patio, although they will crop later than aubergines under glass or polythene. On outdoor plants I rarely achieve anything to eat before mid-August.

By early autumn, plants can be large enough to maintain reasonable growth of fruit for a time, until the first cold nights slow them right down.

By the time fruiting is finished and plants are pulled out, their stems are woody and require chopping or shredding to help them rot into compost.

Problems

Slugs enjoy aubergines, so it is best to support fruit that touch the soil, with a block of wood perhaps.

Red spider mite can destroy indoor plants, and the predator phytoseiulus is a reliable remedy, as long as it is introduced as soon as or before red spider mite is suspected. I recommend this if red spider mite was present the previous year in your greenhouse or polytunnel.

Aphids As for tomatoes (see page 168).

Garlic aubergines

The idea behind this is to treat the aubergine as if it were garlic bread – the same old butter, parsley and garlic with the odd variation!

Slice the aubergines in half lengthways. Score them with a diagonal criss-cross pattern and lay on a baking tray. In a small bowl, mash together butter, chopped garlic, and a mixture of herbs – basil and parsley are popular. Spread the butter over the aubergine as if buttering bread. Roast in a hot oven (200°C / 390°F) for about half an hour.

CAPSICUM

Season of harvest: August-October

Follow with: winter salad such as spinach, rocket, mustard

<i>Variety</i>	<i>Character Special care</i>	<i>Sow First ready</i>	<i>Spacing (cm) Height (cm)</i>
<i>1. Sweet peppers</i>			
MARCONI ROSSA	Long, pale green then red Stake & tie loosely Jul/Aug	Feb/Mar 75	50x50
ORANGE BABY (see Plate 30)	Smaller fruit & plant, sweet Suitable for large patio pot	Feb/Mar Jul/Aug	50x50 60
<i>2. Hot peppers (chillies)</i>			
HUNGARIAN HOT WAX	Mild when immature Jul/Aug	Feb/Mar 75	50x50
HABENERO	Terribly hot small orange chilli Eater beware!	Feb/Mar Jul/Aug	50x50 75

Capsicums include sweet peppers and chillies of all colours. Like aubergines, they are members of the tomato and potato family, Solanaceae. Their green fruit is an immature stage to ripening, which involves a colour change and some sweetening or heating of the flesh.

The vastly different flavours of available varieties, both of peppers and chillis, make it difficult to single out any for general recommendation. Those in the table have worked well for my family, except that many of the Habanero were never eaten, they were so spicy!

Sowing and growing

Capsicums have the same requirements as aubergines (see page 170). Heat is again the most difficult part in Britain, particularly for seedlings and young plants. So, again, it may be worth buying plants rather than seed.

Harvesting

Chilli plants can provide a large number of fruit, so one in a pot may provide sufficient produce for a few months. When mature (meaning red, orange, yellow or purple, according to variety) they can be picked and kept indoors at room temperature to dry. Make sure that they are fully ripe before attempting to keep them; for instance, orange chillies of a red variety are immature and may go mouldy. The depth of flavour is often awesome.

Peppers will be sweet only if allowed to develop their ripe colour. But in our climate this involves waiting two to four weeks beyond when they could have been picked as green peppers, and while they are maturing, plants are forming fewer new peppers than if green ones had been picked off. So harvests of ripe fruit are later and smaller, but sweeter and more interesting.

Peppers carry on fruiting a little later than aubergines, but the last peppers are extremely slow to ripen and at risk from slugs.

Problems

As for aubergines (see page [172](#)).

Pepper and goat's cheese tart

2 onions, 3 peppers

2 cloves garlic

200g (7oz) goat's cheese rosemary / thyme / basil

dough base:

500g (1lb 1oz) wholemeal flour

1 teaspoon easy-blend yeast

1 teaspoon salt

This is essentially a pizza. Start by making the dough and leave to rise in a warm place. Meanwhile slice the onions into rings, and the peppers into elegant blades. Chop the garlic and, depending on the nature of your goat's cheese, either crumble it or slice into rounds. Stretch the dough into a round, arrange the topping, and bake in a hot oven c.200°C (390°F) for about 20 minutes.

CUCUMBER

See Chapter 13, page 131

MELON AND WATERMELON

Season of harvest: August-September

Follow with: winter salad such as spinach, rocket, mustard

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>First ready</i>	<i>Sow</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
MINNESOTA MIDGET	Early, small fragrant outdoor melon Suitable for outdoors	Jul-Aug	Apr	50x50 30
SWEETHEART F1 (see Plate 34)	Prolific crop of early Cantaloupe melons Regular pinching out	August mostly	Apr	50x50 up to 200
WATER MELON	Juicy, needs hot summer		Apr	70x70
SUGAR BABY	Water more than melon	Aug-Sep		30

MELON

The melon is another heat-loving plant, similar in appearance and cultural requirements to cucumber. Varietal choice plays a big part here, and there is

one, Sweetheart F1, which seems especially well-adapted to British greenhouse temperatures, more than most other varieties I have tried. It bears an early and reliable crop of sweet, succulent orange flesh, inside a pale green skin. When grown under cover, some of its early fruits can weigh up to 1.5kg (3lb 5oz); later ones are smaller and sometimes less sweet. Minnesota Midget is better adapted to outdoor growing.

Sowing

Sowing is best in early spring with gentle warmth. Be careful not to over-water small plants, and two re-pottings may be necessary before planting out as late as early June, by which time there could be a trailing stem and some flowers.

Growing

Vertical or horizontal? Indoor melon plants can either be allowed to ramble across the soil like a squash plant, or be grown up a string or stake like a cucumber. The latter is advantageous for keeping fruit off the ground, where ants, slugs and woodlice can sometimes get to them before the gardener spots that they are ripe.

Vertical cultivation I run a re-usable polypropylene string (binder twine) from my polytunnel's crop support bar, straight down to the bottom of a planting hole, just as for tomatoes. The melon plant is gently firmed in, with a knotted end of the string underneath its developing rootball. Carefully wrap the main stem around the string as it grows. By July it should be lengthening rapidly (up to 7cm (3") daily in hot weather), so twice-weekly attention is needed for keeping plants supported.

Baby melons should be seen on all side shoots of the main stem, at the first node of each one, i.e. where their first leaf is growing. Melons grow best with only fruit on each side shoot, so pinch the rest of the stem off once the first fruit is formed. So while the main stem is growing fast, to 2m (6') or more, a lot of pinching out is needed of other incipient stems, just after the point where they carry baby melons. Four or five good-sized fruit is an average for each plant, in rich soil and a hot summer, with plenty of water.

I recommend removing the first few melon side shoots altogether, so that the lowest melon hangs just above soil level, clear of all other interested parties there.

Horizontal cultivation Melons grown at soil level are usually smaller and

less perfect, but of equally impressive flavour. As with vertical melons, their stems require pinching out, but it is harder to see where. I usually let plants grow about 80cm (2'8") in all directions before pinching out all their growing points, and subsequently all others I see. The growing points are the ends of stems and side shoots, where small new leaves are developing. Baby melons should be visible on plants when you do the first pinching out. The main growing area will now fill up with leaves and fruit, but keep paths clear by pushing errant stems back on top of the plant. This advice applies to both indoor and outdoor melons.

Harvesting

Ripeness is revealed in many ways, the most striking being a wonderful aroma of sweet melon. At the same time, there may be a little cracking or splitting of the skin around the fruit's stem. The skin colour will become more yellow and soften.

In Britain, cutting open a ripe melon that you have grown yourself gives a wonderful feeling of achievement, and the flavour is as remarkable as anything one can imagine.

For melons on the ground, small blocks of wood can be placed underneath to keep them clean and make it easier to spot any hint of ripeness.

If they are not ripe by late September, it is best to pick and bring them indoors to finish ripening, but there will be less sweetness.

WATERMELON

Watermelon plants also love heat, and I find them more difficult to grow than melons. No special pruning is required, and most varieties will ramble a long way with some large and heavy fruit – which is why I recommend Sugar Baby, a more compact variety.

Sowing and growing

As for melon (see page [173](#)), but without pruning.

Harvesting

Judging ripeness is not easy. In Sugar Baby's case it is indicated by a slight darkening of skin colour.

CAPE GOOSEBERRY / TOMATILLO

Season of harvest: August-October

Follow with: winter salad such as spinach, rocket, mustard

<i>Variety</i>	<i>Character</i>	<i>Sow</i>	<i>Spacing (cm)</i>
	<i>Special care</i>	<i>First ready</i>	<i>Height (cm)</i>
CAPE GOOSEBERRY	Large plants, tangy fruits Stake and tie up bushy plants	Mar/Apr Aug	70x70 90
PINEAPPLE	Smaller, earlier fruits Stake and tie up bushy plants	Mar/Apr Jul	70x70 60
TOMATILLO VERDE	Fruit for cooking mostly Grow upwards like tomato	Feb/Mar Aug	70x70 150

These are exotic plants of the nightshade family from New Mexico, not too difficult to grow, because of their exceptional vigour. Tomatillo grow in cooler conditions; the fruit are mostly green and up to 4cm (1.5") across. Cape gooseberries are cherry-sized or smaller; mostly dark yellow and sweet but also acidic, rather citrus-like, more fruit than vegetable and wrapped in a pretty, pointed, parchment-like lantern. Cape gooseberries are also known as physalis and golden berry, while Chinese lanterns are an ornamental version with red parchment (when ripe) and inedible fruit.

Varieties

I have recently enjoyed Pineapple for the unexpected sweetness of small berries that really do taste of pineapple. It is described as 'dwarf', but mine grew to over a metre (3') high and required supporting all around with canes and string to hold the stems up a little, to prevent them covering paths and also to keep lanterns clear of the soil. For small spaces, Little Lantern is worth a try, reckoned to grow no more than 50cm (1'8") high with a spread of about 80cm (2'8").

Tomatillo Verde offers larger and tarter fruits than cape gooseberries, resembling wrapped-up green tomatoes. They are mostly used in salsa dishes.

Sowing

Sow in March like tomatoes; plant in May inside, or June outside.

Growing

Growing outside will make the harvest smaller, later and perhaps less sweet, and I recommend this for tomatilloes. The restriction of growth may be a good thing because, indoors, these plants shoot rampantly in all directions and need staking plus some tying in. String can be run around plants as they grow, like a collar, and tied to a stout bamboo.

Harvesting

Cropping indoors may start by late July; watch for a change in colour of cape gooseberry lanterns, from pale green to bright yellow to matt beige. They are edible in all three stages, to cook when unripe and to eat raw or cooked when sweet and yet still tangy, with many powerful flavours.

Fruits picked in colder weather, before frost, should store well in their wrappers, sometimes until Christmas.

Problems

Pests and diseases are not a main worry here, but restricting growth to facilitate picking may be – see above.

OTHER VEGETABLES: NON-GREENHOUSE CROPS

I have put the following few vegetables here because they are somewhat specialised or of unusual habit, rather like most of the above. They are outdoor crops.

CELERY

Season of harvest: August-October

Follow with: garlic, autumn-sown beans

<i>Variety</i>	<i>Character Height (cm)</i>	<i>Sow Harvest</i>	<i>Spacing (cm)</i>
CELERY LEAF	Many smaller stems 40	Apr-Jun Regularly	25x25
GOLDEN SELF-BLANCHING	Tall yellow stems 40	Apr-May Aug-Nov	25x25
GREEN UTAH	Tall green stems, self-blanch 40	Apr-May Aug-Nov	25x25

Varieties

I recommend self-blanching varieties because blanching with ridges of soil usually results in even more slug holes. Celery is better for some blanching to reduce its bitterness. Self-blanching works by close planting, excluding light around stems, with a dense canopy of leaves above them. There is a choice of pale yellow or pale green stems, from the varieties above, and celery leaf for small repeat pickings.

Sowing

Climate warming has played a part here, because it used to be that the summer was about right for bringing celery to maturity from sowing in March. Now there are almost two seasons, in southern Britain at least: sow in March for late-summer celery; sow in May for late-autumn celery.

Raise plants indoors: sow seed on the surface of compost in a seed tray and cover with glass to retain moisture. Water with a fine rose about once a week. Seedlings may take three weeks to germinate, and pricking out into 3cm (1") modules can be done after four to five weeks.

Growing

All celery is shallow rooting, and grows best where surface moisture is abundant. Frequent watering is better than occasional soaks, and in dry summers it can be difficult to grow well. Use the later sowing date if watering is difficult, so that most rapid growth happens in damper autumn weather.

Harvesting

The nicest stems are usually found soon after the canopy has closed over. Celery will grow on beyond that stage, with outer stems becoming tougher and, often, new side shoots growing out of the base. If the main stem is cut above soil level, there may be time for these to give a small second picking. Harvest before temperatures of about -2°C (28°F) or lower; celery stalks will keep well in a polythene bag in cool conditions.

Celery leaf takes this a stage further and is picked over regularly by pulling off or cutting larger outside stems, and then larger numbers of small ones as the plant develops.

Problems

It is difficult to grow beautiful celery, but the taste is always strong. Slugholes tend to spoil the appearance of most outer and some inner leaves, although this is less important for soups and stews. Keep well weeded, harvest on the young side, and trim hard when picking to remove the most damaged leaves.

Celery soup

1 head of celery, chopped

2 onions

500ml (17floz) chicken stock

500ml full cream milk

Soften the vegetables in butter. Stir in a couple of tablespoons of flour, add the milk and stock. Bring the boil then simmer for 20 minutes or until the celery is soft. Liquidise before serving.

SPINACH, CHARD AND LEAF BEET

Season of harvest: April-November

Follow with: (spinach only) many vegetables, depending on season of

Variety	Character Height (cm)	Special care	Sow Harvest	Spacing (cm)
1. True spinach				
TOSCANE	Slow to grow and to bolt, tender 30	Keep moist	Mar-Aug 1-2 months per sowing	5x25
MEDANIA	Overwinters well, dark sweet leaves 40	Keep plants tidy	Jul-Aug Autumn and spring	10x30
2. Chard and beet				
PERPETUAL SPINACH	Long season of picking, versatile 60	Regular picking	Mar-Jul Up to 10 months	30x30
RAINBOW CHARD	Stems of red, yellow, white, pink 60	Regular picking	Mar-Jul Up to 10 months	30x30

Varieties

All spinach is of the beetroot family (*Beta vulgaris*), of which some kinds make more of a beet root than others. True spinach, the least rooty, grows quickly and briefly, for two or three months usually, while the 'perpetual' leaf beet is regularly picked off the same plant, whose increasingly large root keeps sprouting new leaves. Chard of all colours works in the same way.

TRUE SPINACH

True spinach is extremely useful as a salad plant, in winter and spring above all – see pages 76 and 87 for more detailed descriptions of growing and harvesting as salad leaves. As a cooked green, leaves are simply allowed to grow larger. Slug holes will appear in the process, but conveniently disappear again in cooking! Keep plants clean by removing any yellowing leaves, to afford less habitat for slugs under ground-level foliage.

Slugs and woodlice can make it difficult to grow spinach from direct sowing. I mostly raise plants indoors, about three seeds per 3-4cm (1-1.5") module. One

tray of 40 to 60 module plants should yield substantial pickings.

Best sowing dates are March to April.

PERPETUAL SPINACH AND CHARD

These leaves also are useful for salads, picked small – see pages 74 and 82 for detailed descriptions of growing and harvesting as salad leaves. When cooked, a few plants can provide large leaves for many, many meals, but with a different flavour from that of true spinach – generally more acidic. Chards come in a fine range of colours, and their vivid stems may brighten up the garden as much as the table.

Regular picking obliges plants to keep producing smaller leaves. Chard and leaf beet leaves will grow huge if allowed to, and whilst still edible they are tougher than small leaves. As the weather cools in autumn, growth will gradually slow, then stop during most winters, and any severe frost will kill roots as well. However, in milder areas and winters, plants should survive to produce another month or two of leaves in early spring, before sending up highly ornamental coloured stems. Ruby chard is especially striking.

Another beautiful member of this beet family is tree spinach, see pages 73 and 76.

Strawberry spinach is found in some seed catalogues, but provides few edible leaves. It is more interesting for the bright red, seedy fruits that cling to its stems; they are edible, but nothing like as sweet as strawberries.

Perennial vegetables

Regular early harvests every year



‘Easy’, that sometimes over-used word, really does apply here. Perennial vegetables grow again, every year, from roots that survive over winter. There is no need to start again in the spring, and early crops are assured, growing vigorously while newly sown seedlings of annual vegetables are only just under way.

Certain features are common to all perennial vegetables:

- Before planting, it is imperative to clean the soil of all perennial weeds.
- Most perennial vegetable plants take up a larger space than annual vegetables.
- They crop in spring or early summer.
- After harvest, growth in late summer and autumn is for the benefit of next year’s crop.

ARTICHOKES

There are three unrelated kinds of artichoke, sharing only the name. In a way the first two are both perennial, although Jerusalem artichokes are not supposed to be. It is just that some of their tubers always manage to hide at digging time, to re-grow in the spring into very tall stems with little sunflowers on top in the autumn. The flowers rotate to follow the sun, resulting in their Italian name of ‘girasole articiocco’, corrupted in English to ‘Jerusalem’.

By contrast, globe artichokes (true perennials) are large grey-green bushes of the thistle family that re-grow, even twice a year, with edible flower buds. Their flavour is slightly acidic and deliciously nutty, with nibbles of nuttiness at the bottom of each leaf, around tender hearts of a creamy consistency.

Also included here, to complete the series, are Chinese artichokes, which are

of a different family again, and are annuals.

GLOBE ARTICHOKE

Season of harvest: June/July, sometimes September

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow/plant</i> <i>First ready</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
GREEN GLOBE	Early, medium heads Remove all growth after harvest	Mar-May Jul	100x100 or 45x150 100+
ROMANESCO	Later, smaller purple heads Remove all growth after harvest	Mar-May Jul	100x100 or 45x150 100+

Sowing /planting

From seed, sow into small pots or 3cm (1") modules in early spring and re-pot into 8-10cm (3-4") pots after six weeks, then plant into weed-free ground in June. Plants can be raised outdoors, but will grow more strongly in a greenhouse; note that mice sometimes eat the seeds. The first artichokes may come in September, otherwise should appear the following July.

Alternatively, after an established plant has finished fruiting in summer, use a sharp spade to chop away a piece of root and stem with some leaves, and plant this straight into moist new ground, or into a large pot of compost to grow on before planting the following spring. Either way, fruiting in the first summer will be slight, but should be significant thereafter.

In good soil each plant can produce up to three or four large globes and six or more small ones. This is based on one plant consisting of three or four separate growing points, having been given sufficient room (see table above) for each one to develop. If you have space, two different varieties can be a good idea, to spread the harvest.

Growing

Once all the globes are picked, usually by late July, cut out the old woody stems with a sharp spade, just above soil level, and pull off all old and yellowing leaves. Some new shoots should already be appearing, and once these are about 20-30cm (8-12") high, snap or pull off any excess to leave three or four plants for the next harvest. Larger heads are more likely if this is done. In long warm seasons, small heads are sometimes produced in late summer or early autumn – worth picking, but more of a snack than a meal.

Harvesting

There is scope to vary dates of picking by choosing to eat small, tender heads or larger, more fibrous ones. Young heads cut easily, and their peeled stem is as delicious as any heart – if young enough they can be eaten whole, leaves and all. Older heads are more fibrous, but with more ‘meat’ at the bottom of each leaf that is peeled off, and their stalk is woody.

Old unpicked heads will eventually transform into vivid clusters of translucent, sky-blue petals, which can be dried when cut and hung upside down in an airy spot.

Problems

Frosty winters can make all leaf growth disappear and the plants may seem dead until April when, normally, they shoot again. Slugs and snails like using older leaves as a base for damaging raids elsewhere, so it really is worth removing all old leaves after harvest.

Artichokes

These are surprisingly popular with our children. Cut the stalks off and steam the heads in a little water for 20-30 minutes. Serve with garlic mayonnaise or vinaigrette or melted butter.

JERUSALEM ARTICHOKE

Season of harvest: November-April

<i>Variety</i>	<i>Character Special care</i>	<i>Sow / plant First ready</i>	<i>Spacing (cm) Height (cm)</i>
FUSEAU	Not too knobbly Dig roots thoroughly	Mar-May Oct-Nov	60x60 or 45x90 250
GERARD	Red, fine flavour Dig roots thoroughly	Mar-May Oct-Nov	60x60 or 45x90 250

Jerusalem artichokes bring a welcome extra dimension of flavour to winter soups and salads. They would surely be better known and more widely used, were it not for their ability to cause gaseous eruptions. Not everybody is so affected, however, and you may be lucky. Some claim that eating them raw can avoid the problem – and their nutty flavour is superb in a grated salad.

They are almost too easy to grow, such that they keep re-growing, because one or two of their tubers can never be found at harvest time, and then quickly re-grow into new plants from April. Bear in mind the height of their woody stems – up to 3m (10').

Some roots are uneven, relatively small and involve a lot of scrubbing to

remove soil. If peeled, they discolour quite fast once the flesh is in contact with air.

Planting

Set tubers about 15cm (6") deep in early spring. Great vigour and height of stems make the plants more feasible to grow in a clump or section of bed, rather than in a row or line, which robs more light from its neighbours. Do not grow them to the south of tomatoes or French beans, for example.

Harvesting

Tubers can be dug out once leaves die off in autumn; also they are totally frost hardy, happy to lie in the soil until needed. The last digging is usually in early April, when some new shoots may be visible from undug tubers. To clean the soil completely for a different crop, remember to remove any newly shooting tubers every week or two until mid-May. By then there should be almost none left and compost can be spread before planting a new crop.

Problems

Slugs may nibble new leaves in spring but plants usually grow away.

Mice may burrow amongst tubers in winter and enjoy many meals; a good cat is probably the only answer.

CHINESE ARTICHOKE

Season of harvest: November-March

<i>Character</i>	<i>Plant</i>	<i>Spacing (cm)</i>
<i>Height (cm)</i>	<i>Special care</i>	<i>First ready</i>
Sweet and nutty flavour	Mid-April to May	40x40
50	Dig carefully late autumn, store in sack	Oct/Nov

A final variation is Chinese artichokes, also called crosnes, from the town in France where they were first grown in Europe. They are members of the mint family, much esteemed by certain chefs and writers, with a flavour (much of it in the skin) that resembles their Jerusalem 'cousins'. Their tubers are pale and ridged, akin to sections of caterpillars and difficult to clean. They are suitable for salads and all kinds of cooking. Note that these are not supposed to be perennial in any sense, because tubers are supposedly damaged by frost, whereas many unharvested tubers do re-grow and can become a weed just like Jerusalem artichokes.

Planting

Tubers will probably need ordering from a specialist catalogue and should arrive in late winter. If you receive them before all risk of frost has passed, plant in pots in a greenhouse before setting them out in late spring. They have slightly hairy dark green leaves and small flowers appreciated by bees.

Harvesting

All top growth is killed by frost and it is best to dig tubers soon after this, to avoid slug damage over the winter. Store them in a sack or box in a cool, damp place.

ASPARAGUS

Season of harvest: late April-late June, from mature plants only

<i>Variety</i>	<i>Character</i>	<i>Sow/plant</i> <i>First ready</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
SEED – CONNOVERS COLOSSAL	Slower	Mar/Jul Small picking after 3 yrs	60x75 200
CROWNS – CONNOVERS COLOSSAL	Quicker	Mar Small picking after 2 yrs	60x75 200

Asparagus is one of the finest tastes in vegetables, and one of the most expensive – two good incentives to grow your own. It is easy to grow, but needs plenty of space – rather more in fact than is often recommended, especially as plants grow older.

Preparing soil

Make sure you start with clean soil. If you plant into soil with couch grass or bindweed roots, you are simply creating difficulties for yourself over many years, because the weed roots will multiply and can never be cleared out once asparagus crowns have become established. Be patient and do the job thoroughly.

Seed or crowns?

The difference between sowing seed and planting crowns is mostly in time to cropping. A year's wait can be saved, but sowing your own is satisfying and should make for healthy plants. On two separate occasions I have sown seed of Connovers Colossal (Plates 35 and 36), in March, planted it in July, and harvested quite a few spears two springs later, or three years after sowing. Substantial harvests begin about five years from sowing, or four years from planting crowns.

This may sound a long wait, but I assure you it will pass quickly. Then you can enjoy many years of superb meals. There are divided views on the lifetime of an asparagus bed: anything from ten to twenty years is suggested, and the latter is certainly achievable.

Planting

Think ahead: have some ground clean of weeds by late summer if possible. This gives time for any lurking perennial weed roots to be dug out before winter and again at planting time. Asparagus is easy to grow if you are thorough with weed clearing.

Trenches are often recommended, but planting on flat ground works well. I recommend a bed, block or square of asparagus, easier to look after than one long row. Over the years, many roots spread far into neighbouring soil and the fern-like top growth will grow tall and floppy, benefiting from support, but partly supporting itself if grown all together.

To plant crowns, dig a hole slightly larger than the triffid-like roots, lay them in it with the centre higher than root ends, then cover everything with no more than 7cm (3") of soil. A good spacing is 60cm (2') between plants and 75cm (2'6") between rows. Water in if dry, then simply keep clear of weeds with regular hoeing. A 5cm (2") top dressing of compost will help conserve moisture and feed the growing roots. New spears from the crown will rapidly bush out into pretty ferns, with more appearing until early summer and lasting until mid-autumn, when they turn yellow and die.

Growing on

My experience suggests that asparagus benefits from a good annual dressing of compost or well-rotted manure, either in winter or as soon as picking has finished. Rich, fertile soil will encourage strong growth, an abundant forest of ferns through each summer and autumn, and plenty of new spears every spring.

Summer growth should, after about three years, resemble a mini-forest about 2m (6') high, dark enough underneath to prevent germination of too many weeds. Any that do appear must be removed before they seed, so that the soil becomes and stays clean, making the bed easier to maintain.

In late autumn or winter, dying top growth can be cut off and composted, or left to rot on the surface if there are few weeds to hoe in springtime. The most difficult weed can be asparagus itself, from its own fertile berries that drop off or

are excreted elsewhere by birds. All-male hybrids such as Jersey Knight F1 mostly have no berries and tend to yield heavier spears, but I cannot vouch for their longevity.

Harvesting

Excitement mounts in April as you scan the plot daily, hoping to see a first spear-head, which should appear, approximately, on St George's Day (23 April), while the summer solstice is an average end-point to the harvest. Spears can be cut at soil level when 15cm (6") or so, although if left a little longer they snap off easily just above soil level and are less chewy at the bottom.

Growth depends on temperature, so in cool weather, picking may be possible every third or fourth day, while in a heatwave there can be worthwhile new growth every day.

Spears of young plants, best picked only lightly, can either be cut until late May or part-picked – occasional spears removed – until late June. The former is easier; the latter more suitable for occasional visits to the garden.

Problems

The main difficulty is **asparagus beetle**, about 1cm (1.5") long, red and black, which chews the leaves and the stems as well. I find that well-composted soil imparts enough vigour to plants for them to tolerate some beetles and keep their numbers to manageable levels, with strong and healthy crowns producing vigorous new leaves.

Whilst it takes a long time to tire of eating asparagus lightly steamed and dipped in hollandaise, mayonnaise or poached egg, towards the end of the season we start to cook other dishes with it.

Asparagus gougère (for 4 people)

1 Somerset camembert, spring onions, a handful of asparagus, gougère mixture (cheese choux pastry).

For the gougère mixture: 100g (4oz) flour, salt & pepper, 85g (3oz) butter, 225ml (8floz) water, 3 eggs, 50g (2oz) cheddar.

To make the mixture, put the butter and water in a wide pan, and when melted bring to the boil. Pour in the sifted flour and season in one go. Beat vigorously. Allow to cool slightly. Beat in the eggs one at a time until the mixture reaches a dropping consistency. Add the

diced cheese.

This dish revolves around the camembert, so choose a circular oven-proof dish that will take a camembert with a comfortable margin of about 2 inches all round it.

Lightly steam the asparagus spears. Oil or butter the dish, place the camembert in the middle and spoon the gougère mixture around it. Cut deep incisions into the camembert and insert spears of asparagus. Chop the spring onions and sprinkle over the top. Place in a hot oven for about 20 minutes. The cheese should melt and ooze every where. The Somerset camembert is ideal, as the flavour is not too strong for the asparagus.

RHUBARB

Season of harvest: March-July

Variety	Character	Sow/plant First ready	Spacing (cm) Height (cm)
GLASKIN'S PERPETUAL	Reliable, early stems	Sow Mar-Apr, plant July Mar	90x90 100+
TIMPERLEY EARLY	Forcing or maincrop	Plant Nov-Mar Mar	90x90 100+
VICTORIA	Better as maincrop	Sow Mar-Apr, plant July Apr	90x90 100+

Rhubarb grows in a similar way to asparagus, but the end product is utterly different, English to the core, it is an acid, pink harbinger of spring. Adding some cream, sugar and root ginger can transform it into a great delicacy.

Sowing

Sowing adds a year of waiting. Sow seed in pots indoors or out if you choose this option, for planting in late summer or autumn.

Planting

Commencement of the harvesting period depends on variety, so here is a tip to find a good crown for planting. In early spring, look out for a garden or allotment with vigorous new rhubarb appearing. Be cheeky and ask the owner nicely for a piece of root off its side during the following winter. He or she should be happy to oblige, because rhubarb roots or crowns enlarge every year, until they consist of a significant mound of dark knobiness, mostly above ground. Otherwise, buy crowns or rooted crowns in pots from a catalogue or nursery. Plant so that all new shoots are just above soil level.

Roots are vigorous and feed outwards a long way, which is why rhubarb is often banished to a distant corner of the plot, not to interfere with other vegetables or flowers. A damp corner suits it, whereas dry soil will slow its growth. Plenty of compost or manure and occasional watering in spring will be repaid in long, fleshy stalks.

Some rhubarb makes flower stems from about mid-spring. While pretty, they are best cut out because their presence depresses leaf growth and diverts energy to the production of seed.

Harvesting

Hold back in rhubarb's first year, so that energy captured by the leaves can go into building up its roots. During the second spring, it should be possible to gather stems for six to eight weeks, and for up to three months a year from then on.

The first leaves and stems seem to take an age as they poke gingerly out of the crown, being singed by late winter frosts. Putting a large terracotta pot or bucket over them can speed up growth a little and will blanch stems to pink instead of red, with a milder flavour. But starving the leaves of light hampers future growth and should not be done every year.

Commercial pink rhubarb is 'forced' in dark sheds, from crowns that are grown in fields and dug up before winter. By the next spring they are exhausted from lack of light and cannot be re-used, unlike garden rhubarb, which often lasts for decades.

Picking is usually done by twisting and pulling larger stems so that they come away from the crown at their base. The large, inedible leaf is cut off and composted. One crown should produce three or more weekly meals for two people, between about late April and early summer. After the middle of summer, both quality and flavour deteriorate. Also, it is best for the plant to leave it in peace, as one does for asparagus, to allow it to replenish.

Problems

Rhubarb should grow easily and without fuss, as long as moisture is present. When forcing with pots, check for and remove slugs inside every week or so.

Rhubarb mousse (for 8)

700g (1lb 9oz) rhubarb, 1 orange, a knob of root ginger about 1 inch

250ml (9floz) cream (double or Jersey), 4 eggs, 2 sachets gelatine

Cook the rhubarb with zest and juice of orange and grated ginger. Separate the eggs and whisk the yolks and sugar together until light and frothy. Whip the cream. Strain the rhubarb; mix the gelatine with the hot juice. Whisk egg whites. Mix all together and pour into individual serving cups or a nice glass bowl.

This recipe also works if you leave out the cream but use 1 kg (2lb 3oz) rhubarb.

SORREL

Season of harvest: March-October

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow /Plant</i> <i>First ready</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
BLOOD VEINED	Bitter leaves with deep red veins Remove flowering stems	Apr-May Mar/Apr	30x30 25
BROAD LEAVED	Large spinach-like leaves, high yield Remove flowering stems	Apr-May Feb/Mar	30x30 30
BUCKLER LEAVED	Small round leaves, extra flavour Remove flowering stems	Apr-May Mar/Apr	30x30 20

Sorrel is partly a herb, but I include it here because of its versatility and many uses. The table above gives an indication of the range of sorrels available; all kinds have a refreshing, zesty, acidic, lemon-like flavour, which in tiny quantities enlivens sandwiches and spring salads. Larger leaves are excellent in soups and omelettes, an exciting green addition to winter-jaded palates.

Varieties

Of the three types in the table, Buckler Leaved is best for salad use, for the smallness of its leaves and an extra amount of flavour. It is also generally esteemed for use in cream of sorrel soup. Broad Leaved is most suitable for general cooking, partly because its larger leaves are easier and quicker to pick. Blood veined is similar but with a flatter growth habit, of striking appearance but with a rather dry flavour.

Sowing /planting

Buying plants is an option, but growth from seed is fast and successful. Sow into 3cm (1") modules in early spring in a greenhouse, or mid-spring outdoors, for planting out by late spring. Two or three plants per module or small pot is feasible, or one plant for larger leaves.

Growing

Some leaves will be ready to gather soon after planting; thereafter, just keep picking. Growth diminishes in autumn; remove all decaying leaves in winter to reduce slug numbers ahead of new tender leaves from February onwards, when it is mild.

Broad leaved sorrel is most productive in winter and spring, while buckler leaved goes dormant for a long time over winter and may be less vigorous in its second year. Re-sowing every spring is an option.

Harvesting

Early spring growth is best gathered leaf by leaf, to preserve small growing leaves at the centre of each plant. Later in spring, handfuls of leaves can be cut with a knife, about 3-5cm (1-2") above soil level, and used in many fantastic dishes. Flower stems need to be cut or pulled out when they appear – from May until early autumn.

Problems

Sorrel is of the Rumex family, as are docks, and both succumb to frequent attack by small shiny green **beetles** from mid-spring onwards. If these beetles frequent your locality, sorrel may become almost impossible to grow as leaves will be shredded with innumerable holes. Buckler Leaved resists these pests a little better than the other kinds.

Slugs also enjoy sorrel, but should make isolated holes rather than devouring all growth. A night patrol with a torch may be needed.

Dry weather makes sorrel suffer and even die, so some watering is beneficial in dry summers.

Chapter 17

Herbs and edible flowers

Discovering extra dimensions of taste and colour



HERBS

Once you succeed at growing your own vegetables, and then eat them fresh from the garden, your plate will fill with deeply intense flavours in need of little enhancement. You will probably find that there is less need to use seasonings and strong-flavoured additions in cooking.

Nonetheless, many herbs grow well in containers, sometimes better than in soil where they may grow too rampantly and with less flavour. Containers can be close to the kitchen, and are good for coping with the spreading roots of mint, the seeding habit of fennel, and for helping keep the roots of French tarragon dry in winter.

Propagating herbs

It is quick and simple to buy plants at a nursery or store, but beware the problem of rapidly grown, fine-looking but 'soft' plants, which may struggle in a normal outdoor environment. I found this twice with bought thyme, which died the following winter, so then I grew some from seed and it has survived for many years.

Growing herbs from seed takes longer and may be tricky without a greenhouse, but the results are impressive. Sow into 3cm (1") modules in spring, thin to one seedling per module, pot into small pots after four to six weeks, and plant out two to three months after sowing. Buying a seed packet for each herb is still cheaper than buying plants, and you can have the pleasure of giving spare plants to friends or charity events.

Some herbs are easily raised from plant division, using a sharp spade or trowel to cut into a mature plant, to remove a piece of root and stem from its side. Do

this at any time except summer, bedding the offcut in a pot of moist compost until it is growing strongly.

Growing

Read carefully the notes on each herb, explaining their relative performance in soil or containers. Differences in vigour make it impractical to grow certain kinds together: sage or lemon balm would smother chives, for example.

In this chapter I have categorised each herb into four grades, according to its strength of growth, to help you decide where to grow each one, and with what. Grouping them can save time – watering is easier if some are together in a large container, rather than having small individual pots. If growing in a border, the least vigorous herbs will require some bare, clean soil and full sunlight to grow well. Keep plants of the same category together, or grow them in the same spot: for example, basil can be planted in early June as chervil is finishing.

CATEGORISATION OF HERBS USED IN THE TABLES

A: Tender annuals or biennials requiring clean soil in full sun.

B: Small-leaved and non-invasive perennials requiring not too much space to grow.

C: Greedy perennials, invasive and space-demanding.

D: Rampant vigour, best grown on their own. Poor soil will suffice.

BASIL (A)

Season of harvest: June-September, produces best leaves in greenhouse / polytunnel / full sun

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow</i> <i>First ready</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
GREEK	Small leaves, slow to flower	Mar-May indoor	25x25
	Pick/cut around edges, best indoors	Jun-Jul	25
LIME	Deeply scented leaves	Mar-May indoors	25x25
	Pick regularly, remove flower stems	Jun-Jul	35
RED	Deep colour, bitter	Mar-May indoors	25x25
	As for Lime	Jun-Jul	35
SWEET	Often used for pesto	Mar-May indoors	25x25
GENOVESE	As for Lime	Jun-Jul	35

I have talked about basil in Chapter 9 (see page 73) as an ingredient of summer salad. There is a wide range of flavours to experiment with, for a June-to-September season of harvest. It is difficult to lengthen this, even in

a greenhouse, because basil fades rapidly in poor light and cool nights. Some basil varieties can be overwintered but will grow very little, and it may not be worth the effort since the basil flavour is most complementary to summer leaves and vegetables.

Sow and grow in warmth: April or May sowings are early enough. Be careful not to over-water young seedlings, especially in dull weather. Plant out in full sun or in a greenhouse / conservatory. Pick off larger leaves as needed and all ends of flowering stems as soon as they appear, to encourage more leafy growth (see Plate 37).

CHERVIL (A)

Season of harvest: March-May, September-November

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow</i> <i>First ready</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
CURLED CHERVIL	Rich aniseed flavour, hardy Keep moist at all times, grows in shade	Aug/Mar-Apr Mar	20x20 25

Chervil has two particular seasons, spring and autumn, when it yields some rich, spicy leaves. It is not easy to have leaves at other times because it likes damp soil and is encouraged by light and heat to flower.

Because it has some frost hardiness, an early autumn sowing is possible, with new leaves to harvest throughout a mild winter if grown indoors. Outdoor chervil can be fleeced to encourage extra leaves before flowering stems appear in late spring. Late spring and summer sowings will yield few leaves, except in cool, damp weather.

Regular picking of larger bottom leaves, as with parsley, is good for keeping plants in full production.

CHIVES (B)

Season of harvest: March-June and autumn

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow</i> <i>First ready</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
USUALLY UNSPECIFIED	Vigorous, long-lasting, early Keep moist, remove dead flowers	Mar/Apr Mar	30x30 40

Chives can be sown in spring or raised from a divided clump, since chive plants become larger every year. Leaves are like thin and pungent spring onions, and can sometimes be picked in late winter, usually by cutting a small bunch – not the whole clump.

Towards mid-spring some flower stems will appear, blossoming into purple

pom-poms whose florets make a tasty and pretty garnish: break a flower head apart to reveal its numerous mini-flowers. Leaf production diminishes by summer, unless the roots are kept constantly moist.

After flowering it is worth dead-heading before seeds set and scatter everywhere.

CORIANDER (A)

Season of harvest: May-October and through winter indoors

<i>Variety</i>	<i>Character</i>	<i>Sow</i>	<i>Spacing (cm)</i>
		<i>First ready</i>	<i>Height (cm)</i>
CORIANDER (no name)	Large pungent leaves, seeds later	Mar-Jul May/Jun	25x25 50
CALYPSO	Large leaves, very hardy	Aug Oct	25x25 30
LEMON CORIANDER	Citrus flavour to leaves	Mar-Jul May/Jun	25x25 50

For leaves Coriander is easy to grow and tolerates frost, but often flowers before many leaves have been harvested, even from varieties that are bred for leaves rather than seeds. Late summer sowings in the greenhouse should overwinter indoors and provide leaves until May; otherwise sow in late winter for planting out in early spring.

Leaves suddenly become soft and feathery when a flower stem appears; removing it can prolong leafiness for a while.

For seed The delicate white flowers are ornamental and edible, turning into clusters of small seeds which, when properly dry and brown at the end of summer, can be used as tasty condiment in a pepper mill. I pull up whole plants and hang them in an airy outbuilding until there is time to rub out the seeds. Leafy debris amongst the seeds can be gently blown off.

For coriander in winter, sow in about mid-September in 3cm (1") modules or small pots in a greenhouse. Pot on or plant under cover and harvest occasional leaves when mild spells encourage new growth. Plants may not survive below about -4°C (25°F).

DANDELION

Red Ribbed Dandelion (actually of the chicory family) is intriguing, with fleshy leaves similar to some strains of chicory, and a slightly less bitter flavour.

The normal sowing time is spring, but early autumn is possible, as frost does

not kill the roots. Leaves will be less abundant in hot weather, but should be plentiful again in autumn.

DILL (A)

(See also Chapter 9, page 74)

Season of harvest: May-October

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow</i> <i>First ready</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
DILL (NO NAME)	Large leaves then flowers Keep moist and picked	Mar-Jul May	20x20 60
BOUQUET	Smaller plant, finer leaves Suitable for containers	Mar-Jul May	15x15 30

Dill for leaves grows best in spring and early summer, whereas it is more inclined to make flower and seed from sowings in June or later. The leaves have a wonderfully sweet and refreshing taste, suitable for flavouring many salads and soups. Normally they have long spindly stems, although Bouquet is more compact and feathery, suitable for growing in restricted spaces.

If seed-heads are left to become brown and dry at the end of summer, cut the stem and shake out seed over newspaper. They can be sown again, used as condiment in a pepper grinder, or added to stews and soups.

FENNEL, COMMON (C)

Season of harvest: April-October

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow</i> <i>First ready</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
COMMON	Vigorous, use leaves and seeds Do not allow seeds to spread	Mar-Jul Apr	30x30 60
BRONZE	Similar but dark bronze leaves Do not allow seeds to spread	Mar-Jul Apr	30x30 60

Be careful here. Unlike Sweet Florence fennel (also called bulb fennel), this perennial is hardy and persistent, and may be invasive if allowed to seed, so I advise careful harvest of the seeds for cooking. They have an aniseed flavour, similar to but stronger than dill, while the leaves are milder and often used in fish dishes.

Sow in spring, and then by summer's end flower stems may be 1.5m (5') high. Two colours are available: green and bronze. Both will make large plants that may smother or diminish smaller neighbours, so this fennel is perhaps unsuitable for small gardens.

GARLIC CHIVES (B)

See chives, page 193, for details of sowing and growing; named varieties are not usually offered. Growth is similar but leaves are flat and with a pronounced garlic flavour. Clusters of white flowers in late summer are a bonus, and edible, but beware the vigorous seedlings if seeds are allowed to drop – they can be invasive.

MINT (D)

Season of harvest: April-October

<i>Variety</i>	<i>Character Special care</i>	<i>Sow First ready</i>	<i>Spacing (cm) Height (cm)</i>
APPLE MINT	Large fleshy leaves Grow in contained soil/compost	Mar-May Apr/May	30x30 30
PEPPERMINT	The most common mint Apr/May	Mar-May 30	30x30
SPEARMINT	Less pungent than peppermint Apr/May	Mar-May 30	30x30

A garden without mint is hard to imagine, yet mint is powerfully invasive, through roots that spread rapidly in all directions. Hence the advice to grow it in pots or containers, with regular watering for its mass of new leaves.

There is a whole world of mint flavours and leaf sizes, from chocolate mint to apple mint to tiny Moroccan mint. Traditional mint, most commonly offered for sale as plants, is spearmint (from its pointed leaves) or peppermint.

Mint is not often sown because it is so easily increased by digging up and potting-on some roots from established plants. New plants can be set out at any time of year, and need watering in dry weather.

By late spring small flower stems appear and leaf production diminishes. Before or after flowering, removing seed heads will encourage some more leaves.

PARCEL (A)

Parcel grows and looks like parsley and delivers a powerful celery flavour, so it is a useful condiment for soups, lasagne and stews. Grow as for parsley, see right.

PARSLEY (A)

Season of harvest: May-November and April-May from same plants

Variety	Character	Sow	Spacing (cm)
	Special care	First ready	Height (cm)
MOSS CURLED	Densely curled bright green, hardy	Mar-Jul	15x15
	Pick and water regularly	Late May	20
PLAIN LEAVED	Longer stems, faster growing	Mar-Jul	5x15
	Pick and water regularly and remove flowers	Early May	25

Sow in early spring for vitamin-rich leaves all summer. See Chapter 9 (page 75) for extra details. Note that curled parsley produces leaves for longer than flat parsley, which is inclined to flower before the season's end, so will require a second sowing in June or July. Keep picking the larger bottom leaves to make room for new growth to develop.

PURSLANE (A)

Season of harvest: June-September and March-April

Variety	Character	Sow	Spacing (cm)
	Special care	First ready	Height (cm)
GREEN PURSLANE	Glowing yellow leaves	May-Jul	7x25
	Tolerates drought, check for flowers	Jun	25
GOLDEN PURSLANE	Many harvests	May-Jul	7x25
	Tolerates drought, check for flowers	Jun	25
WINTER PURSLANE (CLAYTONIA)	Hardy plant, tender leaves	Sep-Oct	7x25 or 20x20
	Survives frost, vigorous in late winter	Feb/Mar	25

Purslane is as much a leaf as a herb, so unusual that it belongs here as well as under leaves (see Chapters 9, page 75, and 10, page 93), with succulent leaves to add a pleasant bite and notable flavour to salads. Green Purslane lasts longer than Golden Purslane in summer, and its longer stems make picking easier, while Winter Purslane is immensely hardy and brings another dimension to late winter salad.

Summer purslane has an unusual, almost invisible way of flowering and seeding, through small, angular pods that are almost hidden at the ends of its stems. These pods have a bitter flavour and will quickly set and scatter seed, so it is best to look on summer purslane as a quick catch crop, to be cleared between about eight and twelve weeks after sowing, for Golden and Green Purslane respectively.

It is a heat-loving plant, best sown between mid-May and late July, and does well in dry conditions. Three or four weeks after sowing, pick off the small rosettes at the end of all stems, then keep picking off new rosettes that grow out of those stems until there are only flowering stems left.

Winter purslane is extremely hardy, excellent in winter salads, and unlike its summer cousin has attractive white flowers on long white stems, nice to eat and slower to set seed.

ROSEMARY (C)

Rosemary is rarely raised from seed in small gardens, but it does grow well from a spring sowing, preferably in 3cm (1") modules and then potted on. By the second year you will have a large bush with aromatic, oily leaves and vivacious light blue flowers in early spring. Because it can grow rapidly, cut off most new growth after flowering and again in midsummer, especially in wet seasons. If this is not done, a lot of dry, dead wood will accumulate around the plant's middle and its outer edges will tend to smother other plants.

SAGE (C)

Like rosemary, sage is rarely grown from seed, but follow the same procedure if you wish to. Sage also profits from hard pruning, mainly in late spring after a vivid blue flowering. *Salvia officinalis* is normal 'herb' sage, but many types of salvia have a hint of sage to their leaves and purple sage is a fine combination of beauty and flavour. By the age of four or five years, plants become woody and bare at their base, so can be worth replacing with young ones.

Tangerine sage is another member of the extended family but is unlikely to survive a British winter. Its small scarlet flowers, for a long part of summer and autumn, are both attractive and tasty, with a fine small droplet of sweet nectar in their base.

SORREL (C)

See Chapter 10 (page 93) and also Chapter 16 (page 189) for details of the different kinds of mouth-filling flavour that sorrel provides.

TARRAGON, FRENCH (Perennial D)

Seed catalogues offer only Russian tarragon, because French tarragon cannot be raised from seed and must be propagated by separating and re-potting some root off an existing plant. This can be done in autumn or spring. The two kinds have quite different flavours; French is considered more interesting. Both kinds are vigorous, needing about 60cm (2') of space around them and growing to 90cm (3') when they flower. French tarragon does not tolerate wet soil in winter, thriving best in free-draining soil or even a large pot of three-quarters sand and one-quarter compost. Cut all growth to soil level every winter; summer pruning may also be needed to keep it tidy.

THYME (B)

Season of harvest: Mainly March-October

<i>Variety</i>	<i>Character</i> <i>Special care</i>	<i>Sow</i> <i>First ready</i>	<i>Spacing (cm)</i> <i>Height (cm)</i>
COMMON THYME	Tiny fragrant leaves, pretty flowers Cut back in winter, good in pots	Apr Almost year-round	30x30 15
CREEPING THYME	Larger leaves, hugs the ground Good for covering paths	Apr Almost year round	30x30 5
LEMON/ORANGE THYME	Citrus aromas to leaves and flowers Cut back in winter, good in pots	Apr Almost year-round	30x30 15

One of the smallest perennial herbs, and most suited to dry conditions, which promote longer life and intense flavour in its tiny leaves. A tendency to grow long and straggly makes it worthwhile to prune in both summer and winter. Thyme can be fragile and die unexpectedly, but new plants may appear from its seeding and it is worth sowing thyme every three or four years, to have younger, bushy plants.

The table above gives an idea of some thymes of different flavours and habits. A liking for dry soil makes them suitable for growing in pots, which need only occasional watering in summer.

EDIBLE FLOWERS

Many flowers are edible, more than are commonly used. Even if not eaten, their presence on a plate of salad leaves or cooked food says ‘This meal is special’. The following are a few suggestions.

There are also many vibrant colours in edible flower petals. They inspire the eye, surprise the palate, and make gardening, cooking and eating even more interesting.

BORAGE flowers, bright blue, are good with salad or to brighten up summer drinks.

CHARD makes tiny flowers on a long stem. Both are pretty and edible, and bitter in flavour.

CHIVE flowers can be broken into small florets of delicate mauve, with a taste of onion.

COURGETTE / SQUASH flowers are usually cooked as a dish in their own right. The classic recipe involves dipping them in batter and then frying. Courgettes in particular will produce flowers all season long; both male (on stems) and female (on fruits) are edible.

DILL flowers, very pale yellow, can be eaten as clusters of small buds. HEARTSEASE (viola) has bicoloured flowers of great delicacy.

MARJORAM is covered with pale mauve flowers at the end of summer, attractive to many insects and with a herby taste that adds zest to certain dishes. Sweet marjoram's leaves give an oregano flavour.

NASTURTIUM flowers of all colours have a strong flavour and bring a vivid lure to table as well. Empress of India is a useful variety, for deep red flowers and dark magenta leaves, all edible.

ORIENTAL VEGETABLES all flower readily, although you may not have wanted them to. They are mostly pale yellow on tender stems and mild in flavour. Purple Choy Sum is grown mostly for its flowering stems, which bring a hint of blue to the salad bowl.

PEA flowers in late spring are an early taste of summer, recognisably 'pea' in taste.

POT MARIGOLD (*Calendula officinalis*) has deep orange flowers and is easy to grow, often self-seeding.

ROCKET flowers are white on salad rocket (Plate 39) and yellow on wild rocket. Look closely at the petals to admire some intricate patterns. Their flavour is as spicy and interesting as rocket leaves.

TANGERINE SAGE See sage, page 198.

Chapter 18

Tree fruit and nuts

The Garden of Eden at home



An apricot off your own tree, plums with their delicate bloom, small and large cherries, green and red apples all of different flavour – even small gardens can be home to many of these.

I assure you that home-grown fruit, picked ripe and sweet, tastes outrageously, mouth-wateringly wonderful. But it is not always easy to grow, and may have some blemishes, so read the small print carefully. Then the first successful harvest will have you hooked, and determined to try more.

I have suffered as many failures as I have enjoyed successes with organic fruit, which gives me the experience to offer advice on what really works, and where difficulties may arise.

Think out before planting out

The long-term nature of fruit growing invites careful consideration of what to plant where, with a balancing of desire and practicality. For example, it is possible to grow peaches in most of Britain, but the disease risks are high and may outweigh any good harvests.

Fruit trees are in the same place for a long time, encouraging some buildup of tricky pests, disease and weeds. Good gardening can overcome many of these potential problems, and reduce the rest to a manageable level.

I urge you, if new to fruit, to read the whole of this chapter in order to gain a feel for what is achievable in relation to your garden and your lifestyle. Then you can peruse a catalogue of fruit trees and bushes, or visit a nursery, with much better understanding of what is worth buying and planting. Often this will be rather less than is claimed by the sellers, and a bit of knowledge will save you much time and money.

As an example, consider the season of harvest by imagining when fruit would be of most value to you, or might go to waste. Most plums and gages are ripe in August, when you might be on holiday. Apple varieties ripen at different times: some apples go soft by the end of summer, while some can be stored into the following spring, when all fruit is at a premium.

Maximise available space

The size of your garden may be a crucial factor. If trees are too crowded, fruit will not set or ripen well. Consider the space-saving options of dwarfing rootstocks, and of growing trees against walls or in containers.

Rootstocks

Most fruiting trees are grafted on to roots of different trees, called rootstocks, whose vigour is usually less than the main tree. Without rootstocks there would be little chance of growing tree fruit in a small garden, and waiting times for fruit after planting would be much longer.

Apples have the most options, and their most dwarfing M27 or M9 rootstocks are suitable for most gardens, often giving apples in the second summer after planting, and rarely growing more than about 3m (10') high or wide. Size can be further reduced by twice-yearly pruning. For cherries, Gisela 5 rootstock makes it possible to have a small tree with plenty of fruit that can be netted.

The best approach is to check what rootstock is offered, together with the expected size of its tree. All fruit tree labels or catalogue descriptions should contain this information.

Planting

Planting season for bare-rooted fruit trees is November to May, and the earlier the better. Even in winter, roots can be settling in and drainage water will be packing soil all around them. March and April plantings are more likely to need watering in a dry spring, as will container-grown trees, especially as they can be planted at any time of year, even in summer.

Small trees are cheaper to buy, easier to plant, and establish more rapidly than large trees.

As long as your soil is reasonably dark and crumbly, simply dig a hole a little larger than the rootball, drop it in and firm soil around the roots as you back-fill. A large hole with some added compost is worthwhile for pale clay or ex-building sites, but not fresh manure, which might encourage rapid but less-

healthy growth.

Damaged roots can be trimmed back with secateurs and thick rootballs of container-grown trees can be unwrapped a little so that some roots are free of tangle and ready to grow outwards. Some suppliers offer small containers of mycorrhizae for adding to soil around tree roots, and these will almost certainly enhance growth significantly, depending on your soil's health.

Staking is often necessary, for the first couple of years and with short stakes preferably; again, check the instructions supplied with each tree.

Frost damage on blossom

A major cause of crop failures is late frosts killing early blossoms, so if your garden is in a hollow and prone to late frosts in spring, avoid planting fruit trees which flower early in spring, such as plums, pears and apricots. Apples are more likely to succeed.

Weeding and watering

Keep soil around small trees clear of weeds and grass, at least 30cm (12") in all directions, so that they are not deprived of moisture and nutrients. A 5cm (2") annual dressing of compost will benefit them, and some water in dry summers can make quite a difference to the size of harvest on dwarfrootstock trees.

Shaping trees

All trees can be trained to whatever shape and pattern fits best into any garden, always provided the vigour of the rootstock matches the desired size and shape. For example, cordons and espalier apple trees require either M9, M26 or MM106 in order of increasing vigour and size of the tree. Any variety can be chosen on these rootstocks. Specialist fruit books go into the details, but common sense is often enough to suggest how to train branches against a wall or along a fence, by tying in or wiring up those growing in the right direction and cutting off ones that are not. All nurseries listed in Resources will offer sound advice, often through their websites.

Patience is vital, since best results often come from planting small 'maidens' that are simply 1-2m (3-6') stems, out of whose buds will grow twigs that become branches. A maiden has short, easily transplanted roots and adapts more quickly to a new site than a larger tree, with less risk of drying out in the first summer – and small trees cost less.

Pruning and thinning

Q. Why prune, when trees and bushes produce without it?

A. To have better-sized, nicely coloured, easier-to-pick, more-frequent and top-quality fruit, through judicious cuts, which stimulate trees into making new and healthy growth.

I used to hate pruning, feeling it an unnatural thing to do. But I have had enough harvests of small, diseased or difficult-to-harvest fruit to make me appreciate the wisdom of cutting out wood or stems at certain times of year. Thinning excess young fruit is another worthwhile little job in the same vein.

APPLES

Apples like a mild climate, but with cold enough winters to ‘vernalise’ apple trees i.e. make them flower every spring. Their blossom is a joy in its own right: clusters of pink and white every May, which according to weather and insects will become mature fruit between late August and mid-October, depending on region and variety.

Apples have the largest section of this chapter because they are the easiest and most reliable fruit to grow in most of Britain, with the greatest choice of flavours and culinary possibilities.

Rootstocks

Apples are always propagated from cuttings that are grafted on to rootstocks of varied vigour. This is because self-sown apples do not grow ‘true to variety’, take a few years to start cropping, and grow into much larger trees than most of us want.

Check carefully which rootstock you are buying: it is as important as the tree variety, and it should always be stated. Note that M9, probably the best choice for small gardens, has rather weak and brittle roots. A permanent stake or support will therefore lengthen the life of its tree and enable it to fruit better. More vigorous rootstocks can grow without stakes after two or three years of establishing themselves.

The table below outlines some possible tree sizes and planting distances for different rootstocks, how long they need staking, the number of years between planting a maiden and first fruiting, and how much fruit a mature tree might yield.

<i>Name</i>	<i>Average height</i>	<i>Spread (m)</i> <i>Staking</i>	<i>Planting distance (m)</i> <i>Top yield (kg)</i>	<i>First fruit (yrs)</i>
M27	1.5	1.5 Always	1.2x1.8 4-8	2
M9	2.1	2.7 Always	2.5x3.5 8-14	2/3
M26	2.7	3.6 5 yrs	3.0x4.5 12-25	2/3
MM106	3.5	4.0 5yrs	3.6x4.5 16-40	3/4
MM111	4.2	4.5 3yrs	4.5x6.0 25-70	4/5
M25	5.0	6.0 1yr	6.0x7.5 30-80	5/6

Pollination

Most apple trees fruit best when other varieties are flowering nearby, so that insects ‘cross-pollinate’ and help fruit to set. Fortunately, most varieties flower at about the same time, so as long as you have two or three different ones there should be no problem. Bramley and Winston are two of a few self-fertile varieties, setting plenty of fruit without other pollen nearby.

EATING APPLES

Choose a good variety for your location, and keep improving your soil after planting, with some good compost on the surface or, perhaps best of all, some well-rotted horse manure. By the second autumn, if you have trees on M9 or M27 rootstocks, there will be really good apples to savour. And I mean savour, because I rarely manage to buy apples with a depth of flavour and quality of flesh to compare with my own.

The table below is to help you decide which varieties are most suitable for your garden. It includes varieties that I have succeeded with organically, and which have been recommended to me.

Scab is the worst enemy of eaters because its dark and sometimes large, indented spots can really spoil the appearance of an otherwise good fruit. The table column headed ‘disease resistance’ refers mostly to scab, and in areas of high rainfall it is important to plant varieties with good resistance to it. I have not included Cox’s Orange Pippin because it is more susceptible to disease than other varieties listed.

<i>Variety</i>	<i>Origin (c.)</i>	<i>Character</i>	
	<i>Disease resistance</i>	<i>Harvest</i>	<i>Keeps until</i>
ASHMEAD'S KERNEL	1700	Crisp russet, acid, excellent keeper	
	Medium	Oct	Jan/Feb
BLENHEIM ORANGE	1840	Large, slightly conical & russeted, mellow	
	Medium	Late Sep/Oct	Dec, soft by Nov
BRAEBURN HILENA	2000	Crisp, thick skin, keeps well, needs warmth	
	Low	Oct	Jan/Feb
CEVAAL	2000	Like Cox, small red/yellow	
	Good	Sep	Nov
DISCOVERY	1950	Bright red, crisp white flesh, very early	
	Med-good	Aug	early Sep
EGREMONT RUSSET	1870	Small golden-brown russet, top flavour	
	Med	Sep	Dec
ELLISON'S ORANGE	1900	Shiny red/yellow, spicy flavour, vigorous	
	Med	Sep	Oct/Nov
FORTUNE (LAXTONS)	1900	Red, fine flavour & acidity, smallish tree	
	Med	Sep	Dec
<i>Variety</i>	<i>Origin (c.)</i>	<i>Character</i>	
	<i>Disease resistance</i>	<i>Harvest</i>	<i>Keeps until</i>
JUPITER	1960s	Large red fruit, good flavour	
(see Plate 40)	Good	Oct	Dec
KIDDS ORANGE RED	1920	Small, red, rich flavour, sweet/acid balance	
	Med	Late Sep/Oct	Dec/Jan
LORD LAMBOURNE	1910	Red stripes, steady cropper, smallish tree	
	Med	Sep	Nov
PINOVA	2000	Fine flavour, small red/yellow fruit	
	Good	Sep	Dec
RAJKA	1980	Medium red/yellow fruits	
	Med-good	Oct	Dec
RED FALSTAFF	1965	Fine flavour, high yield, reliable	
(see Plate 41)	Good	Oct	Jan
SATURN	1980	Large conical, green/red fruit	
	Good	Oct	Dec
SPARTAN	1930	Medium size, crimson skin, white flesh	
	Med-good	Oct	Jan
SUNSET	1920	Like Cox, heavy cropper, acid then soft	
	Good	Sep	Nov
WINSTON	1920	Small, mostly green/yellow, self-fertile	
	Low-med	Oct	Feb/Mar

Eaters are sweet to eat, when in season and properly ripe. Each variety has an average maturity date, for example August-September for Discovery, October-November for Sunset and November-January for Kidd's Orange. To have apples after that is not so easy, whatever the description may say, because fruits often shrivel a little and, in my experience, ripen earlier than they are meant to. See cooking apples, below, for late eaters.

COOKING APPLES

<i>Variety</i>	<i>Origin</i>	<i>Character</i>	<i>Keeps until</i>
	<i>Disease resistance</i>	<i>Harvest</i>	
BOUNTIFUL	1960 Good	Heavy cropping, large early cookers & eaters Sep	Dec
BRAMLEY	1820 Med-good	Large flat deep-green fruit, reliable cropper Oct	Mar
EDWARD VII	1900 Med	Late flowering, large round green/red fruit Oct	Mar
NEWTON WONDER	1850 Med-good	Large green/red fruit, reliable cropper Oct	Mar
REV W WILKS	1900 Med-good	Early cropping, large yellow fruit, low acidity Late Aug/Sep	Oct

Cooking apples have higher acidity than eaters and are often easier to grow because of better disease resistance. They also crop more heavily.

The classic cooking variety is Bramley, and it deserves its reputation, succeeding both as small trees and as large old ones, which continue to drop vast amounts of dark green apples every year. If picked and stored, they turn more yellow in late winter and can become just sweet enough to eat, if still acidic. Newton Wonder is better as a dual-purpose apple, good to eat in February and March.

Bountiful, an exciting relatively new variety, makes a good companion to Bramley, being ready earlier and becoming edible by November as it ripens. It stays crisper than many eating apples and is often large, especially when thinned out on the tree in summer.

CIDER APPLES

These are more tannic, indicated by how they dry the mouth out, after a briefly pleasing sweetness. Note that eaters and cookers can also be fermented into ciders of pleasing flavours, but do not press too many cooking apples or the cider will be over-acidic.

CRAB APPLES

Crab apples are small, acidic and tannic, almost inedible but rich in flavour for making jelly. They are also highly ornamental, for blossom and fruit: Golden Hornet has clusters of small bright yellow fruit that stay on the tree until December, and John Downie bears larger red crab apples. Other varieties are available, from Walcot and Blackmoor nurseries for example.

Pruning apples

Pruning is more an art than a science, because few people agree on all the details. I aim to keep it simple, and advise you to think in winter of removing about one third of last season's growth, either by cutting off whole branches or by shortening them. The aim is to have:

- a well-spaced framework of main branches
- some fruiting spurs – knobbly protrusions or short twigs
- enough other branches to make leaves for nourishment of present fruit, without shading it too much.

Pruning is mostly done in winter when leaves are absent. If overdone, the tree may make vigorous new stemmy growth in the following season, somewhat at the expense of fruit. Summer pruning in addition to winter pruning can spread the load and help in restricting or re-directing growth, without trees making excessive new growth to compensate. Usually it is done from about mid-July to early August, and involves shortening new stems by a half or more, or removing them altogether on trees of special shape. Also remove any leaves that overhang fruit so that sun can ripen its skin to deeper red colours.

Thinning fruit

In years of plentiful fruit, some will fall in June and July (the 'June drop'), but enough may still remain on the tree that apples are too cramped to grow large. I usually cut or carefully twist off one apple of every remaining pair, or two out of every three, as long as I can reach them, by about the middle of July. Larger fruit are then possible, and the tree is spared from supporting a huge harvest, making it more likely to fruit well the following year.

Harvesting

If apples fall they bruise and will eventually rot, so it is important to pick them before they are so ripe as to fall in an autumn gale (cider apples excepted). They mostly need picking before full ripeness is achieved, between mid-August and mid-October, depending on variety and region. Eaters usually taste both sweet and acidic at picking time, while cookers are mostly firm and green.

Handle apples carefully, laying them out on trays or stacking them in boxes in a cool but frost-free place, and check to see when they ripen – shown by yellowing of the skin, with their flesh becoming softer and sweeter. Or eat them

earlier if you prefer crunchy fruit with more 'bite'.

Problems

Non-organic apple growers and gardeners use a range of toxic sprays, mostly fungicides and some pesticides that contain organophosphates. Your homegrown fruit will be clear of all these poisons but may not avoid the **codling moth's** maggots, **aphid damage** to young leaves, **black scab** fungal patches on leaves and fruit, or canker lesions on branches which must then be cut out.

Growing resistant varieties is a good start – for instance, Sunset rather than Cox, which is unfortunately difficult to grow organically. Use the table on pages 205-206 to find varieties with good resistance. Correct planting distances and good pruning help to keep air and light around the leaves. Healthy, well-drained soil with some compost or manure, but not over-manured, also helps.

Much depends on the effort and money you want to invest in achieving blemish-free fruit. Codling moth traps hung in trees from May and replenished in July, as well as grease or glue-bands for the trunk from late September, are two effective solutions, provided you remember to apply them at the right times.

The bottom line is that many organic apples are less fine in appearance than chemically grown ones, but are clean of invisible residues – and so is the trees' environment. The choice is ours.

Apple crumble

Our favourite crumble topping is:

100g (4oz) butter

80g (3oz) wholemeal flour

50g (2oz) muscovado sugar

80g (3oz) porridge oats

1 apple per person

This serves 4-6; I usually double it for Sunday lunch when we have visitors. Peel, core and slice apples. Butter a large shallow dish. Arrange apples and sprinkle with cinnamon or nutmeg. Add a couple of tablespoons of apple juice or water. Rub the butter into the flour, then add the sugar and oats. Sprinkle over the apples and bake in a hot oven c.180°C (350°F) for 20-25 minutes.

OTHER COMMON TREE FRUIT

APRICOTS

VARIETY	<i>Character</i> <i>e.g Rootstock</i>	<i>Years to fruit</i> <i>Harvest</i>	<i>Height (m)</i> <i>Spread (m)</i>
FLAVORCOT	Large orange fruits Torinel	2-3 mid-Aug	3.0-3.5 3.5
LARQUEN	Large orange fruits Torinel	4-5 mid-Aug	3.0-3.5 3.5
DOUCOUER	Early, medium fruits St Julien A	4-5 late Jul	3.5-4.5 4.5

Note that apricot varieties, and many other fruit trees, have named rather than numbered rootstocks. In order of size they are Pixy, Torinel and St Julien A.

Varieties

There have been some breakthroughs in apricot breeding, such that varieties now exist for planting in open ground as far north as Hadrian's Wall (Tomcot). But a sheltered, sunny aspect is nonetheless always recommended!

Apricot trees are vigorous, even in Britain, so in small spaces look for a tree on Pixy rootstock.

Some of the new varieties, such as Flavorcot and Larquen, bear large fruit almost the size of peaches. I harvested 15 large apricots in Flavorcot's second summer (on rootstock Torinel), planted as a maiden the previous spring. It flowered in early April, later than usual after a cold winter, which just avoided a late frost. Now the tree is six years old and almost too large, in spite of regular pruning.

Apricots are one of the first fruit trees to blossom in March or April, and most problems arise from either frost on the flowers or lack of insects for pollination. Tickling flowers lightly with a soft brush may be necessary.

Planting

Because spring frost does more harm to the blossom than cool winds, be sure not to plant in a frost pocket. Even some south-facing walls can be treacherous, because their warmth encourages early blossom but may not keep ice off flowers if the wall is at the bottom end of sloping ground.

Growing

Torinel and St Julien A rootstocks are quite vigorous, and more suitable for an open orchard area than a confined wall space. Little pruning is recommended or necessary, only to remove any crossing or obstructing branches, and is best done in late spring. Fan training against a wall is possible, but will require summer pruning to keep growth in check.

Harvesting

Fruits look well coloured and ripe for at least a fortnight before they are soft and sweet. A gentle squeeze every now and then will reveal the gradual change to juicy flesh. When ripe they should come off readily in your hand – a moment to really savour!

CHERRIES

<i>Variety</i>	<i>Character Spread (m)</i>	<i>e.g. Rootstock Years to fruit</i>	<i>Height (m) Harvest</i>
CROWN	Cooking cherry for cold spots	Colt	3.0-4.0
MORELLO	4.0-5.5	3-5	Aug
SUMMER SUN	Excellent for British weather 3.0-3.5	Gisela 5 3-4	2.5-3.0 Late Jul
STELLA	Excellent for British weather 3.0-3.5	Gisela 5 3-4	2.5-3.0 Late Jul
STARK GOLD	Large yellow fruit 3.0-3.5	Gisela 5 3-4	2.5-3.0 Late Jul

The RHS (see Resources) has excellent information on making the most of dwarf cherries. For the keen amateur fruit grower, these are an exciting prospect.

Look out for trees on Gisela 5 rootstock, which is becoming common as it proves an ability to keep growth manageable whilst allowing a plentiful harvest. Smaller trees also mean that small gardens can accommodate one or more trees, preferably in full sun, except for Morello, which is often grown against north-facing walls.

Pruning

Cherries are susceptible to silverleaf (see page 216) and canker (see page 208), so do not prune them in winter: the best times are after flowering in April and after fruiting in August. Exact pruning details depend on whether you are growing a bush tree or fan training in the open or against a wall. In essence, April pruning is to shorten abundant new stems and allow new branches to develop. August pruning aims to remove crossing branches or large branches whose fruiting value is diminishing.

Harvesting

Cherries swell rapidly in their final fortnight and in wet summers they may split – while still good to eat, they will not keep if this happens. Pick them with stalks attached if they are not for immediate eating, but their allure makes the passage to table a very tenuous one!

Problems

The scourge of cherries is birds. You will probably need to net or cover the tree or to use some other fail-safe way of keeping birds off the fruit. Stark Gold's yellow fruit are sometimes less attractive to birds. Netting small trees on Gisela 5 rootstock is entirely feasible, because their full height and spread will be about 3m (10') even without much pruning, although cropping will be better for it.

PEACHES AND NECTARINES

<i>Variety</i>	<i>Character</i>	<i>Years to fruit</i>	<i>Height</i> <i>Harvest</i>
DIXIRED PEACH	Early fruiting, resists canker & leaf curl up to 5	2-4	2.5-5.0 Aug
JALOUSIA PEACH	Sweet, flat fruit 4-5	2-4	2.5-5.0 Early Sep
FANTASIA NECTARINE	Reliable, yellow flesh 4-5	2-4	2.5-5.0 Late Aug
REDWING PEACH	Dark red, late flowering, less leaf curl up to 4.0	2-4	2.5-5.0 Aug

Modern breeding has helped, but peaches and nectarines are still plagued by leaf curl, caused by excess moisture on their buds in winter and manifesting as curling, even shrivelling leaves through spring and early summer, sometimes to the point of trees dying. See below for remedies.

Varieties

The table on the previous page reveals some of the many possibilities – a variety with leaf curl resistance is definitely worthwhile. On the other hand, flat peaches such as Jalousia and Oriane have flavour that compensates for extra work in combating their susceptibility to disease.

Rootstocks

Two main choices are St Julien A, for more vigour, and Montclair, for less.

Planting

If you have a wall or fence with a southerly orientation, this will be good for peach and nectarine. Fan training allows heavy yields, while less vigorous rootstocks such as Montclair and Myrobolem can reduce vigour enough to make growth more manageable.

Pruning

Early spring is good for pruning – after flowering and before leaf emergence: being able to see the pretty white flowers helps conserve them from scateurs. For young trees, train larger stems into a fan shape behind wires on walls, shorten them by about a third and cut off all branches coming away from the wall. Also in summer, cut off all outward-growing branches and clear leaves away from developing fruit. Thinning any clusters or pairs of fruit will help growth and ripening of the remainder.

Harvesting

Fruit may colour for a fortnight before ripening, which is revealed by touching to see when they start to soften up. You may even smell their fine fragrance, and tasting them is a notable experience.

Problems

There are solutions to the dreaded **leaf curl** even without chemical fungicides. Probably the safest and most reliable is to make a shelter of wood or plastic that protrudes from wall or fence above the tree to at least half a metre (2'), sufficient to keep most rain off stems in winter. Another is to spray Bordeaux mixture (copper sulphate) on bare stems in February and March.

Drier parts of Britain are definitely most favoured; the wetter west and north carry more risk of problems. Leaf curl can strike rapidly: my Newhaven peach cropped well for three years without protection or spraying, then suddenly died the following July. This could happen to any unprotected peach and nectarine trees after a wet winter. So I have planted a pear instead.

PEARS

<i>Variety</i>	<i>Character</i> <i>Approx. years to fruit</i>	<i>Height (m)</i> <i>Harvest</i>	<i>Spread</i>
BEURRE HARDY	Round pear, resists scab 3-4	3.0-3.5 Late Aug/Sep	3.5
CONCORDE	Longish pear 3-4	3.0-3.5 Late Sep/Oct	3.5
CONFERENCE	Long, adapts to wet & cold 3-4	3.0-3.5 Oct	3.5
GOURMANDE	Round, succulent flesh 3-4	3.0-3.5 Late Sep	3.5

Varieties

With apples, a crop is almost certain, but not with pears. They are more prone to disease and to late frosts on their early blossom. Even when a crop is achieved and picked, they can go soft and become inedible for want of being checked regularly for ripeness.

Plant the variety of your choice in as frost-free a part of the garden as you can spare. I have tried many varieties and find Conference, the most readily available, to be one of the most reliable. Consistent yields of fruit ripen reasonably slowly, in mid-autumn, without going soft too quickly. Another interesting variety, ripening slightly later with some resistance to scab, is Beurre Hardy. Resistance to scab is especially important in wetter regions, while those in the drier south-east of Britain stand more chance of healthier crops.

Pollination and fruit set are generally improved by the presence of more than one variety. Concorde, although self-fertile itself (like Conference), is an especially good pollinator.

Rootstocks and planting

There is much less variation in rootstock vigour for pears than for apples. Most pear trees are sold on the same rootstock, Quince A, which requires a spacing of about 3.5x4.5m (11'6"-14'6"). Staking is recommended for at least three years, more likely five. If on Quince C, trees can be planted a little closer together, will be about a metre (3') shorter and may fruit a little earlier. Planting against a wall with some southerly aspect is good both for extra warmth and for the pruning disciplines imposed by training growth in two dimensions.

Pruning

Pears are keen growers and readily make long vertical stems that rise out of

reach, especially after hard winter pruning, which should therefore be less severe than for apples. Summer pruning is invaluable to cut back long new stems, to remove unwanted ones and, for example, to shape branches into a fan pattern against walls.

Harvesting

This can be tricky to judge as pears are best picked unripe – but not too unripe if you want good flavour. Move the bottom of a pear gently outwards in a circular motion: if its stem comes away from the tree, then picking time has arrived, but if it holds firm then wait another week or so before trying again. Pears are usually firm when picked– except for early varieties such as Williams – and need laying out to watch for yellowing and softening, sometimes over many weeks. Keeping them cool will slow ripening but may also stop them becoming tender, although they should still sweeten up.

Problems

Fungal scab on leaf and fruit is quite likely to infect your tree after a season or two. In wet regions it may be worth trying a variety such as Improved Fertility, as well as trusty old Conference.

Dorset window pudding

This is a very useful pudding topping that lends itself to many fruit – rhubarb, apples, plums. Fits in a 26cm (10") flan dish.

250g (9oz) pears, peeled, cored and sliced

50g (2oz) butter, 50g soft muscovado sugar, 1 egg

75g (3oz) wholemeal flour (25g/1oz ground almonds can be substituted for 25g flour)

1 teaspoon baking powder, 2 tablespoons milk

Butter the flan dish and lay the pear slices in a nice pattern. Cream together the butter & sugar, add the egg, flour and milk. If very stiff, add a little more milk. Spoon on to the pears. Bake at 180°C (350°F) for about 20- 30 minutes.

PLUMS AND GAGES

<i>Variety</i>	<i>Character</i>	<i>Harvest</i>
CZAR	Early culinary / dessert purple plum	Late Jul
DAMSON MERRYWEATHER	Large juicy fruits	Early Sep
REINE CLAUDE DOREE	Top-flavoured gage, some frost resistance	Late Aug
VICTORIA	Benefits from thinning, top flavour	Late Aug
VALOR	Large late plum, magenta-yellow colour	Early Sep

My observations on plums concern rootstock, above all. I have compared various grafted plum trees over the years with some that I have grown from suckers, therefore growing on their own roots. I find that the latter have cropped better and grow more healthily, above all with no infection from silverleaf (see 'Problems', overleaf).

However, they make more suckers themselves – annoying if they are close to some cultivated ground, which they also feed from as they grow large, up to 6m (20') high quite easily. Their shape is quite different from that of apple trees – more vertical and graceful.

For bought trees there are often two choices of rootstock: Pixy is the one for small gardens; otherwise the more traditional St Julien A makes a medium-sized tree. Greengages are more difficult than plums as they need extra sun and warmth, and crop a little less readily.

Varieties

The table above contains only a few of the most common varieties, so there is plenty of choice. Notice that you can have plums and gages for more than a month by combining early and late varieties. Thinning takes time but is really worthwhile if you want decent-sized fruit and can prevent boughs breaking with too many plums in good years. Smaller trees on Pixy rootstock are much easier to manage in this respect.

Planting

Note the different planting distances according to rootstock: 3x3.6m (approx. 10x12') for Pixy and 3.5x4.5m (approx. 12'x4'6") for St Julien A. Staking is advised for at least three years.

Harvesting

The first fruit to drop may have maggots inside, rather like early ripening apples with codling maggots. Then from mature trees there can be an avalanche of fruit in seasons when late frosts have not damaged the

blossom. Pick soft fruit off the tree or shake the trunk to make ripe ones fall, giving you some interesting opportunities for jam making and bottling.

Pruning

Most pruning consists of removing branches that are crossing or duplicating others, and the main consideration is to avoid doing it in winter – see overleaf.

Problems

Silverleaf is a fungal disease that kills plum and gage trees, usually through access to a tree's wounds in winter and early spring, after pruning is done when the tree is dormant. Hence it is always recommended to prune plums and gages between May and July – preferably in June, when rapid growth will heal cuts quickly.

Plum moths and **sawfly** are the source of maggots in some fruit. Moths can be caught by hanging pheromone traps in trees at the end of May for about ten weeks. One trap can look after three trees, but you may well have enough good fruit to do without them.

Clafoutis

The classic recipe is for cherries, but it lends itself well to other fruit such as gooseberries, and raspberries.

750g (1lb 10oz) plums, 80g (3oz) flour, 80g sugar, 2 eggs

1 sherry glass of brandy or other alcohol (optional)

1 pinch of salt, ½ litre (18froz) milk

Stone the plums. Put in a buttered gratin dish or a circular dish of 26-28cm (10") diameter. Sprinkle over the alcohol. Make a batter, whisking flour, sugar, salt and eggs. Heat the milk to boiling point, then whisk into the batter. Pour over the fruit and cook in a hot oven c.180°C for 35-40 minutes. Serve warm.

LESS-COMMON FRUIT

Figs and grapes are two worthwhile fruits to grow, especially in warmer regions or sheltered gardens. They are covered in less detail here because they are grown more rarely, but are not especially difficult if you respect the basic points I mention.

FIGS

Fig trees are difficult to bring into fruit unless their root run is restricted, to dampen their vigour – see right. They are also susceptible to late frost if leaves emerge too early. Baby figs form in late summer but are killed by frost, while eating figs start to develop in autumn and then grow again from April, to ripen by August. Brown Turkey is the standard and a very reliable variety, while Violetta is unusual for its ability to fruit without a restricted root run. Some pruning each winter will encourage fruit of better size and quality, and make it easier to find amongst abundant foliage.

GRAPES

Grapes of suitable varieties will yield well in sheltered, sunny spots and in drier regions. Look for varieties with mildew resistance, because crops are easily lost if mildew-prone varieties suffer damage to their leaves in wet summers. Four outdoor varieties for eating grapes are Alphonse Lavalée, from 1850s France, with small, dark red fruit; Dornfelder, for slightly larger red fruit; Phoenix, for small, almost seedless white grapes with a hint of Muscat flavour; and Perlette, for almost seedless larger white grapes. Picking is usually through October and hard pruning is needed in late winter or early spring – pay attention to instructions with plants, and do not skimp on pruning.

TREE FRUIT IN CONTAINERS

Small fruit trees will grow and crop in containers, but remember that watering is a regular necessity for about six months, and some feeding will also help growth. An organic tomato feed is suitable.

APPLES

If apples are grafted onto M27 or M9 they can be grown in large pots, with some extra summer pruning to restrict their growth. A dwarf variety, Croquella, with red fruit in September, is well suited to pot growing.

CHERRY

The variety Cerasus Maynard Mini Stem grows no higher than 2m (6'), requires no pruning and offers fruit in early August.

FIGS

Since fig trees fruit better in restricted root runs, containers suit them well.

Any variety should be possible in a pot of about 60cm (2'); note that some are especially heat-loving and fruit most reliably in a greenhouse or conservatory – check the details when buying a young tree. Yields will not be huge off small trees, but they are ornamental too, with their dark green, indented leaves.

NECTARINE

A variety called Nectarella is sufficiently slow growing to be viable in a large pot. Keeping it in a dry place between November and March will reduce the risk of leaf curl, as long as you are strong enough to move the pot and tree.

PEACH

As with nectarines, pot growing offers the chance of minimising leaf curl by hibernating trees indoors. A variety called Bonanza is extremely slow growing and should require no pruning.

PEAR

Yields of pears can never be large in containers but some fruit are definitely achievable. Look out for Garden Pearl, which needs no pruning and has a maximum height of 2m (6').

NUTS

ALMONDS

Almonds can be grown in Britain, having similar climatic tolerance to plums and flowering at about the same time – therefore vulnerable to any late frosts. They are vigorous, up to 6m (20') high, and two trees are needed for good pollination. Their leaves resemble those of peach trees and so do the nuts, encased in green flesh that can be mistaken for an unripe peach. Most available varieties have resistance to leaf curl.

HAZELNUTS

These grow so, so easily, and squirrels are so, so good at finding them before we do. I know of no easy answer, but cobnuts (large hazels) such as Kent Cob are still worth a try, edible as green nuts from late August, on bushes that grow as clumps of upright stems, 3-4m (10-13') in height. Older bushes will yield heavily, and in 2009 I picked 2.4kg (5lb 2oz – with shells) – off a six-year-old bush.

WALNUTS

Walnuts suffer similarly from squirrels and take much longer to grow, as well as needing much more space – say 8-10m (26-33') between trees – and it is recommended to plant two different varieties for cross pollination and good yields. Modern varieties claim to bear within five years, about half the time previously needed, and usually come into leaf late enough to minimise the risk of damage by late spring frosts.

Chapter 19

Soft fruit (berries)

To refresh you in summer



Soft fruit covers a wide range of summer and autumn berries. They are easy to grow, respond with tempting, juicy fruits to an annual dressing of good compost, and are much appreciated by birds, depending on who's nesting locally!

Harvests of berries are time-consuming to pick but a great blessing in the kitchen, offering sorbets, ice creams, jams, summer puddings, liqueurs and plentiful bowls of mouth-watering fruit whose flavour, freshly picked at peak ripeness, repays, and more, the time and effort required.

SOIL PREPARATION

Soil preparation is the same as for perennial vegetables: clean the soil thoroughly. Any perennial weeds such as couch grass and ground elder that are present at planting time will plague you for years to come.

Soft fruit likes plenty of humus, so annual dressings of compost are most worthwhile. On top of this in spring and summer you can mulch around bushes and canes with grass mowings, straw, leafmould and cardboard to help conserve moisture and prevent growth of annual weeds. Most bushes and berry plants have lots of surface roots, and cool mulches help these.

Birds are often quicker to pick fruit than we are so netting of some kind may be necessary. However, fruit cages are quite an investment in time and money and need only one small hole to much reduce their effect, so I recommend waiting a year or two after planting to see how hungry your birds are. Individual bushes can be netted for just a month when their berries are ripening.

COMMON GARDEN BERRIES

BLUEBERRIES

(container-grown unless you have acid soil*)

<i>Variety</i>	<i>Character</i> <i>Years to fruit</i>	<i>Height (m)</i> <i>Start harvesting</i>	<i>Spread (cm)</i>
BLUECROP	Compact upright habit 2-3	1.2 Late Jul	0.8
HERBERT	Slightly larger plants and fruit 2-3	1.2 Late Jul	0.8
SUNSHINE BLUE	Unusual pink flowers, self-fertile 2-3	1.2 Late Jul	0.8

* acid soil in your area will be revealed by any rhododendrons, azaleas, camellias and blue-flowering hydrangeas.

Blueberries grow to over 2m (6') high in open ground, and live for two decades or more. Their cousins are bilberries – also known as huckleberries, hurts, whimberries and whortleberries – which hug the soil in acid woodland and bear smaller, darker fruit.

The recent popularity of blueberries is justified by their delicious, nutritious fruit and the ease of growing it, provided you have either acid soil or large pots of ericaceous compost. As well as fine fruit they offer pretty, small flowers and gorgeous bronze-to-dark-red leaves over a month or more of autumn.

Varieties

More varieties are becoming available all the time; the three above have different merits. Better yields come from growing two or more together for pollination, but Sunshine Blue does well on its own. Most varieties crop from late July to early September, although Earliblue starts a little before.

Growing

Birds may mean that netting is necessary – a small piece draped over the plant should work. Watering is a constant ritual for pot-grown bushes. Large 45cm or 60cm (18" or 2') pots are ultimately necessary for good yields of fruit, and to maintain this some feeding of organic liquid feed, of home-made comfrey or nettle water, is necessary.

After three or four years, when your bush has spent a couple of years in your largest pot, it will benefit from being lifted out and up to one-third of its compost teased or tapped out of its roots. Then re-pot it with some new ericaceous compost.

Harvesting

Blueberries are restrained and steady in ripening: a few daily over a long period for most bushes. You need several bushes to have large bowlfuls, and if I had acid soil I would plant lots of them in the garden! But in pots they are rather more work.

Pruning

Remove any dead wood, cut out branches that duplicate, and in late summer pinch out the tops of long, new canes to keep plants bushy.

Problems

Apart from birds, there is nothing to report here – another reason for the popularity of blueberries.

CURRANTS

<i>Variety</i>	<i>Character</i>	<i>Start harvesting</i>	<i>Height (m)</i> <i>Spread</i>
	<i>Years to fruit</i>		
BEN CONNAN	Reliable cropping, large currants		1.2
Black	2	Mid-Jul	1.5
BEN LOMOND	Popular for consistent fruiting, large berries		1.2
Black	2	Late Jul	1.5
BEN SAREK	Smaller bush, plentiful fruit		0.9
Black	2	Mid-Jul	1.0
BLANKA	Lower yields, sweet ivory fruit		1.2
White	2	Late Jul	1.5
ROVADA	Heavy yields for four weeks		1.2
Red (see Plate 42)	2	Mid-Jul	1.5

Currants come in three colours, of which blackcurrants are the most popular. Their season is mainly July, when some bird-damage prevention may be required. If allowed to fully ripen on the bush, which I warmly recommend, black and white currants in particular can become sweet enough to eat as raw berries. On the other hand, cooking currants tends to emphasise their acidity, so added sugar is usually necessary.

Bushes can grow large, needing as much as 1.5m (5') between them – and I have harvested 7kg (16lb) of fruit off one bush of blackcurrants.

Planting

Some compost in the planting hole will help bushes if the soil is poor. Prune according to the supplier's recommendations.

Harvesting

Flavour and sweetness will improve for up to a fortnight after fruit changes

colour in July, but watch for birds at this point. Picking individual berries takes a long time – cutting whole bunches or pulling thumb and fingers through really ripe whole bunches of fruit is quicker.

Pruning

After one summer’s growth, cut out all weaker branches to leave five or six, which should fruit next summer. The next winter, do the same to new branches of the summer just gone and cut two-year-old branches (which should have fruited) back to two buds, whence new branches will emerge.

Simply trimming off new growth is risky, because currants form on second-year’s wood, which must therefore be allowed to develop. If no pruning is done you will still have currants, but bushes may grow large enough to make picking difficult, and the fruit tends to be smaller.

GOOSEBERRIES

<i>Variety</i>	<i>Character</i>	<i>Height (m)</i>	<i>Spread</i>
	<i>Years to fruit</i>	<i>Harvest</i>	
HINNONMAKI YELLOW	Yellow dessert gooseberry 2	1.2 Jun-Jul	1.3
INVICTA	Heavy crops, pale green berries 2	1.2 Late May-Jul	1.5
PAX	Red dessert berries, few thorns 2	1.3 Jun-Jul	1.0

Varieties

Vicious thorns and high acidity have given a bad name to gooseberries, to the point that ‘Old Gooseberry’ is a nickname for the Devil. However, choosing the right variety can help – for instance, Pax has almost spinefree canes. Then if you manage to bring dessert gooseberries to ripeness, by waiting and by netting against birds, you will enjoy remarkable flavours that few people know about, partly because ripe gooseberries are too soft to travel well.

The best variety for jams and cooking is currently Invicta, with high yields of less-sweet berries.

Planting

Allow 1.5m (5') of space around your gooseberry bush. Invicta makes a large and sprawling bush with many thorns, while Pax is more upright and less vigorous.

Pruning at planting time is necessary only if the supplier has not already done

it. Ideally you want a short main stem of 30-40cm (12-15") and four or five stems off this of about 10cm each.

Harvesting

Wait for berries to soften and to change colour so that sweetness can develop. Gloves will make it easier to pick berries off thorny bushes. Yields in the second summer are 2-3kg (approx. 4-6lb) per bush, and rather more thereafter.

Pruning

Prune out older branches and any younger ones that are crossing or duplicating. This makes picking easier and helps ensure fruit of a good size.

Problems

Mildew used to be a major problem, but all the varieties in the table are resistant.

Birds are usually the main difficulty, so netting may be necessary. Blackbirds even eat immature green berries in May – they must be good for baby blackbirds.

Gooseberry and elderflower fool

500g (1lb 2oz) gooseberries

2 tablespoons light muscovado sugar

1 tablespoon elderflower cordial

250ml (9floz) Jersey or double cream

Top and tail the gooseberries, and cook gently with the sugar and cordial in a puddle of water with the lid on the pan for about 20 minutes. Allow to cool and check the sweetness. Depending on whether you like your fools smooth or lumpy, either mash or liquidise the fruit. Whip the cream and fold the two together. If you need to sweeten the mixture, add more elderflower cordial.

RASPBERRIES

<i>Variety</i>	<i>Character</i> <i>Years to fruit</i>	<i>Height (m)</i> <i>Start harvest</i>	<i>Spread (m)</i>
<i>1. Summer</i>			
GLEN AMPLE	Midsummer fruit 2	Mid-Jul	2.0 0.5
MALLING MINERVA	Early fruit, smooth canes 2	Late Jun	2.0 0.5
<i>2. Autumn</i>			
ALL GOLD	Sweet yellow berries, vigorous 1	1.6 Aug	1.0
AUTUMN BLISS	Long season, large fruit 1	1.7 Aug	0.6
JOAN J	Even larger berries 1	1.6 Aug	0.6

High in vitamin A and potassium, fruiting deliciously over a long season, leaves that make a nice tea – what more can one ask?

Raspberries are of the bramble family, adapted to woods and hedgerows and needing plenty of dampness to do well. This means that long-cropping autumn raspberries are well worthwhile, compared with summer raspberries, which, in drier parts of England at least, often suffer from heat and drought.

Some words of caution: be careful of the innocent-looking but prickly hairs or spines on most stems (Minerva excepted), and pull out the suckers sent up by raspberry canes' far-reaching roots, which are somewhat invasive.

Varieties

A few canes of each of the two summer varieties and Autumn Bliss would, in good soil with sufficient moisture, provide raspberries all the time from late June to October. I find that the autumn varieties have larger berries and a fuller flavour – Autumn Bliss is extremely reliable, while Joan J has even larger fruit and superb flavour.

Autumn raspberries

These should really be called 'late summer': they crop steadily from August to the end of September, and through October in milder parts, but become more acidic and prone to rotting in the darker days and wetter weather of autumn. Beware the extreme vigour of All Gold – best avoided in small gardens.

Planting

Planting in winter is best, preferably by the end of March. This will allow

enough growth for autumn raspberries to crop in the first year, even after cutting stems back to 15cm (6") at planting time. Summer raspberries should not be cut back after planting, and will not fruit until the following summer, unless you plant more-expensive long canes and keep them well watered.

Autumn raspberries are shorter and can be grown without supports, but summer raspberries need tying in to wires or canes. Picking and weeding is much easier if rows are kept tidy by some combination of posts and wire.

Growing

Netting will be necessary in some situations. I do not net our autumn raspberries because their cropping time coincides with elderberries and blackberries, so birds are busy elsewhere.

Harvesting

Once berries start to ripen, picking will be possible every two or three days. Spells of wet weather are tricky because fruit may go mouldy as soon as ripe; pick these off on to the ground so they do not infect any berries they are touching.

Pruning

Summer raspberries need pruning in summer, as soon as they have finished cropping. Cut off all their old woody stems at ground level, leaving just the soft new growth for next summer's crop. Long stems may benefit from tying in to canes or sticks, depending how you are supporting them.

Autumn raspberries need pruning in winter and before the following March: cut off all stems to about 15cm (6") above the ground. Fruit develops on new growth of that season, quite different from summer raspberries.

Problems

The aforementioned birds are chief problem, and fruit turning mouldy in wet weather.

Rhudidrew

An old-fashioned recipe handed on by a neighbour. It requires a nice old jelly mould.

500g (1lb 2oz) fruit – mulberries or rhubarb or raspberries

30g (1oz) sago

Sugar to sweeten and draw the juice out.

Soften the fruit with sugar over a gentle heat. Soak the sago in a cup of cold water for 5-10 minutes. Strain. Pour the sago into the fruit and cook over a gentle heat (the bottom oven of an Aga is ideal) for 15 minutes. Wet the mould and fill with the fruit mixture. It should set after 2 hours. Turn out on to a plate.

STRAWBERRIES

<i>Variety</i>	<i>Special character</i>	<i>Start harvest</i>	<i>Height (m)</i>
AROMEL (EVERBEARING)	Medium-sized fruits all summer, tasty	Late Jun	0.2
CAMBRIDGE FAVOURITE	Reliable for jam, smaller, pale fruit	Late Jun	0.2
GARRIGUETTE	Sweet, mellow, conical fruit, vigorous	Early Jun	0.2
MAE	Best for early crops, even in late Mae!	Early Jun	0.2
ROYAL SOVEREIGN	Old variety, top flavour, smaller yields	Mid-Jun	0.2
SONATA	Tender fruit, fine flavour, good yields	Early Jul	0.2

Strawberries were adored by Henry VIII, perhaps as a remedy for his gout. In his day and for two centuries after, the only available fruits were small alpine ones, until French breeders at Versailles in the eighteenth century started crossing larger-fruited species from the Americas. Breeding has continued, and we now enjoy the results.

The normal cropping season for strawberries is mid-June to mid-July, a time to really look forward to. Recent propagation of 'everbearing' varieties such as Aromel and Malling Opal makes it possible to have strawberries until early autumn as well. I find these intriguing but somehow less exciting, and slightly more difficult to grow.

Maincrop varieties

Beware the offerings of certain garden centres and nurseries where there are lots of Elsanta. They grow well and are the most common commercial variety, but not the tastiest. Almost every other variety I have grown tastes better. Three good ones, among many others, are Garriguette, Sonata and Royal Sovereign. And if a friend or allotment neighbour recommends the flavour of their strawberry, ask if they might let you plant a few of its runners.

Strawberries grow well in clay. They also love compost and manure, preferably every year, applied after cropping or in winter.

Being a woodland plant, they will tolerate some shade, but not too dry a soil.

Late frosts

Strawberry flowers are killed by frost, so the first flowers will benefit from protection with fleece if you want an early crop. Alternatively, leave alone and more flowers will appear later.

Planting

New plants are actually runners – rooting nodes on stems running out of established plants, during and more especially after cropping. Once rooted, the stem can be cut and they can be lifted and planted elsewhere. The usual spacing is 45x45cm (18x18") each way on beds, or 30cm (12") in rows, planted shallowly with the knobbly bulge (called a ‘crown’) above soil level.

August plantings will ensure a fair harvest the following summer. Planting as late as October is possible, but the first year’s crops will be small, unless plants are large and well rooted. Such plants can even be set out in March or early April to crop in July. Everbearing strawberries, like autumn raspberries, will fruit through their first summer from a spring planting, and often fruit from their new runners.

Growing

Runners are more of a curse than a blessing in bare soil, because they insert and root themselves into all the gaps between plants, leading after a few months to a densely planted mass. If left unthinned, any fruits growing under such a canopy of leaves tend to grow small and may rot rather than ripen.

Three ways to help prevent this are:

- Plant through a mulch, which also helps to keep the fruit clean – traditionally a straw mulch was applied in spring. Modern plastic mulches allow air and moisture through, but are expensive and make it difficult to apply more compost for the three years or so of their presence.
- Use a good dressing of well-rotted and weed-free compost or leafmould, and repeatedly cut off any unwanted runners through August and September. Allow a few if you need more plants of that variety.
- Strawberries are adaptable to many systems of growing, and some commercial growers have long bags of compost at waist level for easier picking. They grow well in containers, often hanging invitingly over the sides,

and can be kept going for a second year of fruiting in the same pot or bag, with plenty of watering.

After fruiting has finished, cut off all foliage to just above the crown. This helps to reduce numbers of slugs and snails, and to control growth of new runners.

Picking

First fruits are the largest and juiciest, while ‘jam’ strawberries are the final picking of small fruit. Three weeks is an average season for most plants; the starting date will depend on variety (see table, left) and whether cloches or fleece have been used to bring fruiting forward. The high season of maximum fruit is mid-June to mid-July.

In damp weather, mouldy fruit is best removed so it does not infect neighbouring berries.

Clearing plants

The average productive life of plants is three years, sometimes more. I recommend clearing a bed or row after three or four years, having first established another. You can use your own runners unless virus has infected the plants (see below).

Problems

Be prepared for **birds** to show a keen interest, even in semi-ripe fruit. Draping a net over the bed or row should keep them off, but may not stop any badgers.

Avoid watering when fruit are ripening, because excess dampness encourages **fungal rots**. That is another reason for keeping space between plants.

Slugs and snails like strawberries: I often find some while picking fruit and remove them. A dry season is best, whereas some years are simply too wet for strawberries; hence the use of polytunnels to grow them in.

Virus can infect plants, making their leaves stunted and weak, with small yields of fruit. In the rare event of this happening, they should be dug up and burned and a new bed planted elsewhere.

Strawberry ice-cream

2.5kg (5lb 8oz) strawberries squashed with a potato masher

600g (1lb 5oz) light muscovado sugar

5 × 284ml (9floz) pots of Jersey cream

8 free range eggs separated into yolks and whites

This makes industrial quantities for the freezer. It sets like a brick and requires an hour or two to defrost, but tastes delicious. Beat the egg yolks and sugar till light and fluffy, add the sugar and strawberries. Whisk the egg whites and fold in to the purée. Freeze in suitable tubs.

OTHER BERRIES

BLACKBERRIES

Garden varieties are larger-fruited and mostly less sweet than hedgerow blackberries. They are vigorous and thorny, but Oregon Thornless, Loch Ness and Loch Tay deserve a special mention for being thorn-free and somewhat slower growing, making them suitable (just) for smaller gardens. They will still benefit from a trellis or a 2m (6') stake at least, and should start cropping in mid-to-late August for about a month. Allow about 2m from other fruiting plants.

BOYSENBERRIES

These are a combination of raspberry, blackberry and loganberry, offering a large, dark-red-to-black fruit whose flavour is more sweet than acid; akin to hedgerow blackberry. Grow as for blackberries.

JAPANESE WINEBERRIES

These have significant ornamental value as well as fine fruit. Of the bramble family, their leaves are purple-veined and dusty white underneath, while the orange-to-dark-red fruit are borne in pretty clusters and have flavours closest to raspberry, but perhaps more acid. Plants are vigorous, up to 3m (10') high or long and suited to growing over a fence or trellis, with stems that are more bristly than thorny. Like summer raspberries they are 'biennial', fruiting on last year's stems, which then need removing.

LOGANBERRIES

Loganberries were one of the first crosses between raspberries and blackberries. They crop between the two, in late July and August, with quite long berries that need to be dark red for their acidity to diminish. I recommend Thornless LY654 to facilitate training their stems and picking the fruit.

TAYBERRIES

Tayberries are another cross between raspberry and blackberry, and usually grow vigorously with many nasty thorns, with a spread of up to 5m (16'). However, a recent variety called Buckingham has been bred without thorns, and makes tayberries more interesting. They crop late July and through August, with large, juicy fruits that need to be dark red, even purple, to be ripe enough to eat. Late flowering makes tayberries suitable for frosty sites, and their vigour makes wall or fence training a good idea.

BERRIES FOR PATIOS

Make sure you have suitable varieties and the right pots – large 45cm (18") ones ultimately for older bushes. Use organic multipurpose or ericaceous compost, according to species, and organic liquid feed if available, making sure it is an ericaceous feed for plants in acid soil.

This section is more to point you in the right direction than a complete growing manual. Bushes bred for patio growing will come with precise instructions for correct pruning, which will be different from recommendations for bushes growing in open soil. All varieties mentioned here are self-fertile, therefore needing no companions for pollination.

BLUEBERRIES

see page 220

CRANBERRIES

The cranberry is a creeping, low-growing plant, which requires moist, acid compost. Its dark red berries ripen through the autumn.

CURRANTS

Some currants are being bred to grow in small spaces and are usually supplied as cordons with a single stem. For example, Rovada (Plate 42) is a suitable redcurrant variety, with long strings of large fruit and somewhat restricted growth. Grow in multipurpose compost.

JOSTABERRIES

A cross between blackcurrant and gooseberry, with no thorns! They look like a blackcurrant bush and can be trained to a wall or trellis. Spring frosts may damage the foliage, while the fruits are shiny black and rather acid, for cooking as well as for eating fresh. Grow in multipurpose compost.

LINGONBERRIES

Also known as cowberries, and related to blueberries and cranberries. More acid than the former and less acid than the latter, they are well suited to sauces and preserves. They should yield better than cranberry and offer ripe fruit in both late July and in September. They need ericaceous compost.

Postscript

The answer *is* in the soil!

Gardening has so much to offer – being outside with the weather, birds, insects and plants, and developing the ability to help plants grow. Watching beautiful leaves, flowers and fruits develop from tiny seeds is an excitement and a privilege.

Growing food deepens the relationship considerably, as we eat and share the fruits of our efforts, and realise that we can influence the flavour, freshness and quality of our fruit and vegetables.

Continuing to grow food crops over many years offers the chance to glimpse some of nature's relationships, especially if we do it without using chemical short-cuts. I feel grateful for the opportunity to glimpse a few of the laws and principles that underpin the growth of plants – to be able to share the sheer wonder of it.

So often, in seeking to understand more I am drawn back to the soil, the key to all life. We understand it so little, and probably do not respect it enough. Since the invention of chemical fertilisers, soil has come to be seen by some as nothing more than a reservoir of nutrients, akin to a bank account.

Yet every hectare of living soil has about 20 tonnes of living organisms, from bacteria and fungi to earthworms and spiders. It is truly and literally alive, as much as a person or animal. The quality and quantity of plant growth stem from the quality of soil life. Enhancing its aliveness is the basis of good gardening, leading to better health of plants and humans.

I hope that using this book helps you to achieve a wonderful garden, many great meals and vibrant health.

Appendix

Dig/no-dig experiment at Lower Farm, Somerset

Background

There are four wooden-sided beds of 1.5x2.5m (5'x8'). They were created in March 2007 from old pasture, so this record is of their first three-and-two-thirds years' cropping. This experiment is pictured in the first colour section (pages 6-8), which shows one pair of beds in 2009 and all four beds in 2010.

All the beds were created with 15cm (6") of green waste compost, 5cm (2") horse manure and 0.25cm of rockdust. Since then, as soon as the last harvest is taken in late November or December, I spread a large wheelbarrow-load of compost or manure (5cm depth) on the two undug beds and I dig the other two, at the same time as incorporating an equal amount of compost or manure at the bottom of 15-20cm (6-8") spits.

My digging method is to put the first spit of soil into a wheelbarrow, form a 25cm (10") row across one end of the bed to be dug, then manure or compost is placed in this first trench before soil from making a second trench is put on top of it. The barrow of soil is used at the end to fill the final trench and the whole process takes just under two hours.

The idea is to have two pairs of beds with the same ingredients, but in a different profile, with two beds having undisturbed soil while two have disturbed soil.

All beds carry a mixture of single and double crops, so there is rarely any empty space in the growing season. Plants are raised in my greenhouse in modules filled with organic multipurpose compost. The data here is of harvests weighed, after being trimmed and graded to my normal standard for selling produce.

THREE YEARS' HARVESTS 2007-2009

(Not all these vegetables are grown every year)

Vegetable	DIG (kg)	NO-DIG
Beans, dwarf	2.11	1.67
Beetroot	8.15	8.97
Cabbage, red	8.77	5.75
Calabrese (1 year)	1.12	0.62
Carrot	11.99	12.49
Celeriac (2 years)	7.04	10.60
Chard (2 years)	12.33	11.59
Endive and chicory	7.86	10.30
Leaves, autumn (2 years)	2.86	3.04
Leek	9.29	9.84
Lettuce	20.76	25.28
Onion	15.09	16.92
Peas, Tall Sugar (2 years)	16.51	16.05
Parsnip (2 years)	18.41	15.69
Potatoes, early (2 years)	4.25	5.78
Radish (2 years)	1.18	1.40
Spinach (2 years)	9.51	11.89
Turnip	11.97	9.54
TOTAL	177.37	181.10
First crops	94.44	104.77
Second crops	82.93	76.33

2010 to end of August 33.88kg 38.79kg

(still to harvest: parsnip, leek, celeriac, kale, endive, chicory, leaf radish)

Resources

ORGANISATIONS

Biodynamic Agricultural Association (BDAA), Painswick Inn Project, Gloucester Street, Stroud GL5 1QG. www.biodynamic.org.uk. Biodynamic advice, books, preparations, courses.

Garden Organic (HDRA), Ryton Gardens, Coventry CV8 3LG.

www.gardenorganic.org.uk. Information, advice and events.

See www.organiccatalogue.com for its extensive range of seeds and accessories.

The Good Gardeners Association (GGA), 4 Lisle Place, Wotton-under-Edge, Glos GL12 7AZ. www.goodgardeners.org.uk.

The 'Moving Beyond Organic' project aims to grow food for nutrition. Information on no-dig, soil ecology, nutrition in food, human nutrition, research and education projects, but is short of funds.

Organic Growers Alliance, Bradshaw Lane Nursery, Pilling PR3 6AX.

www.organicgrowersalliance.co.uk.

Help with all matters to do with organic growing. Excellent journal.

Royal Horticultural Society (RHS), 80 Vincent Square, London SW1P 2PE.

www.rhs.org.uk. Help with all aspects of gardening.

Soil Association, South Plaza, Marlborough Street, Bristol BS1 3NX.

www.soilassociation.org.

Advice, information, books and inspiration on all matters organic.

SUPPLIERS

Agroforestry Research Trust, 46 Hunters Moon, Dartington, Totnes TQ9 6JT. www.agroforestry.co.uk. Fruit and nut trees and bushes, many unusual ones.

Blackmoor Nurseries, Blackmoor, nr Liss, Hampshire GU33 6BS. www.blackmoor.co.uk. A wide range of fruit trees, bushes and soft fruit.

Delfland Nurseries Ltd, Benwich Road, Doddington, March, Cambs PE15

OTU. www.organicplants.co.uk. Excellent organic plants at all seasons.

Edwin Tucker & Sons Ltd, Brewery Meadow, Stonepark, Ashburton, Devon TQ13 7DG. www.edwintucker.com. Seeds of all kinds and a helpful catalogue.

Implementations, PO Box 2568, Nuneaton CV10 9YR.

www.implementations.co.uk. Copper tools of high quality and information on Victor Schauburger, who understood water better than anybody.

The Real Seed Catalogue, P.O. Box 18, Newport, near Fishguard SA65 0AA. www.realseeds.co.uk. An eclectic range of good, home-grown seeds and advice on seed saving.

SEER Centre, Ceanghline, Straloch Farm, Enochdu, Perthshire PH10 7PJ. www.seercentre.org.uk. Information on minerals and rock dust, and sales of rock dust.

Tamar Organics, Cartha Martha Farm, Rezare, Launceston PL15 9NX. www.tamarorganics.co.uk. A wide range of organic seeds and sundries.

Walcot Organic Nursery, Walcot Lane, Drakes Broughton, Pershore, Worcs WR10 2AL. www.walcotnursery.co.uk. Top-quality organic fruit trees and bushes.

PUBLICATIONS

Gardening and Planting by the Moon, Nick Kollerstrom. Published annually by Quantum.

The Biodynamic Sowing and Planting Calendar, Maria Thun. Published annually by the Biodynamic Agricultural Association (see left), selling 100,000 copies worldwide each year.

How to Make and Use Compost: The ultimate guide, Nicky Scott. Green Books 2009.

ORGANIC EXTRAS

Mill on the Brue, Trendle Farm, Somerset BA10 0BA. www.millonthebrue.co.uk. For children's active holidays and home-grown organic food.

www.zoehawes.co.uk for herbal advice and courses – see *Wild Drugs* in Bibliography.

Bibliography

An Agricultural Testament, Sir Albert Howard. OUP 1940, reprinted by the Soil Association 2006. A brilliant scientist's fascinating story of discovering modern compost-making.

The Living Soil, Eve Balfour. Faber & Faber 1943, reprinted by the Soil Association 2006. An original look at the health of soil and humans, which triggered the founding of the Soil Association – still a great read.

Mother Earth 1946-64 (quarterly journals of the Soil Association). Not currently in print, but worth reading when they are for entertaining distillations of timeless wisdom. New *Mother Earths* are now available from the Soil Association.

Nutrition and Health, Sir Robert McCarrison and H. M. Sinclair. Faber & Faber 1953. Everybody should read this demonstration of the effects of good and bad nutrition.

Nutrition and Physical Degeneration, Weston A. Price. Price Pottenger Foundation 1945. Another must-read – you won't want to eat cake after this graphic, far-reaching account.

The Organic Salad Garden, Joy Larkcom. Frances Lincoln 2001. A rare combination of beauty and information from a pioneering gardener.

Salad Leaves for All Seasons by Charles Dowding, Green Books 2008. Salad leaves explained by the expert.

Secrets of the Soil, Peter Tompkins and Christopher Bird. Harper & Row 1989. Just in case we think we know it all – a lot of this information still needs to be used.

Teaming with Microbes, Jeff Lowenfels and Wayne Lewis. Timber Press 2006. Excellent explanation of soil life.

The Weed Problem, F. C. King. Faber & Faber 1951. An original exposition of the value of compost.

Wild Drugs: a forager's guide to healing plants, Zöe Hawe. Octopus 2010.

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