


RANDOM HOUSE  BOOKS



The Origin of Plants

Maggie Campbell-Culver

About the Book

The Origin of Plants tells the fascinating story of how and why Britain's spectacular gardens and private and public collections are home to the widest range of plants of any nation on earth. As the last Ice Age retreated, somewhere between eleven and eight thousand years ago, the British Isles had the smallest range of natural flora of any country in the world. Even by the year 1000 we could boast only a few hundred indigenous plants. But over the last millennium seeds, bulbs, seedlings and cuttings have been brought to Britain by warriors, explorers and plant-hunters. Europe and the Near East, Russia and North America, South America and South Africa, India and the Antipodes, Japan and China, have all yielded a remarkable bounty.

Critically acclaimed, rich in colourful detail and anecdote, Maggie Campbell-Culver's work is also timely. With some of the world's plants under extreme threat in their native territories, Britain's plant collections have become of crucial importance. This is a must-have book for all plant lovers.

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1. *Caryophyllus maximus* also named, The great old Carnation or gray Hells. 2. *Caryophyllus maximus* & also named, The white Carnation. 3. *Caryophyllus maximus* also named, The Cornelian or the Parrot flower. 4. *Caryophyllus* (also named), The strawberry of Rome. 5. *Caryophyllus* (also named), The black velvet. 6. *Caryophyllus* (also named), The Gleaner Carnation. 7. *Caryophyllus* (also named), The Oriental France. 8. *Caryophyllus* (also named), The great white Gillyflowers. 9. *Ficus* (also named), Malin. Both have a leafy leaf.

Dianthus caryophyllus from John Parkinson's book *Paradisi in Sole Paradisus Terrestris*, 1629.

The Origin of Plants

*The people and plants that have shaped
Britain's garden history since the year
1000*

Maggie Campbell-Culver

*For Michael, Claire, Guy, Lorna, Justin and Steph, with my
love*

Acknowledgements

If you have two pennies, spend one on a loaf and one on a flower.
The bread will give you life, the flower a reason for living.

Chinese proverb

The idea of looking at the history of plant introductions into this country began with my involvement with the Plant Heritage Display for the National Council for the Conservation of Plants and Gardens at the Hampton Court International Flower Show where, for about ten years, a group of us would meet each year to help set up and run the marquee for the week-long show. Knowing relatively little about plants and their history (when one thinks how much there is to know), I quickly came to realise the truth of John Ruskin's aphorism that the best way to learn about a subject is to write a book about it. This is how the book was born and I would like especially to thank those who were there at its conception: Jane Green, Neil Lucas, Graham Pattison, Ann Rawlings, and Edna and Mike Squires.

I wish also to acknowledge particularly the support of Charmian and John Hussey and the kind help that I have received from Mavis Batey, past President of the Garden History Society, and my colleagues in the Society, as well as all my gardening friends up and down the country including Dr Julian Ball, Dominic Cole, Merrial Connell, Sylvia Fitzgerald (the former Archivist and Chief Librarian at the Royal Botanic Gardens, Kew), Hazel Fryer, the late Daphne Lawry (Secretary of the Cornwall Gardens Trust), Denise

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To ease my way through the actual chore of living while all this has been going on, I have been exceptionally fortunate in the unselfish and loving support of my family, particularly my husband Michael who, being a much better gardener than me, has subsumed his first year of retirement from the Law into drowning in a sea of Latin names and plant dates. Without him, this book would not have been written. I thank him.

Maggie Campbell-Culver

Fowey, Cornwall and St Thois, Brittany, 2001

Foreword

After the retreat of the last Ice Age Britain had the distinction of having the smallest natural flora of any country in the world, yet by the start of the twenty-first century it contained the widest range of any nation on earth.

This came about through circumstances which, on their own, might not have been significant but, in combination, were to create a very British renaissance, a literal flowering. It was inspired by, on the one hand, the competitive aspirations of the aristocratic families who vied with each other to create ever more impressive gardens, pleasure grounds and parks and, on the other, the imperial drive to turn the map of the world red. This created the conditions for the development of the Great British Botanic Garden Tradition. Although cleverly disguised as a scientific institution, it was actually the nerve centre for a quite breathtaking programme of economic development, as crops were transported from one country to another to find the ideal conditions for exploitation. The stories of the mutiny on the *Bounty* and the stealing of rubber from Brazil have passed into folklore, but this was a serious business.

From the eighteenth century onwards the plant hunters were not only searching for plants in their native surroundings but were also seeking plants that could be introduced into domestic cultivation in Britain; hence, many of the expeditions were at least part financed by the great nurseries of the time, for whom a successful

introduction meant big money on the back of its novelty value. Maggie Campbell-Culver's important book describes the main actors on this stage and the roles they played, but focuses rightly on the plants themselves. These plants have shaped our culture and, to a certain degree, our destiny.

This work of scholarship comes at a time when we are waking up to the true significance of Britain's horticultural tradition. Bodies such as the National Trust and the Royal Horticultural Society have long catered for the seemingly limitless interest of the British public in gardens and gardening. The millions who attend the world-famous Chelsea and Hampton Court Flower Shows are testament to the depth of interest shown in plants.

Increasingly, the scientific community is coming to reassess the importance of plants in medicine and wellbeing. In engineering laboratories across the world, scientists are looking with fresh eyes at plants as perhaps holding the secrets to the harnessing of solar power and new composite materials, investigations which may change the face of the world within a generation. Whatever our political or ethical beliefs, the advances in DNA research and the consequent interest in genetic modification and the potential for customising nature to man's need is with us. Not for two hundred years have plants been so central to what is happening today.

The great private and botanic gardens of this country are suddenly finding that the collections that have been brought together here from around the globe have an importance far surpassing their ornamental or economic value. In a scenario that would have been unbelievable as little as twenty years ago, scientists are realising that the genetic material of some of the world's most important plants is under extreme threat in their native territories. For example, there is now a greater range of species rhododendrons in the UK than in Nepal, Bhutan and Sikkim, their countries of origin. Similar pressures exist in

South America where, the Edinburgh Royal Botanic Gardens claim, some of the genetic material from the temperate rainforests is under massive threat from paper companies of the Far East which operate a rapacious deforestation regime in Chile. Organisations like the National Trust and the RHS are suddenly finding themselves with a role they never imagined having to play. This is not about education; this is about survival, pure and simple.

I was delighted to add these words to the first edition of this lovely book. Now that it is reappearing under the Eden Project Books imprint, which is its natural home, I am even more delighted. It comes at just the right time to create a context for the exciting and challenging years ahead. As the Americans often say, 'If you don't know where you've been, you won't know where you're going.'

Congratulations, Maggie, from a friend and admirer,

*Tim Smit
Eden Project, Cornwall
January 2004*

Notes for the Reader

The subject of this book, looking at some of the hundreds of plants introduced into the United Kingdom over the past one thousand years, is so huge that it is inevitable that more has had to be left out than that which is included. To bring some structure into the helter-skelter onrush of horticultural arrivals I have made each century a separate chapter with, at its beginning, a list of events – who was on the throne at the time, national and international events which had a cataclysmic effect on the incoming flow of plants (the Black Death or the First World War, for instance) or the all-important explorations of the world. Originally, when writing the book, I used these lists as *aides-mémoire* to see what was happening in the big wide world around the relatively minuscule worlds of the plant-hunters themselves. Having explored thousands of plants with their dates of introduction, I now realise the crucial importance of this historical link: the date of entry of a particular plant can reflect very quickly and sometimes dramatically the consequences of trade, war, exploration, technical advances and indeed the whole gamut of human endeavour.

Choosing plants to write about for each century opened up a cornucopia of thrilling stories; the choice was so great that there are inevitable omissions as well. The nearer to our own time we came, the more difficult was the choice. The name of each plant introduction written about in the text is highlighted in **bold**, the same name appearing in **bold** in the List of Plant Introductions at the end of each

chapter. However, where occasionally a plant is discussed out of its century, it will appear in the List of Plant Introductions for its own century, with a cross-reference back to the page of description.

To assist the reader to buy plants he or she has read about, I have tried to use the most up-to-date plant name, with earlier names being given as synonyms in brackets. Inevitably, the earliest plant introductions have no specific date within the Plant Lists; it is enough to know they arrived within a given hundred years. They are, therefore, listed alphabetically. It is from the sixteenth century onwards that the Plant Lists become totally chronological. Within the Lists, I have also included plants which, because of space, have not been written about in the text and therefore are not highlighted. To a number of these I have added a few extra facts. Native plants written about in the text are not highlighted in bold, nor have they been placed in the Plant Lists.

Inevitably with the millions of horticultural arrivals which have occurred during the millennium, the book could have become one (very) long list of plant names and dates. However, besides plant omissions, finding a plant's date of entry is rarely an exact science and I must ask the readers' indulgence if a discovery is made of an earlier or later arrival date of a favourite plant.

I now hold a long and growing list setting out the chronological arrival of plants from abroad and would welcome correspondence on the matter via email to ccmge2@virgin.net. For readers who would like to learn more about the plants they buy and grow, I recommend they contact the National Council for the Conservation of Plants and Gardens, Stable Courtyard, RHS Wisley, Woking, Surrey, GU23 6QB; www.nccpg.org.uk

Introduction

Horticulturally speaking, Britain would have been considered a Third World country at the end of the last great Ice Age, some eight thousand years ago, when its indigenous flora emerged as a frozen reflection of all that was left from its previous existence. A poor and mean landscape full of waterlogged sedges and ferns is what would have greeted any visitors. A small number of plants did somehow survive the onslaught of the millions of years of ice to emerge triumphant into the post-glacial period. These include the bilberry (*Vaccinium myrtillus*), the exotic Droseras or sundew plants which trap insects in order to survive, some Alchemillas (distant cousins of *Alchemilla mollis*) and the rare and beautiful Teesdale Violet, *Viola rupestris*. There were in all probability no more than two hundred or so species in total, certainly little growing that could have been turned into a sustaining meal or a posy of flowers.

Nowadays, of course, it is a quite different story. At every turn in our daily lives we are almost submerged with horticultural delights. Walking up and down our garden path, strolling through the pedestrianised centre of a town or in the local park, or even turning into a motorway service area, we take for granted that there will be a selection of flower beds, shrubberies, tubs, planters, pots and hanging baskets filled with flowers, trees and shrubs for us to enjoy. It is the same when one goes for a walk in the countryside: we are greeted with a profusion of plants, from trees and shrubs to flowers, grasses and even weeds

(which are only wild flowers growing in the wrong place), as though they are displaying themselves just for us.

Where on earth have they all come from, bearing in mind that we began with such a meanly filled wheelbarrow of native plants? The answer is, of course, that Britain, during the course of about two thousand years, has played host to the biggest planting party in the world. We have become horticultural hedonists as we surround ourselves with plants from every country.

Look around your garden and you will see before you hostas from China and Japan, the scrambling nasturtium which arrived from South America, heather from South Africa, a rhododendron first collected from the Himalayas. California gave us the tall Monterey Pine, while from New Zealand came the hebes; the Mediterranean's contribution was lavender, and even Siberia sent us a gypsophila. In the front garden where the bedding plants are patterned out each May, it is the same story: the bright Busy Lizzies came originally from India, gloxinias and verbenas both originated in Central and South America, as did most of the begonias. The two tubs on either side of the front door hold a reminder of earlier times with a pair of topiary box twirls.

Left to themselves, plants are usually very slow colonisers, and yet they are good at adapting to new environments - which is fortunate considering the journeys of many thousands of miles some later introductions underwent. Once here, they then had to adapt to a new terrain and a new climate. But Britain, having an equable climate - not too much of anything - became a ready and eager host. Where plants come from and when they came here is fundamental to the development of our landscape and indeed our whole countryside. It is part of the biodiversity of the land; plant introductions mirror historical events, exploration and scientific discovery, and provide a reason why gardens have developed the way they have, and why our landscape looks as it does.

The ripples of climate change during this long postglacial period – and indeed up to the present day – have had a profound effect and influence on both the survival and increase of our native and cultivated plants. We are in what climatologists refer to as ‘the Sub-Atlantic period’, which began about 500 BC and which is both wetter and colder than the previous era. However, within these long phases, there are spells of slightly different weather – the ripples. For instance, from AD 1000 to 1300, the south of England was consistently warmer than the rest of Britain, so the vines that had been developed by the Romans during their occupancy thrived. By 1350, however, it was noticeable that the planting of vineyards, their cultivation and the drinking of English wine were being overtaken by wine imported from France. Even before then, Henry II (1133–89) much preferred wines from the Gascony, Poitou and Auxerre regions of France.

A further climate ‘ripple’ of a mini Ice Age is believed to have begun about 1550 and lasted to around 1840, with a forty-year warm period from 1900 to 1940. Today we are living through a similar period (or ripple) but one which climatologists tell us is man-made, caused by an increase in carbon dioxide thus leading eventually to overheating; in other words, the ‘greenhouse effect’. History alone will tell whether this is the sole cause of the present climate change or whether it is linked to the ‘ripple effect’.

With all this apparent climatic activity, it seems amazing that in the comparatively short space of a thousand years Britain has become such a truly ‘green and pleasant land’, with gardens stuffed full of other countries’ plants. As we went out and colonised the world, so plants were brought home to colonise our land.

In looking at the thousands and thousands of plant introductions that have occurred over the past millennium, it is interesting to note how a pattern emerges. There is both an historical timescale and a dominant geographical

area attached to the plants that arrived (although, of course, by no means is either category exclusive). This correlation is well illustrated by the following ten periods:

Period I, 1000–1560, the longest period, is dominated by plants arriving from continental Europe, due in part to the Norman invasion, the Crusades and monastic influences.

Period II stretches from c.1560 to 1620, when plants from the Near East, West Asia and the Balkans began arriving.

Period III is the Tradescant period, 1620–62, and encompasses the older John Tradescant's travels to Russia and the North African coast, and his son's three journeys across the Atlantic to North America's east coast.

Period IV, 1660–1720, is dominated by the introduction of shrubs and trees from the eastern seaboard of North America.

Period V is from 1680 to 1774, when the dominant area for plant introductions was southern Africa, especially the Cape of Good Hope.

Period VI, 1772–1820, is the Antipodean period, which begins with the return of Joseph Banks and Captain Cook from their voyage of exploration to the southern hemisphere on HMS *Endeavour*.

Period VII, 1820–60, covers mainly plants introduced from California and the west coast of North America.

Period VIII, 1840–70, is when plants came mainly from South America with plant hunters collecting on behalf of commercial nurseries.

Period IX, 1840–90, takes in expeditions to India and the Himalayas.

Period X, 1890–1930, is dominated by plants arriving from the newly opened China and Japan.

It is endlessly surprising how often the date of arrival of a plant reflects the exploration of a new country, and, conversely, how the closing of a country's borders – or a war – halts the flow.

The first centuries following the Roman occupation of Britain (AD 43–410) show the slow development of our indigenous plants for food and medicine. The few plants which are known to have found a new home here during this period all came from continental Europe. But it was the spread of the new religion of Islam, with the caliph's territorial conquests of all of the southern shores of the Mediterranean, culminating in their invasion of the Iberian peninsula in 711 (where they remained for nearly eight hundred years), which brought the sophistication of the Near Eastern plants to the attention of northern Europeans.

Even the canny invader William the Conqueror can be thought to have contributed to the total of our plant list. When he came to build what we now know as the Norman castles, he preferred to use material with which he was already acquainted rather than stone from unknown English quarries, so the walls of castles like Dover and Sherborne were built from stone imported from the continent. Incidental to its main purpose, the stone itself carried the seeds of a double invasion – seeds of two plants we think of as being most quintessentially English. The first was the pink (now known as the Wild Carnation), *Dianthus caryophyllus*, and the second was *Cheiranthus cheiri*, now called *Erysimum cheiri*, the wallflower. Both were seen blooming on the stone walls of Caen in France, so the pretty little delicate pink which is used in the breeding of nearly all our border pinks is the result of 1066 and all that.

Major events like the Crusades to the Holy Land during the eleventh, twelfth and thirteenth centuries and the Turks descending on Constantinople in 1453 and Belgrade during 1521 seem to have played a significant role in the gentle pursuit of botany. In fact, any movement of people (whether armies, courtiers, pilgrims or, later, tourists) can influence the migration of plants, either accidentally or

deliberately. We know that following the Crusades, a number of plants gained a home here. Whether they were brought back as a deliberate trophy of the pilgrims' travels or arrived incognito caught up in the dust and dirt of travel we shall probably never know, but they were different enough from our native flora to be noticed and therefore worth nurturing.

However, plants do not always take kindly to their new home. For instance, another *Dianthus*, this one called the Wild Pink, which originally came from eastern and central Europe, was undecided about whether it liked it here or not. The plant crossed the Channel several times before it finally felt at home enough to settle here permanently in the 1560s. John Gerard is credited with naming the frilly little flower *Dianthus plumarius*, and although it has gone native in the southern part of Britain it is still being grown in our gardens. So it is with a number of other plants which teeter on the brink of British citizenship.

On the other hand, some find life in Britain so conducive to their well-being that they become positively thuggish in their garden behaviour and one wishes they could be deported. Plants which come (reluctantly) to mind are the Japanese Knotweed (*Fallopia japonica*), which brought its aggressive manners here during the early 1800s, and its relative *F. baldschuanica* (the Russian Vine or aptly named Mile-a-minute), which arrived from Tajikistan in 1883. They are both movers and shakers of all in their path, including tarmac and concrete.

Nearly everyone with an enquiring mind usually has an orderly mind too, for 'order is the source of peace', as John Caie (1811-79), head gardener at Inverary Castle to the 8th Duke of Argyll, stated as he wrote about the desired balance and proportion of nineteenth-century flower beds. In both the pre-Christian era and the early centuries of the first millennium, the uncoordinated and unclassified natural world must have presented an enormous challenge.

Many great thinkers in the Greek and Roman world have left us amazing natural history and botanical documents recording their thoughts and observations; *Enquiry into Plants* written by Theophrastus (c.372–286 BC) is the earliest surviving European treatise on the subject. The survey lists, naturally enough, the local Mediterranean flora, but also includes plants from further afield which Theophrastus probably never saw growing but which could have been drawn for him or described to him by a sharp-eyed and inquisitive early traveller. These might have been plant enthusiasts accompanying Alexander the Great and his army on the campaigns he undertook through the Middle East and Asia against the Persians.

Pliny the Elder, born at Verona in AD 23/24, was a passionate observer of the natural world. He was, apparently, an all-action man, never wasting a minute of his time, and holding a variety of high government offices including the governorship of Spain and command of the Roman fleet. It was while he was stationed with the fleet near Pompeii in AD 79 that he went with some friends and his nephew (whom he had adopted as his son) to observe Vesuvius erupting and, in trying to save his friends, himself perished, overcome by the fumes. He left us his life's work, a prodigious encyclopedia in thirty-seven volumes called *Naturalis Historia* which, when it was finished, he described as being '20,000 matters of importance, drawn from 100 selected authors'.

A third writer from the early days of the first millennium, then undoubtedly the greatest influence in medical and herbal studies, was born during the first century AD in Asia Minor. Pedanius Dioscorides was a physician in the Roman army who wrote a book of plant descriptions called *De Materia Medica* which had over four hundred colour illustrations; although it only exists in copy form – the first made in c. 512 and now in Vienna – it is an astounding document. The influence of his writings was immense.

Indeed, some of the names he gave to plants we still use today; for instance, *Asphodelus ramosus*, the Asphodel, *Smyrniolus olusatrum*, the plant which now grows wild in our hedgerows and we know as Alexanders (see [here](#)), and the Biarum genus. However, more importantly, he was honoured by the name *Dioscoreaceae* being given to a whole family of about two hundred climbing herbs or shrubs in nine genera. One of the genera is the *Dioscorea*, which includes the yam species. Remarkably, some of his pharmacological insights have relevance today.

In the ancient and medieval worlds a system called the 'Doctrine of Signatures' became the formalised method by which doctors treated ailments and illnesses, using products from the botanical kingdom. In fact, the system was practised for so long that monasteries were still using it until the birth of modern science in the sixteenth and seventeenth centuries.

The Doctrine consisted of the simple idea of relating parts of a plant to parts of the human body; the assumption was that because they looked alike, the plant would in some way be able to cure the ills of the offending body part. So if one received a head wound, the use of the walnut was recommended as a cure because of the resemblance of the nut to the skull and human brain; in this case, walnut oil was smeared over the wound. The very name of *Pulmonaria* (Lungwort) gives the medical indication of the plant's use. The leaves are spotted and rather rough, and look 'lung-like' so were thought to be helpful in respiratory problems. Any plant with a heart-shaped leaf was considered helpful in alleviating matters relating to the heart, and so on. Although the botanical world does provide a tremendous spread of cures for both the body and the spirit, this extraordinary dictate went almost unquestioned for centuries, with the information being copied, printed and plagiarised, and used by herbalists and medicine men all over Europe. Indeed, in all

these early horticultural writings, there is a heady mixture of herbal myth and legend as well as some remedies so disgusting and downright dangerous that it is a matter of wonderment that anyone actually survived to tell the tale. The alarming Doctrine of Signatures was eventually overtaken by naturalists whose systematic observation of plant life led to a more straightforward approach rather than to the unquestioning mumbo-jumbo of earlier writers.

This simpler yet more observant approach happened during the fifteenth and sixteenth centuries, when the Renaissance took an interest in the natural world. Now there were men who really observed and studied plants rather than just using them for old times' sake. One such person was Leonard Fuchs (1501-66), for thirty-one years Professor of Medicine at the then newly established Protestant University of Tübingen. The fuchsia was named after him as a tribute to the work he did as a naturalist; however, like so many learned men after whom plants were named, he never knew the plant, since he died long before its arrival in Europe at the beginning of the eighteenth century. Fuchs befriended the English cleric William Turner (1508-68), who has been called the 'Father of British Botany' on account of his having made the first record of British native flora to be written both in Latin and in the vernacular. This was published in 1538 under the title *Libellus de Re Herbaria Novus*. In 1551 he began publishing *A New Herball*, which came out (after various vicissitudes) in three parts, being completed in 1568, the year of his death. His publications have become seminal in the study of the development of early English botany, as also has the *Herball or Historie of Plantes* written in 1597 by John Gerard (1545-1612), and *Paradisi in Sole Paradisus Terrestris* by John Parkinson (1567-1650), which was published in 1629. Each of these books helped lay the foundation for the horticultural enterprises which were to follow.

Although these good men were striving hard to bring order into the plant world and classify the European flora, more exotic material from both the Tropics and the New World was beginning to appear at about the same time. As ship-building design became more sophisticated, the Atlantic Ocean proved no barrier to inquisitiveness, and there were at least a further fourteen crossings in the thirty years following Columbus's exploratory voyage in 1492. Seeds, bulbs, corms and tubers were the easiest and surest way of bringing new plants across the seas, and their arrival added an urgency to the attempts to bring about an understanding of the flora, and especially of the medicinal use of plants. The idea of forming botanical collections for study seemed essential, and the first two botanic gardens were begun in Italy, one at Pisa in about 1543 and the second at Padua about two years later. They should really be called physic gardens, for their main purpose was to teach medical students to recognise medicinal herbs. They were a modern development from the monastic garden, which had been based on the earlier system of the Doctrine of Signatures.

It was Henry Danvers (1573-1645), later created 1st Earl of Danby, who presented Britain with its first botanic garden, at Oxford. Danvers, who is described as a horticultural patron and innovator - he grew over a thousand fruit trees at his home, Wimbledon House in Surrey - was 'minded to become a benefactor to the University, determined to begin and finish a place whereby learning, especially the faculty of medicine, might be improved'. While under suspicion of murder - he was pardoned in 1598 - he had travelled widely on the Continent and had no doubt visited some of the six or seven established botanic gardens there, all attached to universities. In 1621, after inheriting a large fortune, he decided to take a lease on five acres of Oxford's water meadows. Here, on St James's Day (25 July), with a great

deal of pomp, music and speeches, the first British botanic garden was inaugurated. A further twenty-five were created over the next three hundred years.

Horticulture and botany became entwined in 1753 when a system of classification was established in the publication by Carl Linné, or as we know him Linnaeus (1707-78), of *Species Plantarum*, a book which for probably the first time brought order and discipline to the botanical world. Travellers and explorers, and eventually plant hunters, could now scour the world looking for new plants, and when found, these could be placed in their correct family. That at least was the theory, but nothing stands still, and since Linnaeus, the art of botanical naming (nomenclature) has been constantly changing as botanists delve deeper and deeper into a plant's very nature - much to the delight of plant label manufacturers and the frustration of the gardening world.

The word 'nomenclature' has had an interesting life. It started in the Roman world when a *nomenclator* was a servant - normally a slave - whose daily duty was to inform his master of those who had come to pay their respects, usually seeking an influential patron. By 1599, the name was given to a master of ceremonies announcing guests at a banquet, but by 1644 it had been transferred to an inventor of names specialising in the classification of natural objects including plants.

There is no doubt that the last quarter of the second millennium saw the greatest number of new plants being established in Britain from all over the world. However, it was the botanical opening-up of the Far East, especially Japan and China, during the nineteenth century which led to the greatest of the 'flower ages' in the haphazard history of foreign plant introductions to Europe. The Far East is without doubt the horticultural powerhouse of the world, and thousands of flowers, shrubs and trees which now are available from any garden centre in Britain emanated from

those countries and have had the most profound effect on our gardening landscape. This development, combined with a significant innovation made around 1835 – the invention of the portable mini-greenhouse (the Wardian Case) by Nathaniel Ward – led to the great era of plant hunters who were able to take advantage of easier and safer travel in pursuit of their horticultural treasures. Later, still better and speedier travel also helped to heighten the survival rate of discoveries. The first plant to arrive by air was *Primula sonchifolia*, sent from Burma in 1930.

The evidence shows that the scramble for foreign plants was at its busiest and most enthralling when travel and communication was slow, sometimes dangerous and always difficult. During recent decades, when ease of travel is taken for granted and it seems as if the whole world is on the move – or at least on the telephone, fax or worldwide web – the welcoming of new horticultural treasures has slowed down. The timing has coincided with the awareness of the fragility of the natural world and the rise of the conservation movement. The garnering of plants from the four corners of the earth must be considered as coming to an end. After all, a country's natural habitat is part of its unique identity and thus of its heritage, which, in an age of globalisation, individuals and communities are keen to retain.

While we are infinitely richer in flowers, vegetables and fruit than when we began the second millennium, it is the hybridising and breeding of new and sturdier varieties which has made such an impact during the past hundred years. As the flow of new plants into Britain has slowed from its apogee at the beginning of the nineteenth century, so has interest in the 'designer plant' – a horticultural gem created to fulfil a specific purpose – gained momentum. For instance, *Rhododendron* 'Frosted Orange', *R.* 'Peggy Ann' and *R.* 'Ben Morrison' are three bi-coloured azaleas bred during the latter part of the twentieth century which are

compact 1-2, m (3-6 ft) shrubs, hardy to temperatures down to -18°C (0°F). *Lavandula stoechas* 'Roxlea Park' is a strong cerise shade - not a colour one normally associates with lavender. It was first noted in New Zealand and has a very graceful habit. The achievement of breeders and horticulturists in producing a range of plants which fit in with the changing lifestyles and requirements of the twentieth and twenty-first centuries is truly remarkable. Whether it is in making a plant sturdier, smaller or drought-resistant, or in increasing the flowering time, producing a variegated version or a different-coloured bloom for us to be tempted by at the garden centre, botanical expertise seems to have reached new heights. Yet manipulating a plant's size, shape and colour is nothing new, as witnessed by the development of the chrysanthemum, the camellia and the cherry in the Far East long before AD 1000. In addition, the art of *Pen-tsai* (*bonsai*), the dwarfing of trees, and *Pen-ching*, the making of miniature landscapes, existed in China from the seventh century onwards.

Humans are inevitably the key to the vast majority of the horticultural imports that have taken place around the globe. But one of the most recent botanical finds in Britain, in the last decade of the twentieth century, and the cause of much excitement, was an orchid indigenous to the Mediterranean which was thought to have been swept here as seed on windborne sand from the Sahara. The orchid was identified as *Serapia parviflora* which is a native of the Mediterranean region, particularly of Portugal. Alas, it did not survive, for within the space of two years it had been picked and dug up by collectors to the point of extinction.

Cosmos atrosanguineus is a member of the daisy family, and was first brought from Mexico to Britain in 1835 and grown by William Thompson of Ipswich (founder of the seed merchants Thompson & Morgan). Later, and quite inadvertently, it was transported from South America to

South Africa at the time of the Boer War, when hay containing the seeds was sent as fodder for the British Army's horses. Wherever the horse fodder went, nature took its course, and the road verges later bloomed with the new import. In Britain the survival of *C. atrosanguineus* has been more problematical, and despite its hot-chocolate looks and its perfume - and being given an Award of Merit in 1938 by the RHS - it very nearly disappeared from our gardens in the ensuing years, and is also now very rare in its native land. Its naturalisation in South Africa was therefore most fortuitous in maintaining the plant's existence.

Of the thousands and thousands of foreign flora which have arrived here only a tiny percentage have managed to survive, and yet they have so enriched our horticultural experience that Britain is at the very forefront of the gardening world. It is surprising, too, how quickly some of them become established. Think of Japanese anemones, hostas, *Garrya elliptica*, alstroemeria, ceanothus and many more - all sailed into Britain during the past two hundred or so years, and yet are now part of our gardening scene, just as are the pink and the wallflower, which arrived with the Normans. I suppose the truth is you can't keep a good plant from growing - wherever it is.

Knowing where plants come from, the date they were introduced into Britain, the reason why they are named as they are can tell us an enormous amount about our island's history, and give added enjoyment to our own gardening, too. It is in fitting together the jigsaw, and thus bringing into sharp focus the plants which we grow in our own gardens and the stories they can tell, that we gain a fascinating extra dimension to our knowledge of and pleasure in gardening.

1

Setting the Scene

Significant dates

- 43** Romans under the Emperor Claudius invade Britain
- 60** Revolt of the Iceni under Boudicca; London ravaged by fire
- 64** Great fire of Rome; Nero begins to persecute the Christians; death of St Peter
- 117** Hadrian becomes Emperor
- 118** Invention of the wheelbarrow by the Chinese
- 122** Hadrian's Wall started; completed 139
- 161** Marcus Aurelius becomes Emperor
- 286** Aurelius Carausius attempts to separate Britain from the Roman Empire
- 324** Byzantium becomes capital of the Roman Empire (renamed Constantinople)
- 410** Roman legions leave Britain
- 446** Saxons begin arriving in Britain
- 529** St Benedict (c.480–547) founds monastery at Monte Cassino
- 563** St Columba founds monastery on Iona
- 597** St Augustine (d. c.604) sent by Pope Gregory the Great to convert England; becomes first Archbishop of Canterbury
- 604** First Church of St Paul in London
- 664** Synod of Whitby; Roman practice imposed
- 711** Muslim invasion of Spain
- 780** Offa's Dyke begun
- 800** Charlemagne crowned Emperor of the Western Roman Empire
- 865** First major Viking invasion of England
- 871** London occupied by the Danes

- 960** St Dunstan becomes Archbishop of Canterbury
973 Coronation of King Edgar in form still used in twentieth century
978 Ethelred the Unready (978-1016)
991 English treaty with Normans
995 *The Glossary to Grammatica Latino-Saxonica* compiled by Aelfric, Abbot of Eynsham

With the best will in the world, it has to be admitted that Britain was a late developer as far as the art of gardening was concerned. All the floristic evidence suggests that the first five hundred years of the second millennium, from AD 1000-1500, were spent clinging on to the detritus left over from the Roman occupation (AD 43-c.410) and the wreckage of the Saxon and Viking raids.

And yet ... and yet... there must surely have been more to it than that. The overwhelming desire for food, shelter and warmth was - and still is - a driving force. We like to think it was we - twenty-first-century sophisticates - who discovered the art of DIY. Not a bit of it; we are mere dabblers in the field compared to our ancestors of a thousand years ago. Then it required everyone's concentrated efforts to cultivate and grow crops, a real community involvement in survival. So it is no wonder that there are only a few scraps of vellum for us to pore over, and artefacts more precious than gold for us to see. Almost everyone's energy was required to keep body and soul together, and the laborious scribing to record such a seemingly mundane and obvious activity must have appeared a somewhat pointless exercise, particularly when almost the entire population was actively involved and knew by example what to do. Who would have recorded the activity or then read about it? Only monks and a few scholars were able to read and write. It was patently self-evident what was required to survive, and although it is a proven fact that people died at an earlier age than say in the eighteenth century (or now), it was usually due to