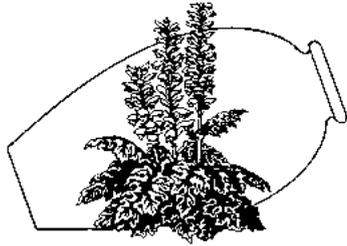


THE
Mediterranean
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THE MEDITERRANEAN GARDEN



THE MEDITERRANEAN GARDEN

A journal for gardeners in all the
mediterranean climate regions of the world

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The Mediterranean Garden Society is a non-profit-making association which acts as a forum for everyone who has a special interest in the plants and gardens of the region.

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Salvia officinalis

MEDITORIAL

This time last year the MGS was little more than a constitution sitting on the lawyer's desk. But despite the fact that the document was doomed to gather dust while the courts enjoyed their extended summer holidays, there has been no real check to the growth of the society since then. Every post has brought us into contact with more gardeners, plant-lovers and horticultural associations, and every week has seen fresh developments.

Now, the launch of the MGS journal. Another milestone, and one which we could not have reached without the splendid efforts of our contributors. We have tried to do justice to their articles within the limits of our budget (and our woeful lack of publishing experience!) and hope that you will enjoy reading this first issue as much as we have enjoyed producing it.

Please don't be afraid to make criticisms or suggestions – this is *your* journal and the more you are actively involved, the better it will become. Bear in mind, though, that there are far more topics in the realm of Mediterranean gardening than can possibly be dealt with in one issue – but if you feel there is something important that we have ignored, do write and tell us. Better still: send us an article on the subject. Whether you choose to make your point in one sentence or in 2,500 words, we shall be happy to print it. Remember this is a forum where everyone has a right to his or her opinion.

And we do not print just words, as you can see. Illustrations are also needed. We know that there are practising artists among you (and doubtless others who are keeping modestly silent about their talents). We welcome black and white illustrations – pen drawings, woodcuts, etc. These can range in subject from botanical illustrations to compositions which celebrate the unique character of the Mediterranean garden landscape. However much we are concerned with the technical aspects of horticulture, it is the visual impact of plants and gardens which affects us all directly. So let's make the journal a showcase for the artist too.

Summer is the time for planning ahead in the garden (preferably in the shade with a cool drink to hand). It's now that we take a long hard look at what we've achieved so far and

consider all those alterations and additions that we're going to make after the autumn rains. Not a bad time, either, for thinking about the future of the MGS. Like a new garden it has come into being in a short time, but things will take years to mature. And at the moment there are still a lot of gaps.

Our membership is growing steadily, but being spread over such a wide area we are rather thin on the ground in many places. This, of course, makes it difficult to organise the kind of local activities which most people want. Interestingly, around one third of our individual members are based in Greece – and half of these are in the Athens area. This is certainly *not* because Athens is the horticultural hotspot of the Mediterranean. (In some other places, notably parts of Spain, established societies which have affiliated to the MGS are catering to the needs of large numbers of local garden enthusiasts.)

We could not have acquired our present international membership without the coverage given to the society by a number of leading journals and periodicals – publicity for which we are extremely grateful. But clearly we are not going to reach every potential member in this way. Our experience here in Greece has shown that making local contacts is an effective way of bringing in new members. If we are to continue to grow, and if local activities are to be adequately supported, this is going to have to come about through local initiatives.

The MGS is *not* an empire which is spreading out from the centre. It is a network of people throughout the Mediterranean, together with others outside the region, who share a common interest. Sparoza is the junction through which we all keep in touch, but every local area has equal importance. Ideally, everyone should be developing in parallel. At the moment the decisions are being taken here, but this is inevitable at this early stage. As MGS activity grows in other countries, we may have to reconsider how the society is organised. We already have Eurocrats in Brussels – we don't need Hortocrats at Sparoza.

Most of the time we gardeners make quite modest demands. Either we want to know the name of a plant, or we want to know how to keep it alive. The answers to these questions can often be provided by other gardeners – hence the need for local contact groups. But there are also wider issues which need to be

addressed by the society as a whole. For a foretaste of things to come, see Heidi Gildemeister's proposal for 'A Mediterranean Plant Finder' on page 45. An ambitious project? Perhaps – but surely feasible given time. What about the lack of horticultural training at all levels in our region? And our botanic gardens: are they adequately supported? Should we – directly or indirectly – be involved in the restoration and maintenance of historic Mediterranean gardens? Two interesting and highly practical suggestions we have received are 'Local Guides to Gardens and Places of Interest for Plant Lovers' and 'A Register of Mediterranean B & B for Garden Lovers'. We hope to see these proposals developed in forthcoming journals.

Some of these projects are too big for an amateur society which is still in the process of finding its feet. But as the old saying goes, "Great oaks from little acorns grow".



**A
NATIVE
MEDITERRANEAN
GARDEN**

Heidi Gildemeister



Clematis cirrhosa

We found the farm tucked away between the mountain and the sea late one afternoon at the end of summer. Shepherds and sheep had been the only inhabitants for as long as anybody could remember. Pirates could have climbed over the cliffs, as in centuries past, and we would not have been surprised. The afternoon was drawing to an end and the return trip was long. There was no path in sight to guide our steps.

Touched by the primeval beauty of the place, love was immediate – and lasting. Years later we bought the farm, discussing for days where to locate the house so it would not blemish this sacred place. It was nature left to herself, with maybe a passing shepherd looking for a lost lamb or collecting wild asparagus. Today we still battle to protect the unspoilt wilderness. The peace of centuries still haunts the hillsides with their silent shades. Our ‘pool’ is a pond where water collects on bedrock, and swallows fly low to catch flies or to drink.

While the house was being built, ‘gardening’ commenced with a gardener who loathed plants. Fencing was set up to keep goats and sheep where they belonged – *not* in the garden... Later, heaven sent me Lorenzo who liked plants, stones – and work. South America sent me Wil who had inherited from Indian ancestors a sense of beauty and endurance. It was he who pushed me along when strength seemed to fail. Mentioning both at the beginning seems essential since they made our garden possible.

Once the initial clearing of brambles and *Smilax aspera* was over, I looked around. What I had found on arrival were slopes worn bare by the hooves of grazing sheep. But I also discovered olive trees of all ages and shapes and a century-old oak (*Quercus ilex*) which later became the principal feature of my garden. Also, the treasured mastic tree (*Pistacia lentiscus*) which would be clipped over and over until it ‘fattened’, mimicking well-tended box, and many pines (*Pinus halepensis*), all mutilated by violent storms, occasional snowfalls and grazing. Delivered of crippled growth, they would start to stretch and grow into splendid shapes. I also came upon the valuable strawberry tree (*Arbutus unedo*), the elegant myrtle (*Myrtus communis*) and the sturdy laurustinus (*Viburnum tinus*) which, in the protected environment of the garden, shot up to towering heights. A ‘common’ plant, nothing exotic, it is still a memorable winter sight when week-long in flower. I found many rock roses (*Cistus albidus*). Sheep do not touch them and farmers loathe them, and I know that I have to watch them for invasiveness. Lavender, rosemary and thyme, and the shrubby Mediterranean palm (*Chamaerops humilis*) became invaluable assets in years to come. *Ruscus aculeatus* carried red berries at Christmastime. Wafts of scent came from honeysuckle (*Lonicera implexa* and *L. etrusca*). White foaming curtains of winter-flowering *Clematis cirrhosa* covered shrubs and trees and later inspired me to use *C. montana* and *C.* ‘Mme. Le Coultre’ with giant flowers. (*C. tangutica* has been a failure although tried often.) The scent of violets hidden in the grass beckoned to me. I potted a few and later let them take over under shrubs.

I meant to preserve the existing elements of the former ecosystem as a functioning plant community. The garden was meant to look ‘natural’, nothing to distract from the glorious view of the sea and the sky, from the beauty of old tree trunks and the restful green masses of the mastic bush. From the beginning and despite a scorching summer sun, I felt it was a challenge to have year-long greenery around, and a profusion of blooms throughout each month. I also intended to bring structure into the garden, simplicity in lines, until it would all melt into one harmonious view. A lawn was laid in front of the house like a carpet at the foot of the splendid view of mountains

and the sea. Level walks were set out to provide the important 'horizontals' which would help against erosion. Complemented by several garden benches, they permitted garden pursuits to go on through the mild winter and let one enjoy the garden dry-footed at all seasons.



Lonicera implexa

Mediterranean gardeners have many joys accompanied by a few concerns: water amongst them. I did have some water – enough to irrigate a lawn near the house, roses around the terrace pillars and newly planted vegetation, but none to squander on bubbling springs or dripping grottoes. Plant choice had by necessity to be waterwise, which led me to a passionate research into drought-tolerant plants. Their wide range is staggering and their ongoing bloom magnificent. A few grow in most gardens, usually watered unnecessarily. After having tried out their garden-worthiness over the years, I have compiled this experience into a book for the benefit of my fellow gardeners. In this undertaking I was grateful to several botanic gardens in mediterranean climates for their valuable advice.

It was the urge to cover barren earth and rock which prompted my plantings – to maintain the humidity of the soil as best I could. I revegetated all places where only a wealth of healthy weeds grew which were striving to cover bare soil to keep it from being washed away – as is nature's way. I planted anything I could lay my hands on, often plants I then did not know. It was not easy. Not every plant is willing to flourish in 10cm of earth over bedrock. However, many drought-tolerant

plants did, and their greenery today veils the erstwhile bare rock. In the shade under shrubs and in the filtered light beneath tall trees I tried out viburnums, peonies, hellebores, or those from related mediterranean-climate regions. *Pistacia vera*, native to Greece and yielding the nut, is still on my list. Once plant and soil life were established, I witnessed the appearance of seedlings and their subsequent rapid growth.

Before a garden nearby was cleared of all growth, I was permitted to salvage baskets full of *Iris* × *germanica*. They were established under large olive trees. More sophisticated sisters in many colours had the habit of fading away after a season or two. From the same garden also came the medicinal *Aloe arborescens*, now filling many cracks. In winter their orange flowers stand out against a blue horizon. Their offspring were planted in generous patches with little work involved.

I hoped for many magnolias. In shade, acidic humusy soil near mastic and oak seemed promising. A few failures later, I accepted that our air is too dry, our soil too shallow and water too scarce. Still, the brilliant leathery foliage of *Magnolia grandiflora* is well equipped to stand Mediterranean summers. Espaliered against the house, it is glorious in flower.

Everybody asked for roses. Grown beautifully elsewhere, it seemed more challenging to experiment with lesser-known varieties suited to the mediterranean climate, and to find out about their best garden use. On the north-west side of the house 'New Dawn' blooms with abandon, far-reaching branches covering column and terrace. 'Schneewittchen' prefers light shade and a cooler position, and excels in autumn and spring. *Rosa banksiae*, a reliable drought-tolerant cover, delights not only with its white flowers but also with healthy apple-green spring foliage. Once I found the place large enough to suit its vigorous shoots, 'Climbing Mermaid' certainly did climb, reaching to roof of the house and threatening to blind all windows. The Mermaid's early child covers the garage roof, branch upon branch piling even higher.

In the early days, three tiny *Elaeagnus* × *ebbingei* [now *Elaeagnus* × *submacrophylla*] were given to me. Over the years they grew to imposing size, and keeping them within bounds provides masses of green waste for mulch. Planted where no

summer water reaches, their rooted cuttings and seedlings cover unsightly spots with their masses of shiny leaves. The scent of creamy flowers entices, and edible fruit delights the passer-by.

Escallonia, *Abelia* and *Euonymus* were also early acquisitions. How they came into the garden, I do not remember. No index cards were kept at that time. A happy choice (or gift?), they come to my rescue wherever and whenever a drought-tolerant cover is needed. They divide easily and cuttings strike well. *Carpenteria californica* was another early choice and grows as well here as in protected English gardens.

Lavender thrives where no summer watering reaches. Dried flowers scent drawers and in former times were swept into corners of the drawing room. One can never plant too many.

In between, to keep us cheerful, bulbs by the hundreds (or was it thousands?) were planted – not always in the right place. Many species of *Anemone*, *Cyclamen*, *Hyacinthus*, *Narcissus*, the lovely Mediterranean *Tulipa saxatilis* and *Homeria collina* [now *Moraea collina*] from the Cape; also white *Freesia* near the house. But *Iris reticulata* ‘Cantab’, while looking glorious one spring in front of flowering rosemary, never appeared again. In rock pockets, planted a foot deep in soil from the oak woods, *Lilium henryi* seeded itself. Calla lilies (*Zantedeschia aethiopica*) spread happily. Snowflakes (*Leucojum aestivum*) in large patches and the golden autumn-flowering *Sternbergia lutea* were found in location. Shocking-pink *Gladiolus illyricus* bloomed in spring and, coming up all over, tended to look dotty. But *Salvia officinalis*, planted in the centre, ‘pulled it all together’, its colours complementing the blooms of the gladioli.

Maintaining this cheerful and exuberant growth and getting it back into shape results in abundant ‘green waste’ each year. A shredder turns this cherished by-product into valuable mulch. Heaped generously around all plants, it conserves humidity in the soil and lets me face the long summer drought with less concern. Mulch also keeps planted areas weed-free. In spring and autumn when weeds come up most forcefully, a string mower prevents them from seeding. This rich varied mulch, occasionally enriched by ‘hoof and horn’, bonemeal or wood ashes from our fireplace, is also what I feed my garden with. It

repays me with vigorous health. The rare health problems are often simply dealt with by secateurs and the ensuing growth is usually sound. Artemisia tea from our own plants discourages aphids. I coddle infants, but grown plants which continue to cry out for help seem a mistaken choice, and I look the other way when they are discarded.

Propagation became not only a favourite pastime but also a necessity. Ten acres gulp up an untold number of plants and only close planting will prevent weeds from coming up. Fascinated, I watched a snippet turn into a fully-fledged plant, and experienced how fresh seed (our own) germinated best. Iridaceae are so 'easy' that by now I am fortunate enough to grow countless species. In the warmth of the house our first Christmas tree shed a bagful of seed on to the floor. All windbreaks now circling the orchard are descended from it (though few are as *pyramidalis* as I would have liked.)

Today I often hear, "You are lucky – in your garden everything grows by itself", which tells me that I may have achieved the natural look I am aiming for. What may not be apparent is how much thought has been given to choosing planting sites, how much trouble taken in preparing them, and how much care given before plants are established and faring on their own. How can I put into a thousand words what took twenty years to achieve?

For me this is my garden – I cannot judge it any more. What is it like? I do not know. How does it compare to other gardens? I cannot tell. But I know that by now I am part of it and that 'slaving for it' means happiness.

Before creating her present garden on a Balearic island, Heidi Gildemeister's gardening experience ranged from Switzerland to South America. Her particular interest centres on the use of drought tolerant plants, and this topic will be an important feature of her forthcoming book Mediterranean Gardening, due to be published this year. Heidi Gildemeister is a member of several botanical societies in Mediterranean climate regions, and contributed to The New Royal Horticultural Society Dictionary of Gardening.

SECOND HOME GARDENING IN THE MEDITERRANEAN



Ebenus cretica

Margaret Likierman

There must be many like me who struggle to maintain a Mediterranean garden with intermittent attention and equally intermittent watering. By ‘Mediterranean’ I mean not the privileged coastal strip where citrus trees grow and palms and strelitzias, but the Midi area of France, which has a climate that is harsh for plants, with winter temperatures between -5 °C and -10 °C and summer highs of 35 °C. The Mistral northwesterly wind blows 100 days a year and hot southwesterlies most afternoons in summer.

I want to consider one narrow topic from the vast subject of Mediterranean gardening. Namely, how to set about making a garden which, in spite of having no one to water it and no automatic irrigation, nevertheless will give flower colour in the summer holiday months. After eight years of experiment I know it can be done, but you have to stick to a few principles that are not always easy for English gardeners.

The first principle is to plant in autumn – and I know how awkward it can be to make the long trip in the October half-term. You simply have to load up the car with plants and go. I still take plants with me, as well as buying locally, as our nurseries often do not have enough of what I want, or their plants are well past their sell-by date.

I have tried to plant at other times, using every possible method. I thought young plants out of 3-inch pots, planted at Easter with plenty of humus round their roots, might be well established by the time the summer drought came, but by July they had simply disappeared. I tried planting bigger things. Surely thyme would do, I thought, so I planted a sturdy clump in a litre pot. By July it was just a tangle of brittle twigs. The same drill at the end of August produced the same failures. There's no way round the basic fact: you have to wait for reliable autumn rains.

Another snag with autumn planting is that many of the things you want to plant are 'half hardies' which English nurseries have ready for sale in early summer. By October supplies are harder to come by. I find the easiest way is to buy when I see things in summer, enjoy them here in England until autumn, then cut everything hard back before the journey. Some things will by then have made good pot plants and the cut material can often be used for cuttings. The current boom in 'conservatory plants' has improved this situation somewhat.

The second of my rough and ready rules is to plant bold quantities of rugged subjects which flower in summer in your area. This rule is wretchedly restrictive to the keen English gardener: first because the list of such plants is very short and secondly because it comes more naturally to try several things rather than load up the car with a dozen examples of the same plant.

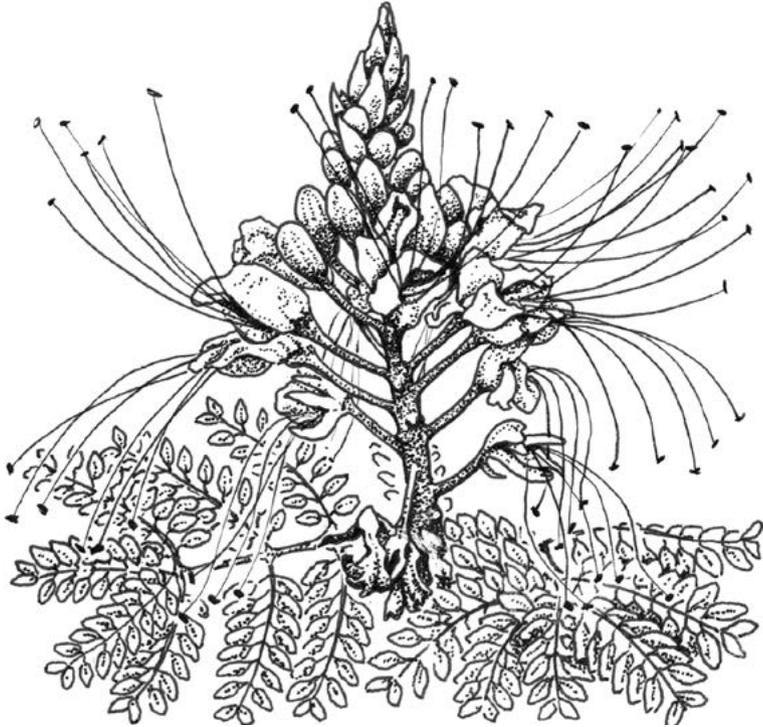
So much for the 'how to do it'. Now for the 'what'. Here are the key plants which work where I am:

At the small tree/large shrub level:

- The deciduous *Albizia julibrissin* is usually grown as a small standard tree with a spreading canopy of pinnate foliage, which is nice to sit under. The fuzzy pink flowers are showy in July and August.
- *Caesalpinia gilliesii* is a light and airy bright green shrub, with big yellow flowers made exotic by a long protruding tongue of crimson stamens. It isn't thorny or rampant like *C.*

japonica, is a reliable August flowerer, and is deciduous and tough.

- *Lagerstroemia indica*, the Crape Myrtle, also has very showy, crimped flowers, in shades of pink or white. It is deciduous but lovely all through the year because of its pale, mottled bark.



Caesalpinia gilliesii

At medium shrub level (1-2m):

- *Alyogyne huegelii* ‘Santa Cruz’. A lovely shrub making over one metre in a season with me, having big purple flowers like *Abutilon vitifolium*, and lacy green foliage. *Alyogyne hakeifolia* has larger paler flowers and leaves reduced to threads. I have grown these free-standing but I think they would train easily and look good against a wall.

- *Anisodonteia capensis* is an open-branched shrub with small, bright green leaves and little clean pink flowers.
- *Caryopteris* × *clandonensis*, familiar though it is, is a must for August and September, producing its haze of blue flowers in the most inhospitable sites. Prune hard after flowering. Excellent red foliage throughout winter.
- *Ebenus cretica* is a first-rate plant with grey leaves, which by July has conspicuous pinky-brown seed heads.
- *Greyia sutherlandii*. A good foliage shrub with big green leaves. My four-year-old plant has not flowered yet. Youth? Or is spring still too cold for its red flowers?
- *Hibiscus moscheutos*. Over big, soft green leaves it bears a succession of enormous flowers of wine, pink or white. The plants are totally herbaceous but the bare space in winter does not bother me as I have plenty of evergreens around. (While the plants are still low, a few *Allium rosenbachianum* poke up through them.)
- *Justicia suberecta* [now *Dicliptera sericea*]. This is a winner. It has orange-red tubular flowers for weeks, perfectly set off by its velvety grey foliage which makes a shapely one-metre mound.
- *Lavatera olbia* 'Rosea' would be bigger in England but unwatered in Provence it makes 1.50m flowering mainly in July. The flowers do not last as long as in England.
- Oleanders are overwhelmingly the best providers of colour in June, July and August. Mediterranean nurseries have them in red, pink, white, peach and yellow, and in many shades. You can let them grow into 10-foot shrubs or prune them hard back in spring. If unusually cold weather cuts them back, they will mostly come again from the base.
- *Perovskia atriplicifolia* with lavender spikes is another familiar plant which revels in Mediterranean heat. Its foliage is a very white grey and the flowers do not last. It has good evergreen foliage if it is cut back hard after flowering.

- I have also tried (but failed with) *Indigofera gerardiana* [now *Indigofera heterantha*] of the feathery leaves and leguminous pink flowers: it ought to have been good but my plant just refused to flourish.

Small shrub/herbaceous plant level:

- *Ceratostigma willmottiana* bears its true-blue flowers in August and September.
- *Gaura lindheimeri*, a herbaceous plant with clouds of pink or white flowers, is rightly popular, for it is in flower for months without a drop of water. It grows up to one metre tall.
- *Knautia macedonica* weaves about the border, pushing its pure crimson globes through all the neighbouring plants and adding a bit of spice to the picture.
- Lavender. Avoid *Lavandula stoechas*, which flowers earlier and has poor summer foliage. *L. angustifolia* and *L. lanata* are good but the best is *L. dentata* with broad toothed leaves either grey (more chic) or green. It flowers for nine months of the year.
- *Sedum spectabile* and *S. telephium* are both excellent, staying succulent and fresh all through summer. Bees love their pink flowers but local butterflies seem indifferent to them.
- *Zauschneria* [now *Epilobium canum*] is a must. One of the rare plants which is better without water than with it. All the orange-flowered types are good. The white is lower and spreads amiably, making a good ground cover. The pink-flowered form is weaker and less effective in sun, though good in shade.

Prostrate/ground cover:

- *Ceratostigma plumbaginoides*, though deciduous, is a miracle of fresh green leaves and bright blue flowers in August and September and is as good in shade as in sun.
- *Bidens ferulifolia*, with appealing yellow flowers and ferny foliage, is popular in garden centres as a hanging-basket plant. In the ground, a single plant will cover almost a

square metre and will still be in flower in November. It exhausts itself in three years but is easy from cuttings.

Climbers:

- *Mandevilla laxa*. This never fails to refurbish its twining stems and produces long, white, scented trumpets in summer.
- *Podranea ricasoliana*. This makes three-metre shoots from the base and has large pale pink trumpet flowers in late summer.



Podranea ricasoliana

Foliage plants:

Even a garden dedicated to summer colour looks better with some foliage plants as a foil. Here, too, are traps for the unwary, for many plants which have good foliage in high summer in England, and which are indeed Mediterranean in origin, in their native climate flower *before* the great heat and then crouch down miserably until revived by autumn

rain and cooler temperatures. In my garden last August the following looked wretched: *Salvia officinalis*, *Thymus* spp., *Santolina rosmarinifolia*, *S. neapolitana*, *S. chamaecyparissus*, *Ballota pseudodictamnus*, *Choisya ternata*, *Phlomis* (all), *Cistus albidus*, *C. purpureus*.

- Tall: *Rhamnus alaternus* (not *R. alaternus* ‘Variegata’), *Eriobotrya japonica*, *Arbutus unedo*, *Pittosporum tobira*, *Ceanothus* (the evergreen species).
- Medium: Rosemary (the bright green-leaved ones), gummy-leaved cistus such as *C. palhinhae*, *Euphorbia characias*, *Pittosporum tobira* ‘Nanum’, almost any species of yucca.
- Low: *Raphiolepis*, *Alyssum saxatile* [now *Aurinia saxatilis*] *Aristea ecklonii*, prostrate osteospermums such as *O. ecklonii* and *O.* ‘Cannington Boy’.
- Grey/White/Silver: *Lychnis flos-jovis* [now *Silene flos-jovis*] *Atriplex halimus*, *Cassinia* ‘Ward Silver’, *Centaurea cineraria*, *Convolvulus cneorum*, *Artemisia* ‘Powis Castle’.

Excellent in a different way is a silky curtain of *Stipa tenuifolia* that is very silvery by July. I must pull out hundreds of seedlings of this grass every summer but I always forgive it.

All the plants I’ve mentioned look well and flower in the summer without watering once they’ve established. However, I’m not going back on what I’ve just said if I also encourage you to give them a good soaking (if you can be bothered when you’re there on holiday) for everything is glad of a drink in that heat. Even one good soaking is better than nothing. You should on no account water every day but if you do it at (say) 10-day intervals you do not risk ‘spoiling’ your plants. They will only be the stronger and more beautiful for it.

I know that the plants I have written about will look and behave differently in England or in other climatic conditions. I myself might have imagined that under the Mediterranean sun things would grow much bigger and better. Some do – but I see shrubs in England twice the size of my specimens, which hunker down out of the Mistral and have to make do with a minimum ration of expensive water.

I've been gardening on and off for twelve years, a mere infancy in gardening terms. I wonder if there are other members who garden in France, or who soldier on with long-distance gardening at a holiday place. If so, it would be interesting to hear of their experiences and to find out how others manage. What do you do about watering, if anything? What can you grow without irrigation? Do you try at all to multiply plants and, if so, how – when you are not there most of the time?

(This article first appeared in Borderlines, the journal of The Half Hardy Group of the Hardy Plant Society. We are indebted to Borderlines and to Margaret Likierman for permission to reprint.)

PLANTS THAT STAND ON THEIR HEADS



Joanna Millar

My first visit to South Africa was in 1980, and I was excited and curious to see how plants from the Southern Hemisphere, but with a similar (mediterranean) climate, would adapt to living 'upside down'. I therefore wrote this article as a result of my experiences, as it was interesting to see how certain plants coped with the change of seasons.

Our first view of Cape Town was through blinding rain. We could not believe our eyes and felt that we had been deceived; we had come for sunshine and warmth, but for two whole days we endured a steady drizzle and a cold wind. We did not even change out of our winter clothes and indeed were glad of them. However, the freak weather of December 1980 was soon over; the sun came out and it was sparkingly clear and warm with a luminosity that is unique to the Cape.

Our first priority was, of course, to visit Kirstenbosch, the centre of the Botanical Society of South Africa on the eastern slopes of Table Mountain, with its 560 hectares of garden. Many old friends in cultivation in our own gardens are growing there in their natural habitat: such as geraniums, pelargoniums, strelitzias, arums, tecomas and agapanthus. We spent the whole

day there (although one needs weeks) and I joined the Botanical Society. Each quarter I receive a beautifully illustrated journal giving descriptions of plants, gardens, botanical expeditions and so on – but far more important to me is the free annual distribution of seeds to each member. As one from overseas, I am allowed 15 packets which are chosen from an exciting catalogue of bulbous plants, shrubs, annuals and succulents, not to mention over 50 different proteas and leucadendrons, and nearly 30 kinds of erica.

Our garden in the Alpes Maritimes is nearly 1200 feet above sea level, longitude 7.3°E latitude 43.44°N, crouched on the side of a mountain and facing due south. It thus receives the maximum amount of sunshine but, because of its altitude, also receives frosts and sometimes snow. One year we suffered for nearly three weeks from a nightly fall to 0 °C, and several nights to -5 °C and -10 °C. We are therefore more limited in what we can grow than those people on the coast where the temperature rarely falls to freezing.



Agapanthus

I brought back from South Africa white agapanthus, beautiful bulbs which had only recently finished flowering in Natal but which without difficulty ‘stood on their heads’ and flowered again the same year (in July). The following summer they were

thoroughly acclimatised and were even more profuse, producing huge white heads of flowers nearly nine inches in diameter.

The next were three beautiful *Eucomis humilis*. Having no experience of these I put them in the cold greenhouse where they too 'stood on their heads' and flowered dramatically in July of the same year. Drawn to the light, they grew at least two feet, and their heads of tiny green flowers topped with the curious tuft of leaves (from which they get their name Pineapple Plant) were eighteen inches long – a record? They are now in the garden where they are doing well, but with smaller flower heads. I have also grown them from seed and they have survived many winters outdoors.

Other bulbs included *Hypoxis obtusa* which has not survived outdoors although one plant remains in the greenhouse. However, it did flower again a few months after its arrival here, in June, and continued for two months.

Dimorphothecas (now *Osteospermum*), which need no introduction, grow well from cuttings brought back from South Africa, starting to flower in early March and stopping only when their unsightly straggling stems are cut back. *Arctotis aspera* withstood -5 °C last winter and looks set to flower again. *Plectranthus*, the vigorous indoor plant, is too fleshy to stay outdoors here but always flowers indoors at Christmas.

Tweedia coerulea [now *Oxyptalum coeruleum*], with its glorious blue flowers, has also grown well from seed and stood on its head, flowering in its first summer here. It has survived two very cold winters. *Sparmannia africana*, which grows well on the coast, flowered in its first summer but did not survive our winters.

While walking in Natal I found a strange plant growing wild with long spikes of small white flowers which turned into wicked-looking shiny black berries, supported on deep wine-coloured stems. I brought seeds home and up came the plants in profusion, flowering in their second summer and making a handsome show. One day, while driving through woods in the Alpes Maritimes, I saw *my* plant growing in the wild. When I described it to a friend and offered him one of these plants, he scoffed at it and informed me that it was a well-known weed, *Phytolacca octandra*. However, it remains in my garden as it is

beautiful and captivating. I understand that it is not a native of South Africa, but originated in either Mexico or Japan.

Growing in the same place as the *Phytolacca*, or pokeweed as it is called in English, I found and took seeds of *Asclepias physocarpa* [now *Gomphocarpus physocarpus*], which germinated in about ten days. It has grown profusely ever since. Sown in April 1981, it flowered in the summer of 1981: a dull greenish white flower – but its attraction is the curious inflated hooked seed pod which bursts open to disperse its little parachutes.

Dietes iridioides flowered in its first summer in early July and likes our climate, although the flowers are not as spectacular as those I saw at Kirstenbosch. *Zantedeschia rehmannii*, the pink arum, did not flower in its first summer but had changed its clock around by June 1982, and produced large flowers which lasted for many months and turned into beautiful seed pods. *Gladiolus crassifolius* has never flowered; it cannot decide which way up it is – nor can *Watsonia meriana*.

Now for some of the seeds sent to me from Kirstenbosch. *Littonia*, the lovely bell-shaped climber, made bulbs from seed. Planted in April 1981, they only flowered for the first time two years later; whereas *Aristolochia* (Dutchman's Pipe), planted at the same time, grew furiously and climbed to over six feet (1.8 m) in a sunny, sheltered position in the garden. It bore many of those curious brown and white speckled flowers in August of 1981, and drew wondering remarks from my many visitors. I am happy to say that both plants are still with me.

The first *Acacia karoo*, grown from seed in April 1981, was a very slow grower. It was planted out in the garden a year later but did not survive the following winter. On the coast it does well in a friend's garden. Happily, another one germinated for me in 1986, and flowers for me every spring.

Heteromorpha arborescens, described as the Parsley Tree, has grown well but slowly and has survived our winters: the trees are now over six feet (1.8 m) tall and still growing.

Several *Rhus* species grow well but slowly. *Rhus dentata* which, as its name implies, has very incised leaves, was planted out in the summer of 1983 and is now about six feet high. *Rhus leptodictya* [now *Searsia leptodictya*], the mountain karee with its graceful drooping branches and serrated leaves, did not

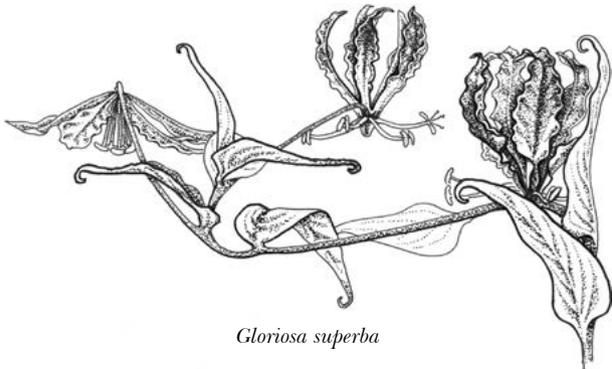
withstand the winter of 1985. *Rhus ciliata* was grown from seed in April 1981 and set outside the following April, where it has grown about six feet and put out many side branches; it has a most attractive pyramid shape, hardy and drought-resistant.

Rhamnus prinoides, the dogwood, has proved to be a success with lovely shiny leaves and is reasonably fast-growing. It makes side shoots but is not happy in cold weather. It is evergreen which is an advantage.

Cineraria geifolia has become a weed – albeit a very attractive one. *Ballota africana* is not happy in the cold, but has survived -5 °C. *Artemisia afra* is delightful and can, by careful pruning, be kept in a neat grey-green mound – very attractive and it smells nice too. *Hemizygia incana* [now *Syncolostemon incanus*] with its lovely, unusually pungent leaves, *Sutherlandia frutescens*, *Melianthus major* and *M. minor*, *Leonotis* and many more have been successful.

My only great disappointments have been *Buddleja salvifolia*: buddlejas normally grow so well with me and I encourage them because they attract butterflies – but this one never germinated. And the lovely moraeas – none of which will germinate for me. Is there a secret?

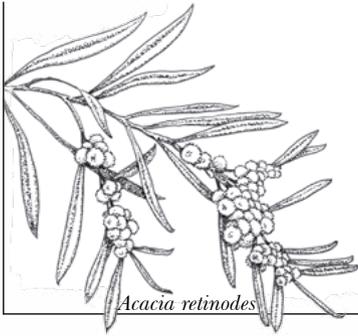
The star of the greenhouse is *Gloriosa superba*, which I grew from seed in 1986. It climbed profusely all over the greenhouse and produced its spectacular flowers in July. It sets seed and I know will give me another magnificent show again this year.



Gloriosa superba

In 1969 Joanna Millar and her husband bought a 200-year-old farmhouse in the Alpes Maritimes. The creation of the garden at Domaine du Prieuré will be the subject of a future article.

ACACIAS



Jeff Irons

Acacia is a very large genus, with about 1100 species. Because of their associations with gum arabic and the African thorn trees, they are often thought of as being mainly African. In fact over 700 of them come from Australia, where they dominate the interior and other semi-arid regions. Many Australian acacias come from parts of the country with a mediterranean-type climate, or one with a pronounced winter maximum in the rainfall. Among these acacias are several with a low growth habit, often wider than high. All are heat-tolerant and are suitable for container cultivation.

Acacias have an amazing variety of foliage shapes. All germinate with bipinnate leaves and while some species keep such leaves all their lives, others do not. What happens is that the stalk functions as a leaf. It is known as a phyllode, and it is these phyllodinous species which show the great diversity of 'leaf' shape.

Nurseries rarely have a wide variety of acacias in stock, so the more uncommon ones will have to be raised from seed. These seeds have a hard seed coat, so need pre-treatment before sowing. The simplest method is to pour boiling water over the seed, leave it to soak for 2-24 hours and then sow. Seeds which float are infertile and should be discarded. Some growers try to assist water penetration by pricking the end of the seed with a darning needle, but this is practical only with large seeds. A few acacias can be damaged by boiling water and water at a lower temperature should be used. The most common of these is *Acacia suaveolens*, which needs water below 80 °C. Another is *A. terminalis*, but coming from

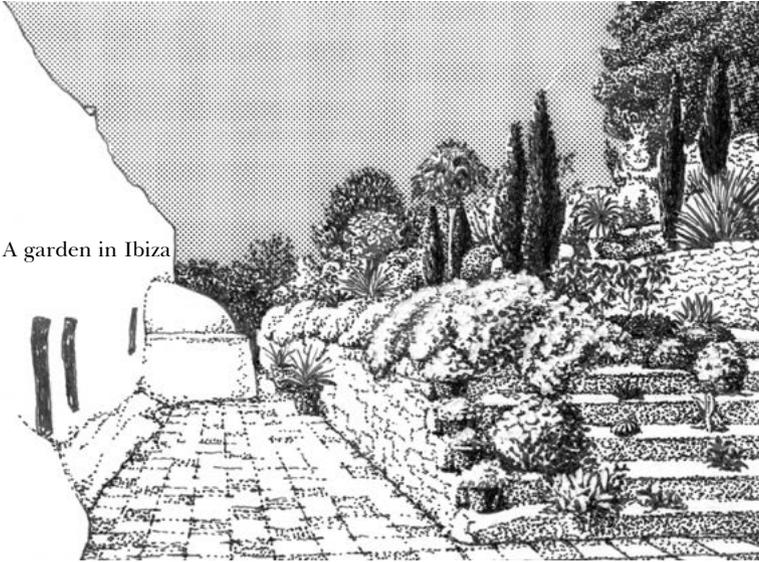
a summer rainfall area it cannot be recommended for the Mediterranean. I like to germinate my seeds on moist paper in a covered Petri dish, but if you prefer traditional methods, use an open mix with a pH between 5 and 6, then add a little borax to your potting mix.

Keep an eye out for the pale yellow new growth which indicates iron deficiency. Very few acacias germinate well at low temperatures, and for most 20-30°C is ideal. Expect a mixture of immediate germination and delayed germination, perhaps over eight weeks. Transplant when about 1cm high, pinching off excess root between finger and thumb.

What follows is a selection of species judged to be suitable for Mediterranean areas. With a garden in latitude 53°N I have not grown any of them, and my knowledge is taken entirely from books. Some which I know grow well in coastal Catalonia are: *Acacia argyrophylla*, *A. brachybotrya*, *A. baileyana*, *A. calamifolia*, *A. cardiophylla*, *A. cometes* [now *A. lachnophylla*], *A. drummondii* (probably unsuitable for Greece or Cyprus), *A. meisneri*, *A. paradoxa*, *A. pravissima* (surprisingly resistant to alkaline soil) and *A. retinodes*.

- *A. argyrophylla*: 3-4m high × 4-6m wide. Silvery phyllodes, young growth golden, globular yellow flowers Feb.-May, frost-hardy.
- *A. brachybotrya*: 2-5m high × 3-6 m. Similar to *A. argyrophylla* but less silvery, lime-tolerant, flowers Jan.-May. Has a wider occurrence in Australia, and some forms come from summer rainfall areas.
- *A. baileyana*: 5-8m × 5-8m. The well-known Cootamundra wattle. Bipinnate leaves, yellow flowers Jan.-Mar. Withstands moderate coastal exposure. Prune after flowering to prolong life.
- *A. cliftoniana* [now *A. congesta* subsp. *cliftoniana*]: 0.1-0.5m × 1-2 m. Well-drained light to heavy soil, good for embankments, profuse deep yellow golden flowers Feb.-April.
- *A. calamifolia*: 2-5m × 2-4 m. Globular golden yellow flowers between January and May. Needs partial to full sun. Frost- and lime-tolerant, withstands short periods of waterlogging.

A garden in Ibiza



- *A. cardiophylla*: 0.5-4m × 1-1.5 m. Small globular golden yellow flowers in dense axillary racemes April-July. Drought- and frost-tolerant. Prune regularly.
- *A. cometes* [now *A. lachnophylla*]: 0.2-0.3m × 0.5-0.8m. Globular flowers in dense spikes at branch ends June-Nov., and sporadically. Likes sunny, well-drained soil. Bushes become sparse with age and should be pruned regularly.
- *A. drummondii*: 0.5-2m × 1-2m. Leaves usually bipinnate, sometimes pinnate. Bright golden yellow rod-shaped flowers on ends of branchlets Jan.-April. Prefers partial shade. Prune after flowering. Variable from seed and some flower poorly.
- *A. glaucoptera*: 0.5-1.5m × 2-3 m. Blue-green phyllodes, new growth can be purple-red. Deep yellow globular flowers Feb.-May. Tolerates slightly alkaline soils, prefers partial sun.
- *A. hemiteles*: 1-2m × 2-3m. Curved phyllodes, profuse globular yellow flowers in clusters at branch ends April-May. Stands full sun and coastal exposure.
- *A. lasiocarpa*: 0.5-2m × 1-3m. Bipinnate leaves, globular flowers Dec.-Feb.

- *A. meisneri*: 3-4m × 4-6m. Light blue-green phyllodes, profuse globular yellow flowers Nov.-July. Stands waterlogging for short periods.
- *A. paradoxa*: 2-4 m. x 2-5 m (Kangaroo Thorn). Very ornamental phyllodes, profuse golden yellow flowers Feb.-April. Withstands limited inundation, extended dry periods, frost and alkaline soils. Declared a noxious weed in the Australian State of Victoria.
- *A. pravissima*: 4-8m × 4-8m. The Ovens Wattle from fairly high parts of Victoria. I was surprised to find this species withstanding second-line coastal exposure near Barcelona. Triangular blue-green phyllodes and masses of globular yellow flowers Feb.-April.
- *A. retinodes*: 4-8m × 3-7m. Globular yellow flowers in racemes shorter than the phyllodes over most of the year. Withstands short periods of waterlogging, slightly saline soils and considerable coastal exposure. Moderately frost-tolerant. Not usually long-lived.
- *A. rossei*: 2-5m × 1-3m. Bright green phyllodes. Deep yellow globular flowers on radiating slender stalks near branch ends Jan.-June. Recommended for semi-arid areas, withstands a limited amount of coastal exposure.
- *A. suaveolens*: 1-3m × 2-5m. This species occurs down the east coast of Australia and across into South Australia: S. Australian seed should grow well in Mediterranean parts. The creamy yellow highly scented flowers appear from October to April. It grows well in coastal areas, but will not tolerate severe salt spray. Responds well to pruning.
- *A. truncata*: 1-3 m × 1-3m. Pale yellow globular flowers Dec.-March. Wedge-shaped phyllodes. Found in coastal situations with shallow sand over limestone. Responds well to pruning. When first collected by Europeans, this species was described as a fern!

In conclusion, please do not call your acacias “mimosas”. The two are different. Acacias have more than 10 free stamens while mimosas have 10 or fewer stamens. The so-called “florists’ mimosa” is an acacia, as is the “mimosa bush” of the Farnese Gardens. Plants with more than 10 stamens, that

are not free, belong to various other species and are mostly tropical.

Note: All flowering times have been changed by six months to fit in to the Northern Hemisphere.

Jeff Irons is Secretary of the Australasian Plant Society.

The Nindethana Seed Service offers a wide range of acacias and many other native Australian plants. Write for the Export Seed List to:

Nindethana Seed Service
RMB 939
Woogenilup 6324
W. Australia

Members of the Wild Flower Society of Western Australia (Inc.) also receive excellent seed lists. For details of membership write to the society at:

PO Box 64
Nedlands 6009
W. Australia



IN SEARCH OF THE PEONIES OF GREECE

Gian Lupo Osti

Not only did Greece give to peonies their name, a place in its mythology and a medicinal reputation, but on the Greek mainland and islands there are more native species and varieties of this genus than in any other single country. I have had occasion in the past to travel in Greece and to look at peonies in the wild: mostly *Paeonia peregrina* and *P. mascula*. A few years ago I also had the opportunity to collect some seed on Mt. Parnassus of what I suppose was *P. parnassica*: I am not sure because the seedlings were destroyed in my absence, during the repair of an irrigation pipe in my garden. I found the plant by pure chance: tired by a long walk in a wood of *Abies cephalonica*, I had lain down on the grass when I saw, just within my reach, under the protection of a group of big rocks, a single peony plant with two seed follicles. It was late July, so that the follicles were not yet open; I searched for other plants but without success. Anyway, I thanked Apollo Paionios (the god to whom the peony was consecrated, who lived on Mt. Parnassus), collected the seed pods and didn't open them until they were dry. I found six seeds, from which I obtained four seedlings – unfortunately destined to meet the untimely end I have just recounted. Ever since then I have planned to go again to Mt. Parnassus to collect some seed of that peony. Finally I was able to organise this trip for the beginning of last October and, being in Greece and having the assistance of the Greek Forestry Services, I decided to search also for the seed of other peonies endemic to Greece: *P. mascula* var. *hellenica*, *P. clusii* and *P. rhodia*.

The outcome of this trip was that I did not find *P. parnassica*, but I was successful with the other three. But then I consider that a 75% success rate is a satisfactory result. Moreover, I still hope that next year I might receive the seed of the Parnassus peony from the forester who was my companion in the search on that mountain. As it turned out, we had awful weather with very thick fog which not only limited visibility but also made it very difficult to maintain our bearings. As you may appreciate, wandering among woods and mountains searching for plants is something quite different from just going from one place to another, and makes it easy to lose one's sense of direction.

From Parnassus I went to Euboea for *P. mascula* var. *hellenica*, a peony very similar to *P. mascula* subsp. *russoi*, but with white flowers. With the help of the Greek Forestry Services we explored all the areas indicated in that excellent book *Peonies of Greece* by Stearn and Davis, published by the Goulandris Natural History Museum in Athens. But without any success; and I have to confess that I was disappointed. A certain feeling of discouragement started to affect the people of the Forestry Services: for just as success is a great incentive to perseverance, so being disheartened is the prelude to retreat. (By the way, the search for peonies is certainly not among the official duties of foresters.)

So that when, following these unsuccessful expeditions, the driver who had accompanied us in the jeep told me that his mother-in-law had seen some white flowers corresponding to the peonies I was looking for, near a small house she had in the mountains in Central Euboea, I didn't hesitate to go there immediately in a small rented car. The only aid I had with me was a photocopy of the illustration of *P. hellenica*, from the above-mentioned book, with an explanation written in Greek to say that I was looking for this plant for the purpose of collecting seed. This was so that I could show it to local people when asking if they had any information about the peony, as my Greek is almost nonexistent, being restricted to a few words of classical Greek from my remote schooldays.

And this is what I did when I arrived at a small sanctuary in Central Euboea, between the villages of Ano Seta and Kato Seta, showing the photocopy to an old woman who was harvesting

the fruits of a wild apple tree. (I did not decline her offer: the apples were delicious, small but fragrant and sweet.) The old lady was very interested in my questions and without hesitation called a young man, her son, working in a nearby field. They started a long discussion of which I could only understand 'louloudi', a very nice-sounding word which in the past few days I had learned means 'flower' in Modern Greek. The young man went with me across the valley as far as a brook bordered by plane trees (*Platanus orientalis* of course), and managed to make me understand that he had to go back to his work but that looking around I would surely find what I wanted. This in fact took me some time but finally I saw, in the distance among the fallen plane leaves, something red. Eureka! There were my peonies with the red caruncles shining conspicuously between the seeds. The leaves were starting to wither, looking more like the common representation of *P. mascula* subsp. *triternata* [now *P. daurica*] than the usual *P. mascula* all around the Mediterranean. I found a few dozen plants with seeds, so that I was able to collect enough also to take back some seed for the foresters who had assisted me on the previous search – we celebrated the event together with some glasses of ouzo!

Bolstered by this success, my subsequent searches on Crete and on Rhodes were very simple. On both islands the local Forestry Service knew exactly where I could find the plants and guided me to the spot. It was certainly not so exciting and, in some way, also not so gratifying; on Crete I found *P. clusii* in the Samaria Gorge, near the small church of St. Nicholas; on Rhodes *P. rhodia* again near another old church on Mt. Prophet Elias. I was told that both churches were built on the sites of old pagan temples. Incidentally, I always found the plants in extremely panoramic situations: peonies are very selective in choosing their residence...

Both on Crete and on Rhodes the plants were dry, almost completely dry, but still with the follicles full of seed. Also, Stearn and Davis in their book say that *P. clusii* and *P. rhodia* are similar (the only difference being the firmer textured leaves of *P. clusii*). But I found that the foliage is quite different in its size and general appearance, being much narrower and more finely cut in *P. clusii*. They are identical in their rootstock, with

tapering roots (as in *P. mascula*) but with a straight vertical development reaching, therefore, a far more profound depth than is usual in other peonies. The buds on the roots are also set more deeply below the surface than in other herbaceous species. Surely this is a consequence of the extreme drought they have to overcome during summer in the *Pinus halepensis* and *Cupressus horizontalis* woods where they usually grow. But this characteristic could facilitate their cultivation not only in (for example) Mediterranean and Californian gardens, but also in pots.

Now I have some years of happy expectation before me till I can look forward to seeing the young plants in flower.

Gian Lupo Osti is vice-chairman of the International Dendrology Society and founder of the Friends of La Mortola.

PALMS IN GREECE



Palm motif from Mycenaean pottery 1600-1200 B.C.

Panayotis Marselos

The palm tree in its various forms is associated with tropical or subtropical regions, such as the Middle East, particularly Mesopotamia and Egypt, North Africa in general and of course all the tropical regions of the planet: Polynesia, tropical Australia, Africa, Asia, America etc.

It is perhaps surprising to realise that 200 genera of palm have been described with 4,000 species (all of them highly decorative), covering a wide range as regards their size and leaf shape, the edibility of their fruits as well as the usefulness of other parts of the plant (trunk, wood, fibre, oil, flour, sugar, pharmaceutical and industrial raw material and so on). Thus we see both small species, such as *Chamaerops humilis*, and giant species such as *Lodoicea callipyyge*, whose leaves are six metres long and two metres wide and whose fruits weigh 20 kilos, while the trunk attains a height of more than 30 metres. The different species also show a wide variation in the thickness of the trunk, for example in *Balaka seemannii* which is used by the Fiji islanders to make spears and lances it is only 2-3cm (the wood, like that of all palm trees, is extremely hard). There are also palm trees which scramble through other trees or are low-growing creepers, like the genus *Daemonorops* whose trunk is even more slender (15-20 mm.). Among palms with a larger diameter of trunk is *Phoenix canariensis* (often up to one metre).

Another characteristic which varies widely in palms is the foliage and the general appearance of the crown. Leaf shape may be divided into two main types: fan-like and fern-like. Among the fan-like species we see leaves that are sometimes very fine and arranged in a radiating pattern (*Chamaerops humilis*, *Copernicia cerifera* [now *C. prunifera*]) and sometimes broad and rounded, resembling papyrus (*Thrinax*) or circular shields (*Licuala peltata*).

The three species which we encounter most frequently in southern countries of the Mediterranean with a subtropical microclimate are *Phoenix canariensis*, *Washingtonia filifera* var. *robusta* [now *W. robusta*] and *Pritchardia beccariana*, although several other species may also be seen and do well, among them *Chamaerops humilis*. Possibly native to the Mediterranean is *Phoenix theophrasti*, found growing wild in eastern Crete.

The Canary Island Palm gave a subtropical colouring to the coastal resorts of the Belle Époque of the early twentieth century from the Côte d'Azur to the Aegean and indeed is decoratively associated with the neoclassical architecture of the age. It remains the king of coastal gardens and of Mediterranean gardens in general. A species equally worthy of note is the Fan Palm (*Chamaerops humilis*) (it grows wild in Spain as well as in western Crete), which is used in various positions as a decorative element, usually as a bush. However, if the Canary Island Palm may be considered as the "neoclassical" species, in Greece we are privileged to have growing the most classical of species, *Phoenix dactylifera* or the date palm. Today in most regions its fruit rarely ripens, apparently because of changes in the climate over the centuries, although as a tree it grows well.

Is the date palm a Greek species? I believe that references to this tree in antiquity lend support to such a claim. Although it is believed to have originated in Mesopotamia and North Africa, where today it is of major economic importance, its presence in Greece goes back several millennia. According to the myth, Leto gave birth to Apollo under a palm tree which had sprung from the earth in Delos.

"So she cast her arms around a palm tree and kneeled on
the soft ground"

Homeric Hymn to Delian Apollo, 117

“Your Delos and your laurel boughs hate you,
by the feathery palm-tree that rose
where in chaste travail Leto bore you
unto Zeus. . . .”

Euripides, *Ion*, 920.

Cicero and Pliny also bear witness to the existence of this tree in Delos. It seems probable that the priests of the temple replaced it as it aged with a young tree, since it is highly unlikely that the same palm tree continued to survive beside the temple for more than ten centuries (the palm usually starts to decline after its 200th year), although Theophrastus refers to this particular palm when discussing the longevity of these trees (*Enquiry into Plants* 4, 13, 2). Palm trees were planted in many other parts of Greece; thus Pausanias states that they grew beside the temple of Artemis in Aulis:

“In front of the sanctuary grow palm trees, whose fruits, though not as edible as the dates of Palestine, yet are riper than those that grow in Ionia”

Pausanias, IX, XIX, 8

while according to Strabo (14, 645) there was a grove of palm trees beside the temple of Apollo in Chios.

Thus it is clear how closely connected the palm tree was with tradition and religion from pre-Homeric times, while later on Euripides, Xenophon, Herodotus, Theophrastus, Strabo, Pausanias, Cicero, Pliny and other writers mention it. Let us look at some references (given by P. Gennadius in his *Lexicon*) which provide general information on the sites, the varieties, the manner of cultivation etc.

“Palm trees grow there all over the plain, most of them yielding fruits, from which food is made and wine and honey... it is usually in palm wood casks that they carry wine...”

Herodotus, I, 193,194

“The march at length brought them to villages [in Babylon] where the guides directed them to get provisions. In

these villages there was abundant grain and palm wine and a sour drink made from the palms by boiling. As for the dates of the palm, the kind that one sees in Greece were put aside for the servants, while those kept for the masters were choice ones, remarkable for their beauty and size and with a colour like amber; other kinds they would dry and store away for sweetmeats. These made pleasant sweetmeats at a symposium but tended to cause headaches.”

Xenophon, *Anabasis* II, iii, 14

“This country [Babylon] produces much barley, more than any other country; indeed, they speak of a very large amount. From the palm tree, they produce everything else, that is, bread and wine and vinegar and honey and timber and all kinds of material for weaving. The date kernels are used by metal workers (coppersmiths) instead of charcoal, or after soaking they are used for fodder for cattle and sheep. It is said that there is a Persian poem in which three hundred uses of the palm tree are enumerated.”

Strabo, 16,742

The leaves of the palm tree have been given many names in antiquity and more recently (among them *vaia*). They were considered to be the symbol of victory and victors were crowned with palm leaves, while whole branches of palm were placed in the victor's right hand. Moreover, Christian martyrs are depicted holding palm leaves. And of course on Palm Sunday (French: Dimanche des Rameaux or Jour des Palmes) palm leaves were used to receive Christ as he arrived in Jerusalem (described most beautifully in the Gospel of St. John). The custom has continued to the present, both on important religious feast days and on the anniversaries of national victories. In regions where the palm tree does not grow, laurel branches are sometimes used – hence the name “bay” and “bay leaves” from the Greek word *vaia*.

“At most games, however, a crown of palm is awarded, and at all games a palm leaf is placed in the right hand of

the victor. The origin of the custom is supposed to be that Theseus, on his return from Crete, held games in Delos in honour of Apollo, and crowned the victors with palm.”

Pausanias, VIII, XLVIII, 2

“...The other slab shows Iasius, holding a horse, and carrying in his right hand a branch of palm. It is said that Iasius won a horse-race at Olympia, at the time when Heracles the Theban celebrated the Olympian festival.”

Pausanias, VIII, XLVIII, 1

Instructions are also given for the preparation of palm leaves for weaving baskets and other wickerwork.

“To make the leaves white and suitable for weaving into containers and baskets, we strip them from the spine while they are still green and spread them out in a covered place for four days. After this, we leave them to be soaked by the rain and to dry in the sun until they become white.”

Didymus, *Geoponica*, 10, 6, 2

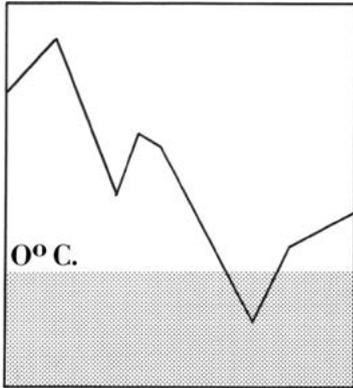
Ancient writers also give instructions for the cultivation of palm trees, for example how to irrigate them, add salt to their soil and transplant them (Theophrastus, *Enquiry into Plants* 2, 6, 3, 17, 1), or suggest them as the only tree suitable for planting on saline soils (Leontius, *Geoponica* 10, 4, 2). Didymus tells how to fertilise them using the remains of grapes pressed for wine-making and how to salt their soil (*Geoponica* 10, 6, 1). Moreover, Herodotus (A, 193) and Theophrastus (*Enquiry into Plants* 2, 8, 4) give detailed descriptions of methods of propagation.

Thus it is clear that palm trees have existed in Greece since mythological times, and particularly in Delos (Apollo, Theseus). In Crete, too, evidence of their cultivation and use can be seen in the shape of the columns in Minoan buildings and a natural palm grove still exists at Vai in eastern Crete. The ancient Greeks used the palm tree not only for its products but also as a symbol of victory and honour, just as more recently we have incorporated it into our religious traditions. Classical writers (Xenophon and others), especially when they saw it in its native

lands, considered the palm to be a somewhat exotic species and admired its fruits for their quality and quantity (“...its beauty and size are wondrous, and its appearance in no way differs from amber...”). However, it must also have been cultivated and have borne fruit in Greece, even if the fruit was of a lesser quality; in pre-classical times the climate in Greece may have been more tropical and the palm tree more systematically cultivated (in Crete definitely). What is certain is that the palm tree has had a long presence in Greece and is associated with the worship of Apollo (music, poetry). This is perhaps because the highly decorative palm tree constitutes the crowning jewel of the landscape and can still be seen growing wild.

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ACCLIMATISATION PROBLEMS Protection and Cultivation Techniques



Piero Caneti

That the Mediterranean landscape starts from the shores of the *Mare Nostrum* is both obvious and generally accepted. Difficulties arise, however, when one attempts to define its inland limits. Some botanists have considered that the Mediterranean landscape extends as far as the olive grows, while others have used the presence of the holm oak as the marker of its limits. But neither of these definitions, though not far from the truth, is universally accepted; for the olive is a cultivated tree and thus its distribution depends largely on human and economic factors, while the holm oak grows naturally as far north as Brittany. In any case, this attempt to define the extent of the Mediterranean landscape is subject to argument, especially in the Italian peninsula where, because of the conformation of the land, some vegetation characteristic of more northern parts of Europe grows in the south, while the proximity of the sea allows typically Mediterranean species to grow even in the mountains. The Italian climate, characteristic of the Mediterranean, is in fact the result of the clash between the mild conditions arising from the proximity of the sea and the cold currents coming from the Arctic and Siberian zones.

Weather disturbances and above all their unforeseeable nature are the biggest problem for gardeners. Those who live in the coastal strip have a definite advantage, as they suffer damaging effects only during extreme frosts, like the “historic” frosts of 1929, 1956 and 1985, and even then their gardens manage to recover without too catastrophic damage.

Things are different for those who garden in inland hilly areas, where the mitigating effects of the sea are weaker. Here frosts are not of the “historic” type but during winter the thermometer easily drops below zero and fairly often below -5 °C. These drops in temperature are sporadic and usually occur at night; they are short and sharp, but there is no escaping the fact that they do happen. Under these conditions, therefore, great care must be taken in the choice of plants to be cultivated. Those who attempt to acclimatise plants from other regions require a measure of courage, for losses may be great. Having such an experimental garden myself, and being a Mediterranean landscape designer, I am for ever torn between being daring and playing safe. I must admit, though, that the happy medium between risk-taking and caution has given me much satisfaction.

In order to define the Mediterranean microclimate of my garden, I would like to take two indicators as points of reference to give the reader a precise bearing. To say that my garden is at an altitude of 400m on a hill overlooking the Tyrrhenian Sea, which I can see at a distance of about 25 km, is hardly indicative; however, to say that in my area *Bougainvillea glabra* (the true ‘Sanderiana’) and citrus trees are normally planted half a metre from a south-east-facing wall is much more significant. If I then add that of these plants the frost of 1985 spared only the mandarin and that the others, including the *Bougainvillea* ‘Sanderiana’, regenerated from the base, the picture becomes clearer. Under such conditions, plants have to be divided into three groups: those that absolutely need the protection of a wall, those that, although shrubs, are grown as herbaceous perennials without any protection, and finally those that can be considered native which can be planted anywhere in the garden.

The first group includes the more tender plants which in Italy can survive happily in the open wherever citrus trees grow, i.e., from Naples southwards, but which in other areas must be protected from cold winds by placing them near the wall of a house. If the house is heated, the protective effect is even stronger. When the temperature dips to -8 °C in the open garden, the temperature recorded half a metre from the wall

of the house is never lower than -2 °C. For this reason *Echium candicans*, a native of Madeira, does magnificently in such a position. The same applies to *Plumbago auriculata* and *Lantana camara*, which do not even lose their leaves in winter. *Polygala myrtifolia* flowers twelve months a year and all jasmines, including *Jasminum polyanthum*, flower copiously without scorching of the leaf margins. Even *Abutilon megapotamicum*, a native of Brazil, thrives and keeps its graceful little yellow-orange lanterns.

The second group includes very tender plants which are bound to lose all their parts above ground in persistent frost, but since they have the characteristic of flowering from new growth can do so from the shoots that they produce from the base in spring. Obviously, such plants will never reach the dimensions that they would attain in the citrus-growing areas, but if it is the flowers that we want to enjoy, without wrapping the plant in a protective jacket of polythene or cloth, then this can be guaranteed. The only precaution we should take is to cover the base of the plant with a thick layer of partially rotted mulch. But this is a must in any Mediterranean cultivation, anyway. This group includes all *Datura* [*Brugmansia*], *Erythrina crista-galli*, *Salvia leucantha*, *Cestrum* and also *Euryops pectinatus* if it is exposed to a temperature lower than -5 °C.

All native plants of the Mediterranean maquis and evergreen forest, as well as those that have been naturalised in the area, do well in this climate, including *Quercus suber* (the cork oak), but even among them some show signs of suffering more than others: after the 1985 frost, for example, most of the leaves of *Myrtus communis* dried and the olive died back to the ground.

Pietro Caneti is a landscape designer and gardener at Velletri near Rome. His book Il Giardino Mediterraneo Secondo Natura has recently been published by Edagricole.

THE GARDEN IN ANTIQUITY



*Aphrodite receiving an Adonis garden
from Eros, 4th century B.C. ceramic*

Yvonne Linardos

Although the term ‘antiquity’ covers the entire planet, in this article the title refers to the so-called *known* ancient world of the Mediterranean.

We might begin by looking at gardening during the Bronze Age (c. 1500 B.C.). Egyptian murals record all sorts of gardens, showing us not only decorative trees and flowers but also produce for consumption – orchards, fruiting shrubs etc. – from as far back as the Old Kingdom (until 2250 B.C.). The New Kingdom (until 1070 B.C.) in Egypt saw the introduction of luxury gardens as part of a trend towards international relations which developed during the reign of Queen Hatshepsut (ended c. 1480 B.C.). Under her direction an expedition was organised to Somaliland, the place thought to be ancient Punt, in order to import plants, trees and other products.

Before we move on to subsequent evidence from the Mediterranean Basin proper (i.e. from the Cretan and Aegean civilisations), we should perhaps explain how this evidence is collected. Working as an artist on an excavation, I have been able to observe the work of the paleoethnobotanist. When a site is excavated, the drains of a building, for example, may be found undisturbed. Using archaeological techniques, such as washing samples with water in a special sieve, and then searching through the samples painstakingly almost grain by grain, seeds from thousands of years ago may be discovered, identified and even matched with other evidence relevant to the excavation.

This “other evidence” may be a mention in ancient writing – such as Homer in the case of the Greek world. Homer alludes to some 80 plants... and this is his description of the palace garden of King Alcinous: “Immediately outside the courtyard of the palace is a four-acre orchard bounded by a hedge on either side, where pear and pomegranate flourish, the apple bearing its glossy fruit, the sweet fig and the bountiful olive. The trees crop continuously winter and summer alike. Within this enclosure there is also a productive vineyard. Beyond the last row of vines there are well laid out plots where vegetables of every kind are grown. The garden is fed by two springs, the water of one being led through channels to all parts of the enclosure, while the other runs under the courtyard gate to serve the great house...”

From later writers we gain some idea of the range of plants with which the Greeks were familiar. Hippocrates names 237 plants with medicinal properties, Theophrastus includes more than 450 plants in his *Enquiry into Plants*, and Dioscorides discusses over 600 plants and other materia medica. Of course, not all of these plants were grown in gardens; many culinary and medicinal herbs could simply be gathered from the mountainside, just as they still are in places today. And when the ancient Greek writers mention a garden, or κήπος, it is not always clear whether they refer to a vegetable garden, a flower garden, an orchard, a vineyard, a sanctuary grove, a park or a tomb garden.

Plants may also be depicted on vase paintings and wall paintings and, although the treatment is generally highly stylised, in many cases the identity of the plant is reasonably certain. Dr. Maria Shaw of the University of Toronto has in fact used the evidence from frescoes to argue for the existence of gardens attached to Minoan villas.¹ From ancient writings and paintings evidence suggests that the flowers in the gardens of antiquity were those which can also be found in our gardens today: crocus, violet, *Muscari comosum* [now *Leopoldia comosa*], *Anemone coronaria*, cyclamen, ornithogalum, iris, tulip, *Chrysanthemum coronarium* [now *Glebionis coronaria*] and lily. *Rosa canina* and *Rosa centifolia* were cultivated² by the fifth century B.C.

Later Roman gardens, such as those buried beneath the ashes of Pompeii, have been excavated by archaeologists,

but little direct evidence has been uncovered to indicate the plantings in ancient Greece. The Athenian Agora has been replanted with the trees and shrubs thought to have grown there in antiquity, but this modern replanting has been based on evidence such as water channels, ancient writings and inscriptions.³ Around the nearby Temple of Hephaistos planting holes in the rock were excavated, some of which contained the broken remains of unglazed pots. From what we know of Roman gardening techniques (often learnt from the Greeks), it is likely that the pots had been used to propagate trees by layering. At the Minoan palace of Phaistos smaller holes in a rock outcrop are thought to have accommodated wild crocus, *Iris unguicularis* or aromatic herbs.⁴

Maureen Carroll-Spillecke⁵ points out that we have no good reason for supposing that ancient Greek gardens were similar in appearance to the later Roman gardens, let alone to the verdant courtyard gardens found in many Mediterranean lands today. A classical city in Greece was not large, perhaps with a diameter of only 700 metres, and the average building plot measured 250 m². There was no space available for a garden, and even the tiny courtyards were often paved – though pot plants were undoubtedly grown there. Within the city walls the only gardens to be found were those associated with temples and sanctuaries, and in the agora, the central meeting and marketplace. The agora was carefully planted to provide a shady cool environment.

Within the city walls water supplies were limited, and gardens were situated outside the walls wherever there were rivers and streams to irrigate them. Often managed as market gardens, these were owned not only by individuals but also by temples which might rent out their properties. Just outside Athens were several gymnasia which, in the fifth and fourth centuries B.C., were verdant park-like areas. In the fifth century the statesman Cimon installed an irrigation system and added to the natural vegetation of the Academy (where Plato taught), and this was later furnished with plane, elm, poplar and olive trees. Tomb gardens, which lined the roads outside the city gates, were tended with great care.

It is probably true to say that the ancient Greeks had a concept of a garden which was rather different from our own.

They would have certainly agreed with Gertrude Jekyll that a garden can “give happiness and repose of mind” – but it is doubtful whether, like her, they would have considered that to be “the first purpose of a garden”. Their poets could respond to the beauty of a flower, and their botanists make detailed observations of plant life, yet the most important function of a garden was to produce food. And not only food, but medicines and materials for crafts such as weaving and dyeing.

Most importantly, plants were intimately connected with the mythology, beliefs and rituals of the ancients. The origin of many plants was described in myths which associated them with particular gods. This in turn led to the use of plants in religious ceremonies – and even to the incorporation of some plants (such as the palm) in later Christian festivals. Hellmut Baumann has recently published an excellent account of these associations, together with the relationship of plants and man in classical medicine, the arts and the economy.⁶

Finally, it is interesting to note that container growing has a long history. To celebrate the festival of the god Adonis, Athenian women planted lettuce and fennel in broken pots.

References

- 1 Maria C. Shaw, The Aegean Garden, *American Journal of Archaeology* 97, 1993.
- 2 D.B.Thompson, *Garden Lore of Ancient Athens*, American School of Classical Studies at Athens, Princeton, NJ, 1963.
- 3 Ibid.
- 4 Maria C. Shaw, op. cit.
- 5 Maureen Carroll-Spillecke, The Gardens of Greece from Homeric to Roman Times, *Journal of Garden History*, Vol.12, No. 2, 1992.
- 6 Hellmut Baumann, *Greek Wild Flowers and Plant Lore in Ancient Greece*, trans. W.T. & E.R. Stearn, The Herbert Press, 1993.

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A MEDITERRANEAN PLANT FINDER

Heidi Gildemeister

It may be true that the range of plants commercially available in the Mediterranean is not as wide as it should be. Several reasons account for this situation and not all of them are the fault of the nurseries.

Many gardeners stick to what they have seen all their lives in gardens all around them: the more colourful the better. A nursery owner whom I prodded to offer a better variety laughed at me and said, “This is meant to be a business. Nobody ever buys what they have not seen all their lives, and I cannot widen the choice only for you”. So it is really up to us, the gardeners, to go on asking for those plants which we feel ought to be sold. Nurseries will be quick to catch on to the demand.

Outmoded garden habits are another reason for the restricted supply. Native plants used to be considered ‘common’ as they grew on every hillside or could be seen on neglected farmland. Thus few gardeners asked for them. Only recently has interest in the native plant world been awakened and it will not take long for the trade to grasp its potential.

On the other hand, certain Mediterranean plants require expertise to propagate. If profit is foremost in one’s mind, it is tempting to sell primarily those plants which come up easily from seed, strike well from cuttings or divide readily – not always the ones best suited to the mediterranean climate and its gardens.

It may also be that we simply do not know the place which offers the choice we have in mind, even if it is nearby. A PLANT FINDER** helps gardeners, for example, in Britain, France, Germany and the United States. Why not have one for the Mediterranean – for you and me and our gardening friends? I

* - *THE PLANT FINDER, 40000 Plants and Where to Buy*, C. Philip, Headmain, Whitbourne 1995.

- *20,000 Plantes - Où et comment les acheter?*, F. et J. Cordier, La Maison Rustique, Paris, 1992.

- *PFLANZENEINKAUFSFUEHRER*, A. Erhardt, Eugen Ulmer Verlag, Stuttgart 1992.

am not experienced in this matter, but I imagine that assembling a PLANT FINDER would mean a gigantic undertaking – but perhaps not so very gigantic if we all contributed.

Although we often complain that there is no way of obtaining the plants we are looking for, we all do have a few addresses which we can share with our fellow gardeners. If there were a central MGS register, we could send in our ‘best’ addresses of nurseries or garden centres where we do find Mediterranean natives – all those useful, untiring evergreens and cheerful flowers, the sturdy low-maintenance assistants in our efforts to cover the ground. More specialised gardeners will be happy to learn about places which offer plants from the other four mediterranean-type climates (the Cape of South Africa, California, central Chile and southern and western Australia). It would be best to state roughly the plants available at each place.

If one of the MGS members (or a group) were willing to feed the addresses and plant names into a PC, the PLANT FINDER would emerge by itself. Does anybody have experience in this matter or simply enjoy working with his/her computer? To avoid confusion, botanical names would have to be used. An index of common names could be appended. Readers of the first edition might have to be indulgent with the infant...

A word of caution: a few nurseries sell not only the plant, but with it an assortment of sometimes quite pernicious weeds or obnoxious pests. *Oxalis pes-caprae*, which each year turns spring fields into gold, is one of them. Once in one’s garden, it is impossible to get rid of. Tiny bulbils look like soil and escape the most careful scrutiny. You may yourself risk a purchase at such a place, but please do not hand on the address.

Although personally I find the widest selection of Mediterranean plants in England (such as the cherished silvers and greys), it is wise to enquire ahead about import restrictions into your country (carrying plants across Europe is now less limited thanks to the European Union). Spring and autumn fairs, quite popular in France, are worthwhile hunting grounds.

Here are a few of my own addresses:

- Journées des Plantes de Courson (spring and autumn),
Courson-Monteloup, F-91680 Bruyères-le-Chatel. Tel.
(1)6458-9012.

- Elie Bonaut (rare mediterranean-climate plants), 566 chemin des Maures, F-06600 Antibes. Tel. 9333-5124.
- Pépinières Michèle Dental (rare plants), 1569 Route de la Mer, F-06410 Biot/Cannes. Tel. 9365-6332.

Ed.: Just to show how this could work, a member in Italy writes: “For members in central or northern Italy there is a nursery near Florence specialising in Mediterranean plants:

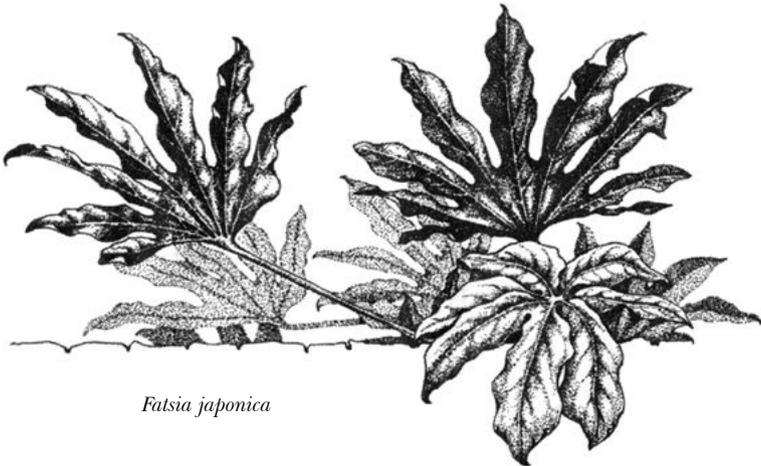
Vivai Guido Degl’Innocenti

Via Colle Ramole 7

loc. Bottai

50029 Tavarnuzze (FI). Tel. 055/2374547.

Signor Degl’Innocenti wrote on rock gardens in the March 1995 (No. 131) issue of *GARDENIA*”.



Fatsia japonica

TORTOISE GARDENS

Caroline Harbouri

Much has been written about wildlife gardening in temperate climates, yet I have never come across anything about that age-old animal of Mediterranean regions, the tortoise. If gardening necessarily involves a never-ending series of compromises between one's ideal vision and the realities of soil and climate, gardens inhabited by tortoises require some further readjustments in planning and planting.

Three species of land tortoises live in the European Mediterranean countries: the marginated tortoise (*Testudo marginata*), found only in Greece and Sardinia, Hermann's tortoise (*Testudo hermanni*) and the Greek or spur-thighed tortoise (*Testudo graeca*) which, confusingly, has a very limited distribution in Greece. (Added to these are two species of pond tortoise, *Mauremys caspica* and *Emys orbicularis*, which I shall not discuss here). All three species of land tortoises are great wanderers and may therefore be found as visitors in unwalled country gardens. I use the word 'unwalled' rather than 'unfenced' advisedly, since tortoises climb, dig and scramble determinedly and are thus not easily kept out – or in – by anything except the strongest fence set in concrete or a well-built wall. Not every gardener is as tolerant as Gilbert White, who noted objectively that his tortoise Timothy “devours kidney-beans & cucumbers in a most voracious manner” and “picks out the heart and stems of Coss-lettuce, holding the outer leaves back with his feet”. So if your garden consists mainly of tender vegetables or delicate-leaved annual plants – sweet peas, pansies, petunias and so on – then you are unlikely to want any tortoises in your area to visit it and will probably already have constructed a solid barrier.

Thus the first compromise to be made in a tortoise garden is the selection of plants. One way of not losing plants to tortoises, of course, would be to grow only those that they will not eat – most grey-leaved or felted plants, for example, or those with highly aromatic leaves like marigolds (*Tagetes*, not *Calendula* which they love). But in this case visiting tortoises would soon depart, and permanent resident tortoises would begin to

starve. Another solution is to grow plants which tortoises eat but which are so profuse and self-seed so rampantly that one never risks losing them; examples of these are common valerian (*Centranthus ruber*), *Acanthus mollis* and *Cerithe retorta*. Tortoises also enjoy a lot of the wild plants commonly considered as weeds in the garden: dandelions, clover, mallow and stinging nettles. They are very fond of that invasive pest, the Russian vine (*Polygonum aubertii* or *P. baldschuanicum* [both now reassigned to the genus *Fallopia*]); pulling off great armfuls of it to feed to tortoises is a useful way of keeping it under control. They make short work, too, of *Oxalis pes-caprae*, which most gardeners that I know would consider a great point in their favour.

But what about the plants that you value but that tempt tortoises? A full-grown marginated tortoise – the largest of the European species – has a reach of about eight or nine inches, so anything taller than this which has a tortoise-proof woody stem is safe. Plants whose stems are juicy and succulent can be individually protected with discreet wire mesh, while smaller plants – those petunias whose evening scent you do not want to be deprived of – can be grown in containers.

Tortoises, however, not only eat plants; they also trample on them and occasionally dig them up. I lost a very precious newly established cutting of *Teucrium polium* when it was uprooted by a female tortoise digging a hole to lay her eggs in; by the time I discovered it the plant had lain in the sun all day and was past resuscitation. Here the gardener's compromises must be two-fold, aiming at prevention and distraction. Prevention takes the form of strategically placed rocks, stones, bricks or anything else; it is not that a tortoise cannot climb over them to trample your clumps of narcissi or crocuses, but that it will not do so 'by mistake' – if the plant thus protected is not a tempting food item the tortoise will tend to make a detour round the barrier rather than march straight over it. Distraction involves, for example, leaving a few bare patches of loose, soft sandy soil in sunny places where the females may easily dig and lay their eggs, or providing a supplementary food supply. Much of what might otherwise have gone on the compost heap in the form of fruit and vegetable peelings is welcomed by tortoises; in return, they provide surprisingly copious droppings to be composted.

So far I have been taking the gardener's point of view. If tortoises visit your garden, however, and even more so if captive tortoises live permanently enclosed in your garden, it is important to consider their needs too.

First, safety. Land tortoises cannot swim and will drown if they fall into a garden pond or swimming pool; thus any pond except one with the most gently sloping of sides should be surrounded with a tortoise-proof barrier. Tortoises are frequently killed on roads, so should not be kept or encouraged in gardens where there is a danger that they might stray on to busy roads. Although adult tortoises have few if any natural predators – if one discounts the story of Aeschylus being killed by an eagle dropping a tortoise on his head – some dogs pester them or turn them upside down (whereupon they are doomed, as they cannot right themselves) and some cats prey on hatchling tortoises. Other cats and dogs ignore them entirely.

Second, living conditions. Although a pond is a danger, and although they drink sparingly, in the hot weather tortoises need access to water and seem to enjoy sitting in it. A large shallow container which they can easily climb into and out of, like a flower-pot saucer, is ideal. If confined to a garden that is not watered in summer, tortoises may need an extra supply of food. When ranging free, however, they are perfectly adapted to life in a dry climate. Indeed, although most books describe them as herbivorous I suspect that wild tortoises are fairly omnivorous in order to survive in their sun-baked habitats; certainly in the garden I have watched tortoises eating a dead mouse (leaving only the tail) and the remains of snails that have been accidentally stepped on. Like all reptiles, tortoises are poikilotherms, i.e. they control their body temperature by moving into and out of the sun, and thus need shelter from the rain and shade from the sun. Both are amply provided in the garden by dense shrubs. They also need hibernation sites for the winter. Again, in a thickly planted established garden they will find these for themselves, but I also help them by piling small branches, prunings etc. in a sheltered corner and covering the pile in autumn with dead leaves and grass. A word of caution: take great care if you light a bonfire in autumn that a tortoise has not chosen your pile of material to be burnt as a comfortable hibernation site.

Third, social life. Tortoises are generally encountered singly in the wild, except when mating, and tend to turn up as garden visitors one at a time. Nevertheless, it is clearly not fair to condemn any animal to a permanently solitary existence, and thus single tortoises should not be kept confined in a walled garden. The sexing of tortoises, however, is not an easy matter, particularly in juvenile individuals, and it may be hard to establish whether a couple of tortoises in the garden are a true pair unless they are seen mating. But if the conditions in the garden are right, adult tortoises (from about eight years of age) will mate and reproduce freely. Mating involves much clashing of shells and loud moaning on the part of the male; the female then laboriously digs a surprisingly deep hole and lays 10 or 12 eggs, the size and shape of ping-pong balls. She covers the hole and leaves the eggs to be incubated in the warm soil for about two months. As they hatch, the walnut-sized babies scabble their way out of the ground and are henceforth entirely independent, though obviously vulnerable to predators.

And watching the hatchlings emerge, tiny and bright-eyed, is one of the joys of tortoise gardening, which amply compensates for the occasional loss of some valued plant. As more and more of the Mediterranean tortoises' natural habitat is built on and more and more roads are constructed, safe havens which they may visit or where they may live and breed become increasingly important. Needless to say, this does not mean that one should remove tortoises from the wild to introduce them into the garden, even where this is still legal.

Useful addresses:

The British Chelonia Group, PO Box No 235, Lincoln
LN6 8AX, U.K.

The Tortoise Trust, Yddyryd, Bancyfelin, Carmarthen
SA33 5NQ, Wales

Le Village des Tortues, Gonfaron, [nr. Toulon] 83590 France.

THE GARDEN IN SUMMER

POT PLANTS

The essentials during the next three months are watering, feeding and preventive spraying against insect and fungal attack. Watering will include spraying or standing the pots on absorbent pebbles, e.g. 'Lytag', to create a more humid atmosphere.

Many gardeners go on holiday during the summer, which creates a problem for watering pot plants. Before leaving, the plants should be sprayed with a systemic insecticide/fungicide plus a liquid feed. The plants are best placed in the shadiest, coolest area outside the house. Stand the pots on a layer of 'Lytag' or capillary matting in shallow plastic trays. If you have an irrigation system, connect it with one or two drippers per pot. Failing that, use inverted 1.5-litre plastic bottles with a dripper hole near the neck and an air-leak hole near the top (former base). These can be positioned in large pots which are too heavy to move. Various home-made watering devices can be most effective to ensure the survival of precious plants – but a helpful neighbour may need to top up the devices when necessary.

FLOWERS

Regular dead-heading and watering will prolong flowering, but remember that it is natural for most plants to aestivate, that is, to rest during the hottest months, so do not expect a great show of flowers or new growth in July or August. When the first rains come and the mean temperature drops a little your garden will experience a second 'spring'.

Watering is best done in the evening or early morning and a drip or exudant tubing system gives the best results as there is less evaporation and no water on the leaves. A thorough soaking every few days (every two/three days on light soils, maybe only once a week on clayey soils) is much better than a sprinkling every day. Mulch the surface to keep the soil cool and open and to cut down on evaporation (therefore less water will be needed). Try to avoid letting your plants get to the stage of

wilting as this puts a great strain on them and they will be more prone to diseases or attack by pests.

VEGETABLES

Most of the leafy vegetables do not tolerate the high temperatures of summer well and will need to have plenty of water to see them through to the autumn. Leave any seed sowing until after the first rains as, even if they germinate, they will have a struggle to survive. Of course, it is the semi-tropical fruits that do well in the height of summer – tomatoes, cucumbers, courgettes, peppers, aubergines, melons, etc., though they too are very heavy on water requirements and will quickly wilt if they do not get enough. Keep an eye open for mildew and other fungal diseases and treat them immediately or they may kill your plants. If you have a cool spot you can continue to sow quick-growing salads such as radishes and lettuces – the Cos and Windermere varieties seem to tolerate heat quite well. Again, mulches help to keep plants happier in these hot months.

CITRUS FRUITS

All fruit will be picked by now and it is a question of continuing your watering and feeding programme – lack of water or nitrogen fertiliser will mean poor fruit later on. Hang jamjars with vinegar in the bottom and a cone of plastic tied (nozzle downwards) inside the rim to attract and trap the Mediterranean fruit fly which lays its eggs on the developing fruit. Change the vinegar every couple of weeks and keep the jars *in situ* from now until December. Spray the trees if you see any sign of aphids or scale insects or any of the other ‘nasties’ that citrus fruit seems to abound in.

VINES

Fruit will be developing during the summer months and the vines will need protection from mildew if the weather is at all humid, so be ready to use sulphate powder or sprays to prevent trouble. Vines (and also almonds and carobs) do *not*

need watering and can, in fact, be harmed by it – their roots penetrate to great depths to reach the water table, which should be perfectly adequate for their needs in a normal year.

A NOTE ON WATER

If you have a swimming pool you will have water from backwashes of the filter from time to time. The water of a pool that is kept clean with chlorine can only be used for plants if it has been left to stand in an open-topped container for a few days to allow the chlorine to be given off. Ionised water does not harm plants and, if rainwater is not available, you can filter tap water through peat to remove some of the lime and make it more acceptable to them.

These seasonal tips were compiled by Jenny Bussey of the Costa Blanca Gardeners' Circle, and first appeared in their monthly newsletter.

SEED HARVESTING

From now through to the autumn there will be a succession of seeds ripening both in the garden and in the wild. It is best to let seed ripen thoroughly on the plant, but if the plant is small you may need to mark it before it shrivels up and becomes unrecognisable. For most seeds it is recommended that long-term storage is in airtight containers placed in the refrigerator (but not the freezing compartment unless you are stratifying them). However, if you plan to sow this autumn, which will almost certainly give the best results, simply put the seeds in paper bags and store them in a cool, dry, airy place. And don't forget to label the bags... In three months' time you'll have forgotten what is in them.

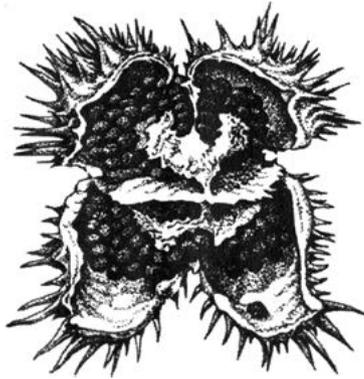
D.T.

Heidi Gildemeister adds:

Seed pods are works of art in a fascinating variety of shapes and colours. When removing seeds from their protective case, one realises how beautifully and efficiently they are packaged and admires nature's infinite resources, a world of wonder.

Seeds of *Schotia*, a South African legume, rest each in its own compartment, their dark colour standing out against a yellow velvety cushion. The beady jet-black seeds of *Paeonia cambessedesii* are surrounded by a shocking-pink outer layer within starry follicles. White silken threads in *Oxypetalum* seedpods unfold into countless parachutes.

My tip: Setting up a seed collection (with their pods) is a spellbinding pastime and particularly suits those peaceful moments of leisure for which many gardeners come to the Mediterranean.





BOOKS

Mediterranean Wild Flowers

by Marjorie Blamey and Christopher Grey-Wilson
Harper Collins 1993, 560 pp., 1500 colour paintings.

There lurks in all of us who love wild flowers a Sherlock Holmes or a Miss Marple, determined to track down the identity of the small miracles at our feet.

Marjorie Blamey and Christopher Grey-Wilson's *Mediterranean Wild Flowers* will assist us in this as no other handbook has done before.

All the wild flowers of the littoral regions of the Mediterranean Basin and its islands, from Portugal to Syria and from Morocco to the Lebanon, are covered. The flora above 1000 feet is excluded.

The layout of the book is admirable. A short comprehensive introduction precedes the Glossary which is followed by the plant descriptions, many with defining line drawings of 2500 species. This section is divided roughly in half by Marjorie Blamey's colour paintings of 1500 of the species described.

These are much truer representations of the plants than any colour photographs. They are arranged in consecutive order in their families. It is the simplicity of the manner in which the book has been arranged which makes it more helpful to the amateur sleuth than, for example, Oleg Polunin's *Flowers of Greece and the Balkans*.

Marjorie Blamey and Christopher Grey-Wilson have produced a number of notable works by their harmonious collaboration.

This one is an essential book for all of us who live or travel in the Mediterranean.

Sally Razelou

Norma Ashley-Smith writes:

Plants for the Dry Garden by Peter Thurman is published in the "Plants at Your Fingertips" series by Pavilion Books Ltd., and costs £4.99 in the U.K. Since it is a small book it could be sent quite easily by post to gardeners in the Mediterranean.

John Singleton recommends *Taylor's Guide to Water Saving Gardening* (Houghton Mifflin, Boston USA 1990) as being generally adaptable to our region and well illustrated.

GETTING IN TOUCH

The following members are interested in forming local active groups:

Gard/Languedoc-Roussillon – Edna Price (Tel. 33-66-77-38-67)
Tuscany – Judith MacDonald (Tel. 0575 837 221)
Rome – Piero Caneti (Tel. 06/9637765)
Corfu – Marjorie Holmes (Tel. 91411)

For mainland Greece (an autumn programme should, we hope, be prepared by late September) contact Sally Razelou at Sparoza until further notice.

For information on affiliated societies in the following areas, contact:

Costa del Sol – Asociacion de Jardinera La Cappelliana
(Richard Dight, Tel. (345) 259 55 90)
Costa Blanca – Costa Blanca Gardening Circle (Paula Hall,
Tel. 648 2060 or Jenny Bussey, Tel. 346 640
5365)

- Mallorca – ESRA Gardening Club (Ann Manning, Tel. (3471)530850)
Skiathos – International Women’s Gardening Club (Norma Ashley-Smith, Tel. 0427 23543).

LETTERS

In your January Newsletter, you wonder whether *Thevetia peruviana* at Sparoza was not a tree but a large shrub and may have been the victim of a severe winter. The New RHS Dictionary of Gardening lists it as a tree/shrub from tropical America growing to 8m. Years ago, in my Peruvian garden, the Yellow Oleander grew as a shrub (2-3m), similar to oleander but not as sturdy, and never reaching tree size. I have tried several times to grow it in my present Mediterranean garden, to no avail. This tropical beauty is done away with by our cold winters. If I had a garden in the Canary Islands, I would attempt it again.

Heidi Gildemeister

I am an enthusiastic amateur gardener, growing many types of plants, but primarily interested in *Hemerocallis* and Bearded Iris. I am a member of both the American Iris Society and the American Hemerocallis Society. I have several species of *Hemerocallis* as well as about 90 cultivars from U.S. and European hybridisers. I would enjoy knowing others with similar interests.

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