Summer-flowering Oyama magnolias

MAURICE FOSTER surveys a select group of magnolias and makes the case to recognize one of them at species level

Magnolia wilsonii opens all its flowers at the same time and is the most widely grown Oyama magnolia

All photographs by Maurice Foster unless stated otherwise

THE *OYAMA* SECTION of the *Magnolia* genus derives its name from a mountain region in Japan where there are extensive colonies of the type species, *Magnolia sieboldii* . Oyama is also the Japanese vernacular term for *M. sieboldii*, where it plays a part in tea ceremonies as a flower to contemplate by looking up into it.

The section is quite distinct within *Magnoliaceae*, to the point where Liu *et al.* (2008) elevate it to genus status, comprising four species, *Oyama globosa*, *O. sieboldii*, *O. sinensis* and *O. wilsonii*. Other treatments retain the section in *Magnolia* and usually recognize three species, with *M. sinensis* as a subspecies of *M. sieboldii*.

All the species are closely related, having three common characters. These are nodding or pendent white flowers, pendent fruit aggregates, and stamens that are red, pink or cream with rounded apices. All have fragrant flowers, borne in summer from May onwards.

All are reasonably hardy and first-class plants where conditions are favourable. Optimum conditions are full light overhead, some shade during the hottest part of the day, and adequate moisture at the roots during the growing season.

There are only a few hybrids, most of which are gardenworthy.

Magnolia wilsonii

The best known of the species is *M. wilsonii*, introduced by Ernest Wilson for the Arnold Arboretum from Washan, west Sichuan, in 1908. Forrest also introduced a variant, as *M. taliensis*, from the northern end of the Cangshan range above Dali in west Yunnan, differing only in its relatively glabrous leaves.

The two main distinguishing characters are twig colour and foliage. Two-year-old twigs are a smooth, distinctive, purplish brown. The leaf blade is ovate-lanceolate to narrowly oval, widest between the base and the middle, 7–15cm long, and with greyish, or brownish to white, villous indumentum beneath. The flowers are saucer-shaped, pendent and 8–10cm across, usually with 9 tepals.

Often noted for its egg-shaped flowers, *Magnolia globosa* is uncommon in gardens

In good conditions it makes a substantial shrub or small tree – the Tree Register records the two tallest, both in Ireland, at Powerscourt, Co Wicklow (10.5m), and Woburn, Co Down (9.5m). Uniquely in the section, *M. wilsonii* flowers all at once, while the other species have fewer flowers at any one time, but a longer succession.

It is well worth growing from seed, which it normally sets in copious amounts, as germination is easy and it can flower within five years. It is also variable; I once raised a semi-double-flowered form (now dead!) with 12–16 tepals, from garden seed. It will also root from semi-ripe cuttings and the best forms, particularly those with dark stamens, are worth seeking out. There is a superb form at Sandling Park, Kent, an old tree now in decline, with large flowers and vivid, dark crimson stamens.

Magnolia globosa

While *M. wilsonii* is relatively restricted geographically, *M. globosa* is found throughout the central and eastern Himalayas and into western China. It was first discovered by Hooker in Sikkim in 1854, but not introduced until 1919 when George Forrest collected it from the border of Yunnan and Tibet. However, it remains rare in gardens.

It has handsome oval to oblong leaves, nearly half as wide as long, dark glossy green above, with a rusty indumentum on the veins and midrib on the underside. There are two types in cultivation, the so-called Indian and Chinese forms which have significant horticultural differences. The Chinese form has a dense, rusty, velvety indumentum, breaks bud very early, is liable to frost damage and thus suited to only the most favoured gardens. It is often in full leaf before the Indian form flushes, but is less vigorous than the Indian form, which Wilson reported (Sargent 1919) as a tree to 12m in height. The Chinese form at Chyverton, Cornwall, an old plant celebrated for the magnificence of its indumentum, was measured by the Tree Register at 6m in height. ➤

Both types have flowers that are broadly egg- to cup-shaped, about 8cm across, with 9–12 tepals. Treseder (1978) describes them as 'white egg-shaped cups, fleetingly tinted at the edges with pale pink'. However, the flowers are susceptible to bad weather and soon turn brown in rain or hot sun, occasionally before they are fully open, and then remain on the tree for a few days. It flowers over a long period from May to July, but never en masse.

Magnolia sieboldii

Magnolia sieboldii is native to Japan, Korea and the eastern provinces of China. Reports of its introduction vary, but it is usually held to have been introduced by Veitch from Japan around 1879.

It is more widely grown than *M. globosa* and Millais (1927) preferred *M. sieboldii* to *M. wilsonii* 'because its pure white flowers with brilliant crimson centres stand up and look you in the face'. Unlike the pendent *M. wilsonii*, its flowers are nodding and readily present to view their prominent cluster of red stamens, sometimes spreading to as much as 3cm across. The flowers are generally irregularly cup-shaped, with 6 obovate and markedly concave tepals, quite different to *M. wilsonii*. The leaves are distinctive, being oblong-obovate to oblong with an abrupt point at the apex and 7–9 pairs of veins. The undersides are glaucous and covered with adpressed hairs. It usually forms a large spreading shrub which needs plenty of space. Millais planted a 3ft (1m) high seedling in semi-shade in 1911 and some 14 years later it was '22ft high, 60ft in circumference and 21 ft across'. *M. sieboldii* always puts on an excellent show in May and then continues to produce flowers into August. A well-grown specimen is a strikingly beautiful plant. It is perfectly hardy, indeed Wilson writes: 'In the Diamond mountains in north-east Korea, where the winter temperature is more severe than in Massachusetts, this lovely magnolia is a feature' (Sargent 1919).

Harvard University Herbaria, Cambridge, Massachusetts

Wilson's original collection (W1422) was named *Magnolia globosa* var. *sinensis*. Subsequent botanists have either raised it to species level, *M. sinensis*, or treated it as a subspecies of *M. sieboldii*

Magnolia sieboldii subsp. *japonica* occurs in Japan and possibly in some of the Chinese populations. It is generally a more straggling shrub, branching freely from the base and with pale yellowish green or creamy white stamens. A Tom Hudson collection of subsp. *japonica* at Tregrehan, Cornwall, from north Guangxi, China, has pale pink stamens and leafs out two weeks later than the type. A plant of this collection grafted onto *M. kobus* flushes even later, perhaps an influence of the rootstock. This late-leafing is a significant and beneficial delay for gardens that suffer from late spring frosts, to which the early

The contrasting flower shapes and stamens of *M. globosa* (left), *M. sieboldii* (centre) and *M. wilsonii* (right)

Mark Flanagan

A plant at Savill and Valley Gardens that conforms to Wilson's original collection, W1422. If recognized as a species it would be *Magnolia sinensis* (syns. *M. globosa* var. *sinensis, M. sieboldii* subsp. *sinensis*)

flushing of the type can be vulnerable.

Double cultivars reported to be in cultivation include 'Harold Epstein' (36 tepals), 'White Flounces' (16–24 tepals), 'Michiko Renge' (15 tepals), and 'Kwanso' (22 tepals).

A cultivar with pink tips to the tepals, 'Ferris Miller', found by its namesake in Korea, is said to come true from seed. The late Dr August Kehr created two tetraploid cultivars – 'Colossus', bigger in all its parts than the type, but which does not sacrifice grace to size; and 'Genesis', having a flower of heavier texture, notably cup-shaped, with the outer tepals reflexed at the edges.

Magnolia sinensis

Most authorities treat *M. sinensis* as a distinct species closely related to *M. globosa* and *M. wilsonii*, but Spongberg (1976) treats it as a subspecies of *M. sieboldii*. It has been found only in a limited area of north-west Sichuan, from where it was introduced by Wilson in 1908 under the collection number W1422 and named *M. globosa* var. *sinensis*.

While allying *M. sinensis* closely to *M. sieboldii*, Spongberg (1976) differentiates it on the basis of several significant characters. Its young twigs are tomentose with yellowish or rufous hairs; it has larger leaf blades, some being suborbicular; the lower leaf surface has crinkled or curled hairs; the petioles are longer, up to 6cm, rather than 1–3cm; and the stipule scars extend to more than half the length of the petiole. I have noted further differences. The flowers are completely distinct from *M. sieboldii*, being pendent, not nodding, and notably saucer-shaped rather than cup shaped, and generally larger and flatter in profile with 9 rather than 6 tepals. The 'floral internodes' are much longer, and the leaf veins number 10–15 rather than 7–9. (Floral internodes are conspicuous zones extending from a scar on the peduncle left by a spathaceous bract up to the base of the flower.)

Spongberg (1976) explains that the differences flow from the disjunct position of *M. sieboldii* subsp. *sinensis*. He suggests that *M. sieboldii* was once more widely distributed and has become morphologically differentiated as a result of geographical isolation. The nearest subsp. *sieboldii* population to subsp. *sinensis* is in northeast Guizhou, some 650km away. Both there, and in neighbouring north Guangxi, the flowers and foliage are typical of subsp. *sieboldii*, with pale stamens. I have seen specimens from only these two locations. However, there are other isolated populations in China (it occurs in 10 provinces) and it would be interesting to see if variants of *M. sieboldii* exist elsewhere to ➤

support Spongberg's thesis.

On the evidence at present, I think the morphological differences between subsp. *sieboldii* and subsp. *sinensis* are consistent and substantial, and that a close alliance is not supported. The latter should be treated as a distinct species, *M. sinensis*, as recognized by Stapf in 1924.

Some authorities ally *M. sinensis* to *M. wilsonii*, on the basis that both the flower and the fruit aggregate are indistinguishable. However, the markedly different leaf size, shape and texture, and the twig texture and colour are distinct and consistent between these two taxa. Johnstone (1955) records having seen no seedlings with obovate or rounded leaves raised from typical *M. wilsonii*.

The only plants I have seen to date in cultivation, given the caveat that I have not seen many, that conform to images of Wilson's original five herbarium sheets of W1422 are in the Savill and Valley Gardens, Surrey. These had been propagated from an original plant in the gardens, the origin of which is not known. Philippe de Spoelberch of Arboretum Wespelaar, Belgium, has recorded identical plants in UK, US and New Zealand gardens which could all be the same clone propagated from an original UK source. Laboratory analysis and growing seedlings on from hand-pollinated flowers would shed light on the clonal, subspecific or specific status of this taxon.

Many plants labelled *M. sinensis* (or *M. sieboldii* subsp. *sinensis*) in gardens appear to be either a variant of *M. wilsonii* or *M. sinensis* x *M. wilsonii*. This is not surprising as the story in cultivation is one of lost labels, an absence of records, and a wide distribution of open-pollinated seed over many years. For example, in 1927 seedlings from a pan with a lost label were sent from Caerhays, Cornwall, to Highdown, Sussex. As

Magnolia x *wieseneri* (*M. obovata* x *M. sieboldii*) can be slow to establish but it has good fragrance

Magnolia 'Pink Petticoats' may be a hybrid between *M. globosa* and *M. wilsonii*

Magnolia 'Summer Solstice' may be a hybrid between *M. globosa* and a pink-flowered *M. obovata*

both species were at Caerhays the seedlings were later assumed to be *M. sinensis* x *M. wilsonii* and named *M.* x *highdownensis*, but are now regarded as a cultivar of *M. wilsonii*. Lord Aberconway (1938) confirmed the continuing problem: 'Plants of *M. wilsonii* and *M. sinensis* are growing quite close together at Lanarth and have seeded freely there. The generous distribution of seed gathered from *M. sinensis* has led to the growing of a number of plants which have proved to be hybrids between the two species'.

The introduction of these valuable plants also got off to a confused start. The Arnold Arboretum sent W1422, as *M. globosa* var. *sinensis*, to Chenault in Orleans, France, with instructions to propagate it by grafting and distribute it widely. Chenault sent grafted plants to the UK in 1920, which were said to be weak and difficult plants, perhaps because they were grafted on an unsuitable understock. (The choice of an Oyama rootstock, which he may have used, though logical, is generally unsatisfactory.) To further confuse matters, these were wrongly labelled *M. nicholsoniana*, another Wilson introduction now sunk into *M. wilsonii*, and grown under that name for many years.

Whatever its history, *M. sinensis* W1422 is a magnificent garden plant with a notably spreading habit. It has the largest flowers in the section, up to 13cm across, bold and broad tepalled. It is tough and hardy, and, according to cognoscenti in the US, it is more tolerant of sun and dryness at the root and has taken -24°C without dieback or bark-split. Also, it will tolerate chalky soils.

Hybrids

Of the Oyama hybrids, perhaps the best known is *M.* x *wieseneri* (*M. obovata* x *M. sieboldii*). It is not the easiest of plants as it is slow to establish, with a straggling habit up to 6m in height, and difficult to propagate. But once it gets going, both flower and fragrance are superb. The flowers appear in May and June and are cup-shaped, ivory-white, and open to reveal a striking boss of red stamens. It has been in cultivation for about 120 years, being first exhibited as *M. parviflora* (now *M. sieboldii*) in Paris in 1889.

Magnolia x *wieseneri* usually fails to set seed, but it did so in the garden of Sir Peter Smithers in Switzerland. He assumed it had been pollinated by *M. obovata* and he named one seedling 'William Watson', which grows vigorously and quickly into a sturdy tree. Its flowers are similar to those of *M.* x *wieseneri*, equally fragrant, but larger and of a slightly more rounded shape. It is more arboreal than *M.* x *wieseneri* and promises to be an outstanding summer magnolia.

Magnolia 'Summer Solstice' was named by my wife Rosemary to mark its RHS Award of Merit received on Midsummer's Day 1994. It flowers steadily from May to July. I selected it from a row of unflowered seedlings of *M. globosa* at the Valley Garden as it had distinctive foliage. It is a small tree, now about 7m in height, and assumed to be a hybrid with a pink-tepalled *M. obovata* growing nearby. It carries this pink over to its buds and outer row of tepals, which are smaller than the inner ones and reflex at the base. The fragrant flowers retain the cup shape of *M. globosa* and are erect, 10cm high, and creamy white.

Magnolia 'Pink Petticoats' is a cultivar I raised from *M. globosa* seed. It may be a hybrid with *M. wilsonii* as the elegant, pendent flowers are larger and have more pink in the tepals than those of its seed parent. The pink is quite conspicuous on the inner row of tepals.

Magnolia 'Charles Coates' originated as a self-sown seedling in 1946 at Royal Botanic Gardens, Kew, and is intermediate between its parents, *M. sieboldii* and *M. tripetala*. It is a large spreading shrub and is best in some shade. It has the leaves of *M. tripetala* and the flowers of *M. sieboldii*, although they are held upright on the leafy shoots. The 8–9 tepals are creamy white and crinkled in appearance. The flowers appear mid-May to mid-June, are very fragrant, but soon turn brown and are held on the tree for some days, rather marring the overall effect.

Maurice Foster VMH is a member of the RHS Woody Plant Committee and has a garden and arboretum in Kent

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