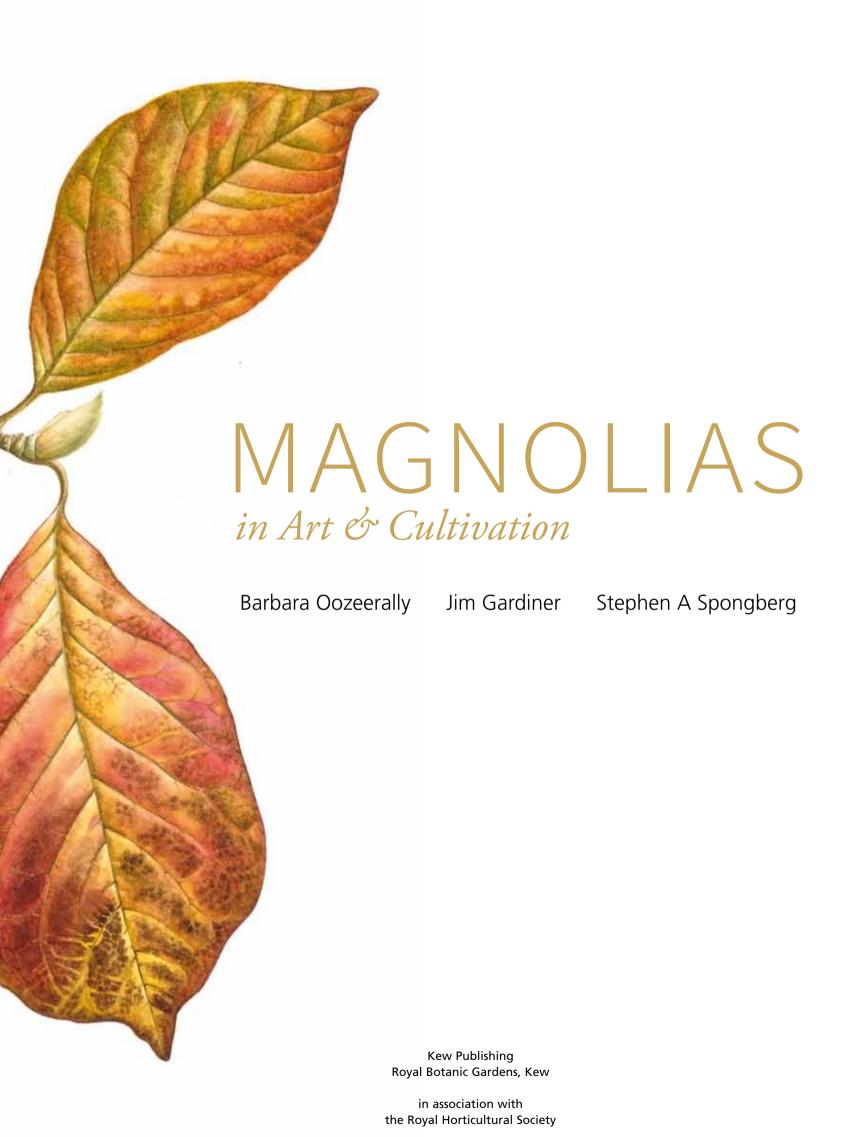
MAGNOLIAS

in Art & Cultivation





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Introduction

Jim Gardiner

Magnolias and the people who grow them are a common thread that can be traced throughout my horticultural career. In the late 1960s, I was able to see flowers of the Asiatic tree magnolias, particularly *Magnolia campbellii* and *M. sargentiana*, in the Valley Garden, Windsor, for the first time, and thus became aware of the magnificence of these garden aristocrats. Prior to this my knowledge had been restricted to the ever-present *M.* × *soulangeana* and *M. stellata*; beautiful as they were in their many settings across suburban Britain, they did not have the 'wow' factor of a tree magnolia in full flowering glory! Visits to many of the Cornish gardens at this time brought home the sense of 'wonderment' that the early twentieth-century plant collectors Ernest Wilson and Frank Kingdon Ward must have felt when they saw them in the wild:

Suddenly round a corner we come on that first magnolia in bloom. It is just below us and we look right into the heart of the tree, sprouting with blossom. The sight overwhelms us. After that we see scores of trees, some glowing pink, others with ivory-white flowers. From our giddy ledge we look down over the wide waves of the forest beating against the cliff, where the magnolia blooms toss like white horses, or lie like a fleet of pink water lilies at anchor in a sea of green surf. (Kingdon Ward, 1930)

Yet this enthusiasm for seeing magnolias flowering for the first time is not restricted to the wild. Seeing a new cultivar or species flowering for the first time in cultivation can be equally appealing, as one is sharing this joy with other 'kindred spirits'. *Magnolia pseudokobus* is a species that has not long been in Western cultivation, and was first described by Ueda (1986) from Shikoku in Japan. I and a number of fellow enthusiasts first saw this species in flower in Karl Flinck's garden in south-west Sweden, and we were struck by its flower shape and the fact that its scent was quite distinct from that of other magnolias, being 'earthier' rather than sweet.

It was during the 1980s, while I was curator at the Sir Harold Hillier Gardens and Arboretum, that I joined the Magnolia Society. This was established in the USA during the early 1960s. Sir Harold Hillier had been a member of the Society from the outset, so I was able to read its newsletters and journals in his library. It was while I was at the Arboretum that I wrote my first book on magnolias, 'Magnolias – Their Care and Cultivation' (Gardiner, 1989), enabling me to correspond with many of the names that I knew or had read about. In particular, Phil Savage (Bloomfield Hills, Michigan) and plantsman Roy Lancaster were always generous with their knowledge, helping me to gain a more thorough understanding of this great genus. When I became president of the Magnolia Society during the late 1990s it became evident to me how friendly and approachable everyone is who has an interest in this group of plants. Irrespective of their background or their country of origin, they are willing to share their knowledge, whether the question is simple or complex. Many of my best friends are members – an indication of the camaraderie that exists.

Not long after starting at the Royal Horticultural Society's Garden at Wisley, Pauline Dean introduced herself to me. She was an excellent botanical artist whose first major exhibition for the RHS was on the genus *Iris* in 1989. She was also a great communicator, and in 1990 she set up the first weekend botanical illustration workshop, which ran successfully for 12 years. Quite early on I asked her to paint *Magnolia sprengeri* 'Diva' for my wife Allison and myself.



'But I've never painted a magnolia' was her reply, yet the result was exquisite and the equal of work by other botanical artists – Stella Ross-Craig, Lilian Snelling, A. V. Webster and Marjorie Blamey – who have illustrated earlier magnolia books (Johnstone, 1955; Treseder & Blamey, 1981).

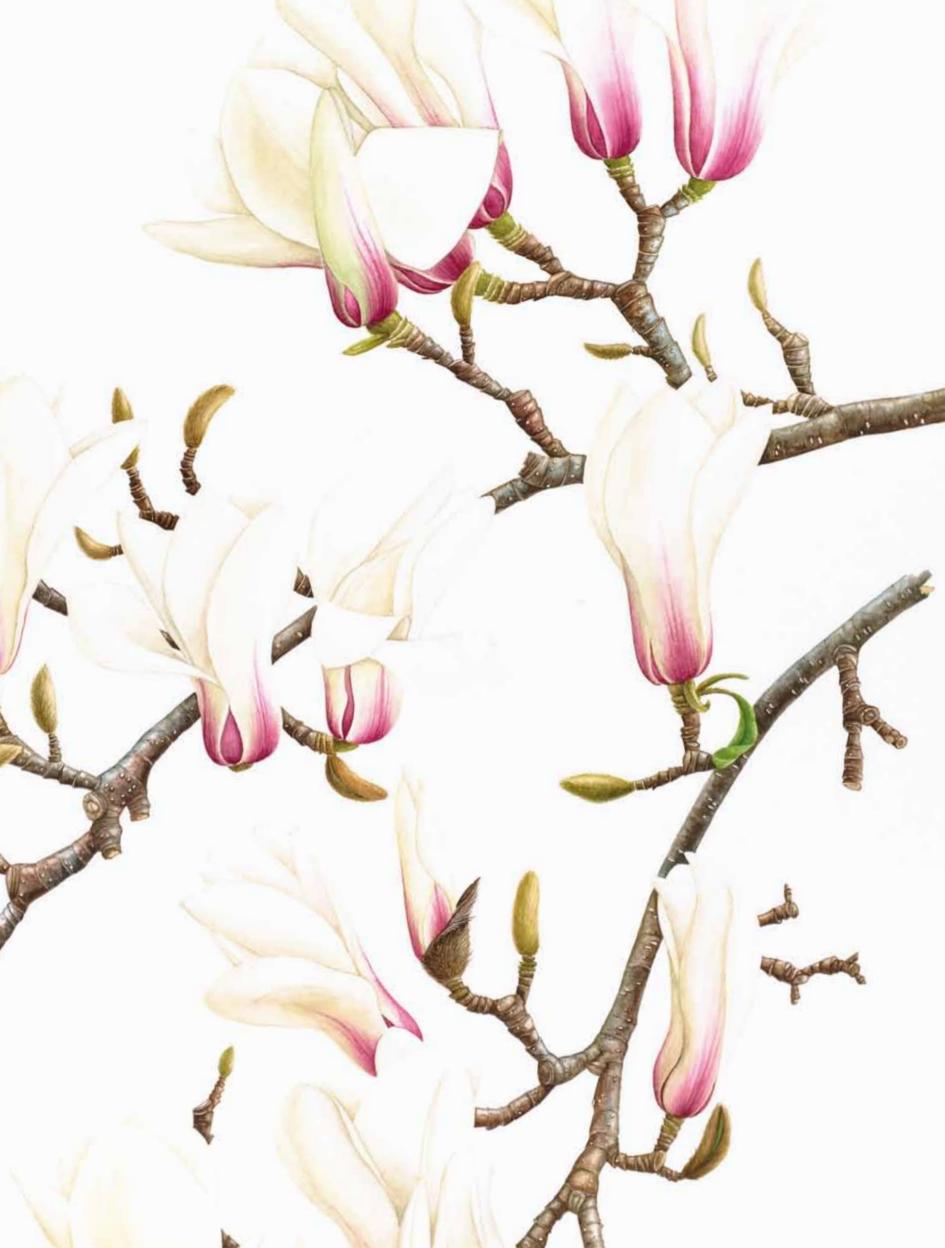
This interest in botanical art draws me to visit the exhibition stands of botanical artist, the crème de la crème of whom exhibit each year at the Chelsea Flower Show. Barbara Oozeerally was one of those whose skill, not only in painting but also in presenting her work on paper, was clearly visible. Among the varied subjects on display were magnolias including *Magnolia* × *soulangeana* and *Magnolia* 'Galaxy'. So our friendship started! Over the years her confidence has grown, as has her skill in presentating on paper of subjects as diverse as *Magnolia wilsonii* and *Pinus pinaster*, so that today her portfolio of magnolias knows no equal! Whether their flowers, fruiting cones, seeds, leaves, buds or stems are depicted, the eye for detail and colour presentation is superb. Following the flowering of magnolias is indeed like travelling around the world in 80 days, so I suggested where she should see them, not only in the UK but also in Italy, Switzerland, Belgium and the Netherlands, as well as in the USA and New Zealand! This dedication to seeing magnolias in situations where they are grown well and in good light levels will be seen for the first time not only in this volume, but also at an exhibition of many of the finest paintings at the Sherwood Gallery at Kew.

This superb collection of illustrations highlights for me the importance of botanical illustration as an art form, the enduring qualities of fine-art publishing, and the value of friends who have a common interest.

Above: Fruit of Magnolia grandiflora 'Goliath' (lifesize) RHS Garden Wisley, 2006

Magnolia species, hybrids and cultivars

Magnolia cylindrica UBC 10634 Eisenhut, Ticino, Switzerland, 2008





Above: *Magnolia* 'Daybreak' (lifesize detail) Herkenrode, Belgium, 2006

Fruit of *Magnolia* 'Daybreak' (lifesize) Herkenrode, Belgium, 2007

Right: *Magnolia* 'Daybreak' Herkenrode, Belgium, 2006



Magnolia grandiflora

This 'elegant aristocrat of American trees' (commonly known as southern magnolia or bull bay) is a large, handsome tree of the south-eastern USA, from North Carolina south to central Florida and west to eastern Texas and Arkansas. It grows only within a few hundred miles of the Atlantic Ocean or the Gulf of Mexico. It can be found along the bluffs of the Lower Mississippi River and on the borders of river swamps and ponds, where it grows in association with Quercus nigra (water oak), Liquidambar styraciflua (sweet gum) and Nyssa sylvatica (tupelo, sour gum). It can be seen growing as a large forest tree, but is also found as scrub amongst the sand dunes overlooking the Gulf of Mexico. It was commonly planted in front of early homesteads in the American South, often with the lower branches pegged down so that they rooted as layers. This practice not only provided replacement plants, but also made the tree virtually impregnable against the prevalent hurricane-force winds.

This magnolia is regarded as a symbol of the American South, being the state flower of Mississippi and Louisiana, as well as a symbol of the Confederacy.

It is thought that the first introduction of Magnolia grandiflora into European gardens was during the early eighteenth century, when the English, French and Spanish first introduced the species. However, the northern French city of Nantes claims to have introduced it first, in 1711. The species has since become one of the most popularly planted evergreen plants around the world in warm temperate and subtropical areas.

In their native environment, trees of this species reach 27.5 m (90 ft) in height. In south-east England, 12 m (40 ft) is the maximum height that can be expected, but sites in the south of France or Italy, especially bordering on the Riviera, produce specimens as large as those found in North America. One of the largest specimens seen is on the Borromean island of Isola Madre in Lake Maggiore, Italy, being about 18 m (60 ft) in height and 12 m (40 ft) in spread.

There are over 100 cultivars listed, originating not only in North America but also in Britain and France. The following represent some of the more popular cultivars, together with some of the more recently named ones, as well as illustrating the variation within the species. The majority of plants in European gardens are named cultivars, such as 'Angustifolia', 'Exmouth', 'Galissonniere' and 'Goliath', but many of the plants seen in North American gardens are of seedling origin and are unnamed. However, since the 1970s, initially in North America, there has been a move to propagate Magnolia grandiflora from cuttings, thus offering gardeners plants whose habit, leaf shape and colour, flower size and growth response can be predicted.

'Charles Dickens' is a broad-spreading cultivar with very large flowers up to 15 cm (12 in) in diameter, and broad green leaves that have a distinctive pale appearance on first opening. It was introduced into cultivation by Jewel Templeton, who found it growing in the garden of Charles Dickens in Franklin County, Tennessee. It has very large bright red fruit.



Fruit of Magnolia grandiflora 'Charles Dickens' (lifesize) Herkenrode, Belgium, 2006



Magnolia grandiflora 'Charles Dickens' RHS Garden Wisley, 2010 Courtesy of Lady Tessa Keswick



Magnolia grandiflora 'Charles Dickens' (lifesize detail) RHS Garden Wisley, 2010. Courtesy of Lady Tessa Keswick.





Magnolia 'Maryland' RHS Garden Wisley, 2007 Courtesy of Sir Henry Keswick

Magnolia macrophylla

Magnolia macrophylla (commonly known as big leaf magnolia) has a restricted distribution in the south-eastern USA, being found in Georgia, Alabama, Mississippi and Louisiana, and northwards to western Virginia, Kentucky, Arkansas and Ohio. It was first discovered by André Michaux in the mountains of South Carolina in 1759, and was introduced into

In its native habit it is a small to medium-sized tree, 7.5 m (25 ft) to 15 m (50 ft) in height, and varying in habit from a single erect to a multistemmed spreading crown. In the UK it seldom reaches a height of more than 12 m (40 ft).

This rare tree is found either individually or in small groups in sheltered woodlands, especially in ravines and river valleys along with Liquidambar styraciflua (sweet gum), Liriodendron tulipifera (tulip tree) and Quercus texana (southern red oak). Rich, deep, moisture-retentive soils just on either the acid or the alkaline side of neutral are best for this species, which also requires a sunny yet sheltered site so that the flamboyant foliage display is not severely reduced.

Magnolia macrophylla subsp. dealbata is a small to medium-sized single fastigiate or more generally multistemmed tree, and is the only deciduous magnolia found in Central America. It grows in the forests of the southern and eastern central mountain ranges in the states of Oaxaca, San Luis Potosi and Veracruz with *Liquidambar* (sweetgum) and *Quercus* (oak) species at an altitude of 1,200-1,500 m (4,000-5,000 ft), where it is seen in both sun and shade.

At Easter each year, many of these trees are pruned by the Mexican people, who use the flowers to decorate their churches. The leaves, when boiled, are also used medicinally as a poultice and applied to sore tendons. This subspecies was the first magnolia to be printed in European literature. Francisco Hernandez, the court physician to King Philip II of Spain, was sent in 1570 to explore 'New Spain' (Mexico), and described this magnolia in Plantarum Historia Mexicana in 1631.

The subspecies was introduced into Britain by Sir Harold Hillier during the 1970s, and again by James Russell in the early 1980s. It is thought to be reasonably hardy, being similar to Magnolia macrophylla subsp. ashei. Until comparatively recently it was regarded as a species in its own right. However, in 1989, Dorothy Johnson of the L. H. Bailey Hortorium, Cornell University, Ithaca, and more recently, in 1993, John Tobe of the Florida Department of Environmental Protection, Tallahassee, both proposed its subspecific status.

BOTANICAL DESCRIPTION

M. macrophylla Michaux, Fl. Bor.-Am. 1: 327 (1803).

Deciduous trees to 15 or rarely 20 m, usually of slender upright habit, occasionally widely branching, the bark on trunk and older limbs smooth, light grey; branchlets stout, green, at first thickly tomentose with silvery hairs, becoming glabrous and reddish-brown, with prominent leaf scars clustered in groups (the internodes very short), the groups separated by elongated internodes; terminal winter (mixed) buds thickly tomentose with silvery hairs. Leaves crowded into false whorls at the ends of branchlets or alternate on new shoots; petioles stout, (3–)5. 5–13(–15) cm long, densely to finely tomentose like the young branchlets, sometimes glabrescent, with elongate stipule scars on the adaxial surfaces; leaf blades membranaceous, very large, $(18-)24-60(-100?) \times (8.9-)11-26(-32)$ cm, broadly elliptic, oblanceolate, or oblong-oblanceolate with cordate to auriculate, rarely subtruncate bases, entire, often undulate margins, and rounded, obtuse, or acute apices; upper surfaces of the blades green, glabrous; lower surfaces of the blades chalky white to silvery-glaucous, sometimes glaucescent, finely pubescent over the entire surface, particularly on and along the conspicuously elevated midveins and major lateral veins, occasionally becoming subglabrous. Flowers fragrant, large, ±cup-shaped, held erect on stout, silvery-tomentose pedicels c. 5 cm long, subtended by a false whorl of leaves; tepals 9, irregular and unequal, the outer 3 greenish, usually narrowly spatulate, becoming yellowish and reflexed, the inner 6 creamy white, often purplish-spotted near the base on the adaxial surface, $14.5-20.5 \times 5-14$ cm, broadly spatulate, elliptic, ovate, or suborbicular, with broad or abruptly constricted, short-clawed bases; stamens creamy white, very numerous, 15–18 mm long; gynoecia 2–3 cm long at anthesis, the carpels with densely silvery-pubescent ovaries and glabrous styles. Fruit aggregates subglobose to globose, 5.5–8 cm long, rosy-coloured at dehiscence, becoming greyish-brown; follicles pubescent, with stout beaks, or sometimes the beaks obsolete, the lowermost follicles dehiscing ±downward, with the floral axis forming an angle of c. 90°; seeds 1–1.4 cm long, the outer seed coats pinkish-red or coral red. 2n = 38.



Bud of *Magnolia macrophylla* (lifesize) Isola Madre, Lake Maggiore, Italy, 2006



Fruit of *Magnolia* macrophylla subsp. ashei (lifesize) Herkenrode, Belgium, 2006

Right: Magnolia macrophylla RHS Garden Wisley, 2012



Magnolia × soulangeana

This multistemmed large shrub or broad-spreading small tree is probably the best known and most widely planted of all magnolias; it is the archetypal magnolia. On driving into most towns and cities, especially in southern England, during late March and early April, one is instantly aware of its presence. White, pink and reddish-purple blooms are seen in profusion on every major road or tucked under the lee of boundary walls.

The story of Magnolia × soulangeana can be traced back to the early nineteenth century. Europe was just recovering from the Napoleonic wars, during which vast armies had travelled in all directions across the continent. Etienne Soulange-Bodin, a cavalry officer in Napoleon's army, had seen great botanical collections of the day at Schonbrunn (Vienna), Stuttgart and Moscow during the campaigns, and had been saddened by what he saw, suggesting that it would have been 'better for both parties to have stayed at home and planted their cabbages'. On his return from the war, Soulange-Bodin founded the Royal Institute of Horticulture at Fromont, near Paris, and became its first director. It was here in 1820 that he pollinated Magnolia denudata with M. liliiflora. This flowered for the first time in 1827 and 'was remarkable for its tree like habit ... and above all for its wide spreading brilliant flowers, in which the purest white is tinged with a purplish hue'.

With the upturn of economic fortunes in Britain during the 1820s, new plants were being introduced by the (Royal) Horticultural Society and nursery firms, including Soulange-Bodin's first batch of Magnolia × soulangeana. J. C. Loudon reported in the Gardener's Magazine of 1834 that this hybrid had 'produced throughout April this year the most beautiful effect in the Vauxhall nursery belonging to Messrs. Chandler & Sons where it is trained against a wall exposed to the west'. Thus our love affair with Magnolia × soulangeana began.

Cultivars of *Magnolia* × *soulangeana* have been raised by numerous hybridisers in Europe (including Britain), Japan and North America. It is probable that earlier hybrids existed in Japan prior to 1830, as it is likely that both plants were growing in close proximity to each other in temple gardens or nurseries. However, since that time both second- and thirdgeneration hybrids have been raised, providing a complexity of colour forms from milky white through various shades of pink to an intense reddish purple, while some are bi-coloured. Flower shape ranges from a tulip shape to a cup-and-saucer shape and a goblet shape, while the size of the blooms and the time of flowering are also quite variable, depending on the cultivar and the season. In the south of England, the peak flowering period is generally from the last week of March to the end of April or early May, whereas in California, flowering starts in mid-February. Even young plants only 2 or 3 years of age produce flowers in quantity. The flowers have nine tepals and are generally of a firm constitution as well as being fairly weather resistant, although they are not frost tolerant.

In habit they are all broad-spreading multistemmed shrubs, which in time develop into plants with tree-like proportions that are generally freestanding. Their shape and size can be controlled by pruning, which is done either immediately after flowering or during late summer.

More than 100 cultivar names of Magnolia × soulangeana are recorded. Many of these have stood the test of time, having been raised in the nineteenth century, while others are more recent.

The plant most widely cultivated as Magnolia × soulangeana has cup-and-saucer-shaped flowers that are a beautiful warm pink in bud, opening to white inside with flushed pink on the outside, deepening

to a purplish pink at the base. Consideration should perhaps be given to providing the cultivar name 'Étienne Soulange-Bodin' for this widely grown clone.

'Alba Superba' is one of the earliest cultivars to flower. The cupand-saucer-shaped flowers have pure white tepals with basal blotches of pink or purple. This cultivar was raised in Belgium during the midnineteenth century.

'Brozzonii' is a second-generation seedling that was raised in the garden of Camillo Brozzoni at Brescia, Italy, in 1873.

'Burgundy' is a floriferous, early-flowering hybrid that was raised by W. B. Clarke of San Jose in the 1930s, and named in 1943. It was introduced into Britain in the 1960s. The flowers are rose pink in colour and open to 20 cm (8 in) across. In North America, where light conditions differ from those in the UK, the flowers are a deep purple-red that better justifies the cultivar name.

'Lennei' is an important cultivar that should not be overlooked. It was raised in the province of Lombardy, northern Italy, during the midnineteenth century, by Guiseppe Manetti, who named it after Peter Joseph Lenne (1787–1866), a German botanist. It was introduced into the trade by A. Topf, a nurseryman based in Erfurt, Prussia. The tulip-shaped flowers are rose-purple on the outside and white within.

'Norbertii' has goblet-shaped slightly scented white flowers flushed with pink, with tepals about 10 cm (4 in) long. It flowers in early April, and was introduced by Cels of Montrouge, Paris.

'Picture' (syn. 'Wada's Picture') is a Japanese cultivar introduced by Wada's Nursery of Yokohama in the 1930s. It has one of the largest flowers, with tepals 15-17.5 cm (6-7 in) in length and typically cup-andsaucer-shaped flowers, which are white or sometimes a pale pinkish white on the inside with heavy red-purple staining on the outside. There are almost certainly two clones of 'Picture' in cultivation in the UK. Both have very large flowers, one with a more clearly defined colour separation with far more white in the flower.

'Rustica Rubra' is a Dutch cultivar that was raised at the end of the nineteenth century in Boskoop. The classic goblet-shaped flowers are reddish-purple on the outside and pink-white within, and appear in mid-season (mid-April).

'White Giant' was introduced by Wada's Nursery of Yokohama in Japan. It has very large goblet-shaped milky white flowers, which 'splay' open on their second day, very much like Magnolia grandiflora does!

> Right: Magnolia × soulangeana 'Alba Superba' Windsor Great Park, 2011





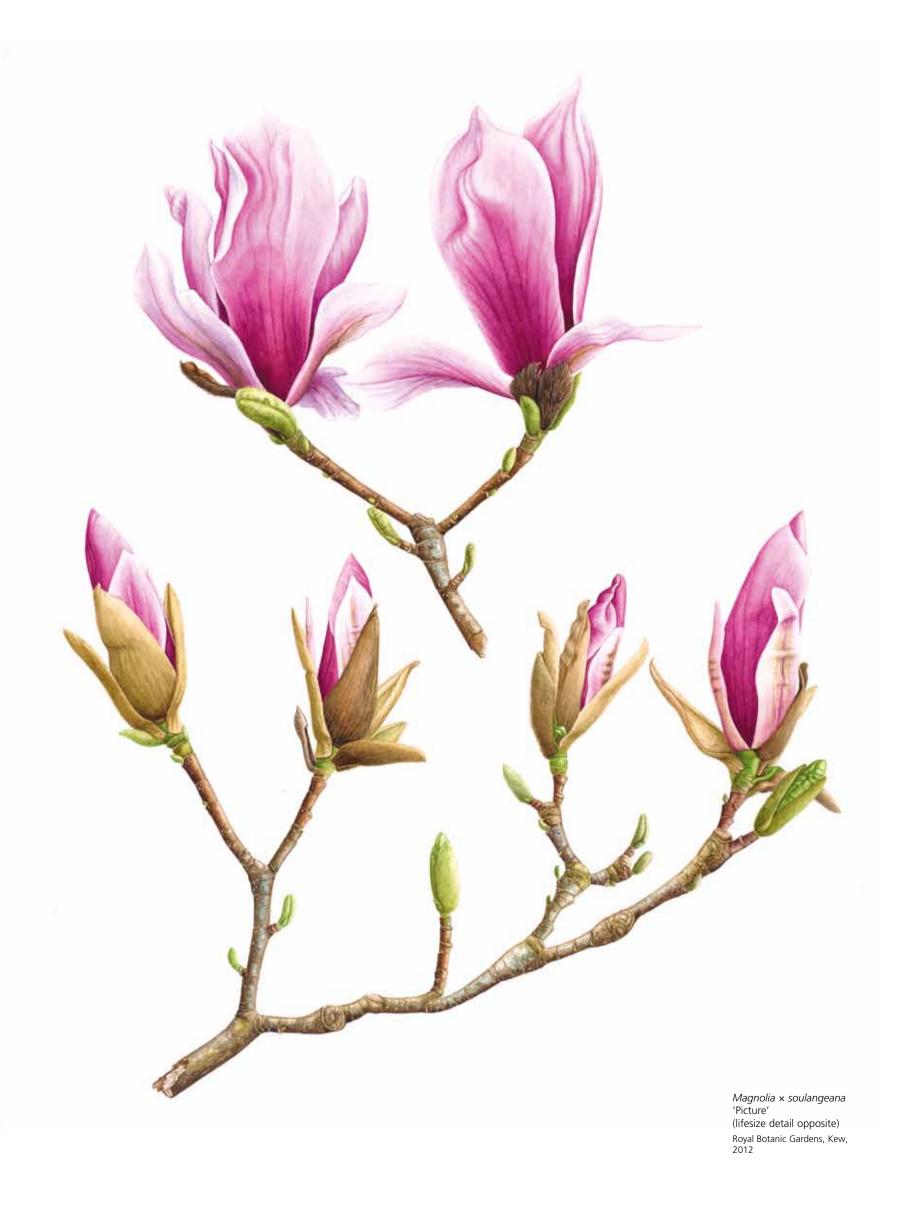
Magnolia × soulangeana 'Brozzonii' RHS Garden Wisley, 2006



Fruit of *Magnolia* × soulangeana 'Brozzonii' (lifesize) RHS Garden Wisley, 2003







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