

Tree of the Year: *Magnolia campbellii*

Susyn Andrews

With contributions from: John Anderson, Alan Jellyman, Sir Charles Jessel and Peter Laharrague.

“Still higher we met with many fine trees of the glorious *Magnolia campbellii* in full bloom; looking down on them from above, one saw as it were thousands of white water-lilies, floating on a rough green sea.”

F. Kingdon-Ward in Cox (2001)

Introduction

The genus *Magnolia* contains three subgenera: *Magnolia*, *Yulania* and *Gynopodium* (Figlar & Nootboom 2004). The deciduous taxa with flowers appearing before the foliage fall into subgenus *Yulania*. This subgenus comprises two sections and six subsections, of which subsection *Yulania* contains 12 species, all from Asia. *Magnolia campbellii* belongs here.

The species was described by Joseph Hooker and Thomas Thomson in 1855 and they named it for Dr Archibald Campbell (1805-1874), the Political Resident at Darjeeling, while Hooker was travelling in the Himalaya. Dr Campbell was responsible for relations with Sikkim between 1840-1862 and they had collected together there in 1849.

“This superb tree which forms so conspicuous a feature in the scenery and vegetation of Dorjiling was chosen by Dr Thomson and myself to commemorate the eminent services of our friend Dr Campbell”

J.D. Hooker (1855)

Hybrids of *Magnolia campbellii* with other species, i.e. *M. denudata* Desr., *M. liliiflora* Desr., *M. sargentiana* Rehder & Wilson, *M. × soulangeana* Soulange-Bodin and *M. sprengeri* Pamp. are not dealt with in this paper.

Magnolia campbellii Hook. f. & T. Thomson

Common names: Ghoge Chanp, Lal Chanp (Nep.)

Description: Deciduous large tree, to 35+ m or a large shrub; often many-stemmed. Bark a greyish-tan. Leaves leathery, variable, unfolding after flowers, elliptic to obovate, 11.5-30 × 4.5-14 cm, acute, bases unequal, rounded or cordate, pubescent at first, veins 10-15 pairs; petioles 1-5 cm long, stipular scars 5-7 mm. Flowers large, c. 15 cm across, enclosed at first by spathe-like bract 4.5-6 cm long, densely sericeous; perianth parts 12-16, pure white to pink or crimson, the outer whorls held horizontally to reflexed and drooping, the innermost whorl held erect, enclosing the stamens and ovary, fragrant. Fruiting receptacle cylindrical, c. 15 × 3 cm; carpels obovoid, laterally compressed 1-1.5 cm long (*vide* Spongberg 1989).

Distribution: E. Nepal, Sikkim, Bhutan, N. Assam, N. Myanmar (Burma), SW. China (SE. Tibet, N. & W. Yunnan, ? W. Sichuan). Alt. 2000-3100m.

This superb tree, perhaps the most magnificent of all the magnolias, normally flowers between February and April, depending on the weather. Unfortunately its swelling flower buds are extremely susceptible to frosts and cold winds and indeed specimens in the UK have been badly affected by frosts in 2004 and 2005!

Although *M. campbellii* was described in 1855, it was not introduced into cultivation until 1865 [not 1868, as in Burbidge (1895)]. It first flowered in William H. Crawford's garden at Lakelands [not Lakeville, as in Elwes & Henry (1912)], Blackrock in Cork city in the south of Ireland, c. 1885 (Bean 1973, Crawford 1978). However, in a letter to Dr Oliver, then the Keeper of the Kew Herbarium, Crawford stated that he was sending over a flowering specimen on 27 March 1884. The foliage followed on 22 July. His letter is now attached to a herbarium specimen (see p. 21). This is the material upon which Hooker based his *Bot. Mag.* plate (Hooker 1885).

"Repeated attempts have been made to introduce *Magnolia Campbellii* by seed, but on arrival the fleshy albumen has always been found to have decayed and killed the minute embryo. Living plants have been sent by Drs. Anderson [Thomas, Superintendent (1861-68)] and King [George, Superintendent 1871...] of the Calcutta Botanical Gardens, but they have proved too tender for the open air in the East of England. In Ireland, however, it has succeeded. I saw a small tree of it in Mr Crawford's well-known garden near Cork in 1878; this flowered in March of the present year, when that gentleman kindly forwarded the flower for figuring in this work. At Kew it grows well in the temperate house, but has not hitherto flowered. In the south of France and in Italy it has flowered on several occasions."

J.D. Hooker (1885)

Burbidge (1895) noted that the finest plant was to be seen at Lakelands and that it "has attained to the height of a small tree, being at least 40 feet or 50 feet in height.... and is about twenty-five years old." He then went on to list the other specimens that he had seen; in Ireland these included Castlewella, Kilmacurragh, and Fota, while in England, Kew was mentioned as well as "other private and public gardens." As far as Dr Burbidge knew, by 1895 the only *M. campbellii* to have flowered were those at Lakelands and at Fota.

The Smith Barry demesne on Fota Island, Co Cork also sent their first flowering material to Kew on 6 April 1895. Their gardener Mr W. Osborne wrote to Dr Burbidge regarding the event (Burbidge 1895) and his letters and photograph of the plant are held in the herbarium. Osborne attributed its free flowering "to the abnormally dry summer here of 1894." The tree had been planted for many years and was 25 feet in height. The fine plate accompanying Burbidge (1895) was drawn by H.G. Moon for *The Garden* from the Fota material. According to the Osborne letters, the flowers did not last due to high winds and

severe frosts, hence the lack of plant material from Fota in the Kew herbarium. Henry Elwes noted in Elwes & Henry (1912) that the Fota plant “produced beautiful flowers of a much richer tint than those at Lakelands.”

In March 1903, *M. campbellii* was awarded a First Class Certificate. The exhibitors were W.E. Gumbleton of Belgrove, Cobh, outside Cork and Messrs Robert Veitch of Exeter (Anon. 1904). Elwes & Henry (1912) noted that “A specimen at Belgrove, Cork produced 147 flowers in 1903.” However, Gumbleton himself said it first flowered in 1902 (Gumbleton 1907). Anon. (1904) described them as “pale, rose-coloured petals internally stained with rosy-crimson.”

Other early flowering specimens were at Veitch’s Exeter nursery in 1898, which according to Treseder (1978) was sold to an unknown Irish garden in 1930. Also at Abbotsbury Castle, home of the Earl of Ilchester in Dorset c. 1900, while it flowered at Leonardslee, Sussex in 1907 at “20 ft high” (Elwes & Henry 1912).

Thurston (1930) noted “Recently Mr R. Gill of Penryn, Cornwall, who has a son in the Himalayas, has imported seed and managed to raise a few plants, so he may be encouraged to get some more and distribute a fair stock of the species.”

subsp. *campbellii*

Occurs in the western area of the distribution, namely E. Nepal, Sikkim, Bhutan and N. Assam. It can take 15-20+ years before this subspecies produces flowers.

1969.18378 at Kew came from an altitude of 2438 to 3048 m. It is not, however, the tree grown in the Temperate House referred to by Joseph Hooker in the above quotation, as it is planted in the Magnolia Glade. Bean (1914) mentioned a tree “9 ft high, has been raised from seed that may have been gathered at the highest part of its altitudinal range. George Brown (1977) refers to 1969. 18378 as:

“There is a large *M. campbellii* subsp. *campbellii* No. 53 and this is a lightish pink one, one of the originals and a very fine form.”

Alan Jellyman *pers. comm.* made four visits to Nepal, ranging from the eastern border with Sikkim westwards to the Kali Gandaki River. Approaching the Everest National Park, the Solu Khumbu area was particularly rich in *M. campbellii*:

“To both the east and the west of the Dudh Khosi valley notable groups of magnolia can be seen in the first weeks of April. Trees would appear to reach 30 metres high and grow in the gullies. Superb specimens are to be found in the valley leading from Kharikhola up to Pangkoma and towards the Salpa La. Trees are usually single trunked and from memory may reach up to 1 metre in diameter.”

All the plants that he saw had pure white flowers and he noted it was extremely difficult to secure good seed from these trees.

Alba Group

(subsp. *campbellii* f. *alba* hort., subsp. *campbellii* var. *alba* hort., *M. campbellii* 'White Form', *M. campbellii* 'Alba')

The white form of subsp. *campbellii* was discovered in 1838 by Dr William Griffith (1810-1845), then Surgeon to the Embassy to Bhutan. He described and illustrated this plant, but due to his untimely death, his papers were not published until several years later. See Treseder (1978) and Gardiner (2000) for a more detailed account. *Griffith* 1726 ex Bhutan in held in the herbarium at Kew.

Ivory-white flowered forms of subsp. *campbellii* are said to be more common in the wild than in cultivation. "The massive flowers have ... an alabastrine texture which has to be seen to be believed" (Treseder 1978). This taxon appears to flower at c. 14 years, has erect trunks and downward-sweeping lower branches. According to Alan Jellyman *pers. comm.*, in New Zealand this is a more slender tree which flowers early.

The first tree to be grown in the West was raised from three seeds sent to J.C. Williams at Caerhays from Darjeeling in 1926. It was severely affected by frost in December 1938 but flowered for the first time the following spring but did not flower again for another 11 years. C. Williams received a First Class Certificate for this plant in 1951. By 1969 the tree was only 11.4 m high. Layered and seed-raised progeny from this plant have proved to be hardy and rapid growers and the largest was 10.5 m × 56 cm at 91 cm by 1966. It was only planted in 1957 and flowered in 1966 (Bean 1973, Treseder 1978). According to Callaway (1994), plants belonging to this Group flower slightly earlier than the more typical form.

'Chyverton' ('Chyverton Clone') – This is a good white-flowered seedling raised from the Caerhays tree. It appeared in Treseder's catalogue c. 1965 and was grown at Chyverton near Truro, Cornwall.

'Ethel Hillier' – A vigorous and hardy tree which was selected in 1927 by the Hillier Nurseries. It has large, white flowers with a soft pink centre. Named after the wife of Edwin Lawrence Hillier (1865-1944). He was the eldest son of the founder of the Hillier dynasty and the father of the legendary Harold (Anon. 1991).

'Nancy Hardy' – This is said to be similar to 'Ethel Hillier'. It was first exhibited on 17 April 1984 to RHS Committee B by Major A.E. & G.E. Hardy from a tree at Sandling Park, Hythe, Kent, where it was given an Award of Merit. The flowers are white flushed pink and are 35 cm across (Anon. 1984). Nancy Hardy was

Major Hardy's mother (John Gallagher *pers. comm.*).

'Strybing White' – According to Gardiner (2000), this is the most distinctive clone in this Group. The flowers are white, 30.5 cm across, with lax and drooping outer tepals. Seed was imported from G. Ghose & Co., Darjeeling in 1940 to the USA. Named by Eric Walther, the first director of Strybing Arboretum, San Francisco in 1962.

Other clones of subsp. *campbellii* are:

'Ambrose Congreve' – A clone with claret-red flowers. Named after Ambrose Congreve, the owner of the magnificent Mount Congreve estate in Co. Waterford, Ireland. It was selected from his avenue of dark coloured 30 year old seedlings (Jim Gardiner *pers. comm.*).

'Betty Jessel' – A late flowerer (April-May) and is remarkable for its crimson flowers that are 25 cm across. The deepest colours are on the upper surface as opposed to the lower surface as is usually the case (Gardiner 2000). A good clone for the colder gardens, with striking slate-black buds in winter (J. Gallagher *pers. comm.*).

According to Anon. (1972), this plant originated as a seedling, which was obtained by Sir George Jessel from the Lloyd Botanic Gardens, Darjeeling in 1937. Sir Charles Jessel disagrees and says his father asked Marchants of Wimborne to obtain a plant from Darjeeling, which was planted in the 1950s at Ladham House, Goudhurst, Kent and named after his wife in 1967. When it flowered, it was shown at the RHS in 1967 and 1969, and awarded an Award of Merit in April 1972, followed by a First Class Certificate in March 1975. According to Sir Charles Jessel *pers. comm.*, the tree was unharmed during the great storms of 1987 and 1990 and he has never known it to be affected by the weather. The original tree is now some 9 m in height but Ladham House has been sold.

A seedling of 'Darjeeling', 'Betty Jessel' is said to be difficult to propagate but the late Dr Jimmy Smart of Marwood Hill Gardens obtained scions and sent them off to Otto Eisenhut in Switzerland. It has since been propagated at Marwood by Malcolm Pharoah (John Gallagher & Sir Charles Jessel *pers. comm.*).

'Darjeeling' – In the Lloyd Botanic Gardens, Darjeeling grew a *M. campbellii* with flowers of an exceptionally dark pink. Graftwood was obtained by the Hillier Nurseries and they named their stock 'Darjeeling'. A late flowerer, this first flowered in the Hillier Arboretum in 1974 (Rankin 1999). Callaway (1994) said it was named in 1967. 'Darjeeling' is easier to propagate than 'Betty Jessel' (J. Gallagher *pers. comm.*).

'Hendrick's Park' ('Hendricks Park') – Grown at Hendrick's Park, Eugene, Oregon and chosen for its colour and hardiness by Gossler Farms Nursery,

Springfield, Oregon, USA. In 1971, some 35 years after it germinated, this plant produced rich, deep pink flowers.

‘Landicla’ – A clone with very large, deep pink flowers which later fade to pale pink. According to Callaway (1994), this was listed by Treseder’s Nurseries in 1973. Is this a Cornish name?

‘Piet van Veen’ – Named by Graham Rankin for the owner of the camellia and magnolia garden at Vira Gambarogno, Switzerland. The flowers are purple-red outside and red-purple to pale chamois inside (Jim Gardiner *pers. comm.*).

‘Queen Caroline’ (‘Kew Variety’) – The flowers which are 23 cm across, are a rich red-purple outside, paler inside. The basic colour is whitish-pink, more or less heavily suffused outside with red-purple.

The specimen (1904.17003) by the Temple of Bellona and the Unicorn Gate (not far the Victoria Gate) at RBG Kew was introduced from Calcutta Botanic Garden in 1904 as scion material. It first flowered in 1927 when the tree was 7.6 m in height (*W. Dallimore* s.n. K!). On 29 March 1977 it was awarded an Award of Merit (Anon. 1977) and named for H.M. Queen Caroline (1683-1737), wife of King George II. She was a knowledgeable gardener.

George Brown (1977) described 1904.17003 as:

“... the large spreading form, deep coloured form of *M. campbellii* is the outstanding one and this is the one we have got a young tree of here near No. 1 Aroid House where it is labelled ‘Kew Variety’. It is No. 138, really we should have one or two more of this tree.”

“By No. 1 House *M. campbellii* subsp. *campbellii* No. 317 is a propagant from the dark flowered form near Unicorn Gate which has the same No. 170.04.”

G.E. Brown (1977)

The latter plant (1904.17001) used to grow beside the Aroid House or No. 1 House (now the Nash Conservatory). A grafted tree, it was propagated in 1957, first flowered in 1975 but died in February 1983.

subsp. *mollicomata* (W.W. Sm.) Johnstone

(*M. mollicomata* W.W. Sm., var. *mollicomata* (W.W. Sm.) F.K. Ward)

This subspecies differs from subsp. *campbellii* in its densely hairy flower-stalks, branchlets and its long buds. It is hardier, comes into flower earlier, i.e. 9 to 12 years, and the majority of plants have mauvy-pink flowers, never rose-pink. According to Gardiner (2000), it often sets seed, is more floriferous than the typical subspecies, and flowers later in spring (April), thus missing the early frosts. The flowers when open have a typical cup-and-saucer shape.



W. Dallimore s.n. (1927) specimen of *Magnolia campbellii* subsp. *campbellii* 'Queen Caroline'.

Occurs in the eastern area of the overall distribution: N. Myanmar and SW. China (SE. Tibet, N. & W. Yunnan, ? W. Sichuan).

George Forrest first came across subsp. *mollicomata* in 1904, when he saw it on the western side of the Mekong Valley, Yunnan.

"I shall always remember my first sight of a group of these magnificent Magnolias in full flower! I got within a mile of them, from which distance the masses of pink blossoms showed up distinctly, but surrounded, as the trees were, by heavy snowdrifts ten to twelve feet in depth, fully a week passed before I could secure specimens, by which time the flowers were almost gone."

G. Forrest in Treseder (1978)

Treseder (1978) gives a detailed account of the confusion over the identity of this magnolia and it was not until 1914 that it appeared in cultivation. Forrest's expeditions were partially sponsored by J.C. Williams of Caerhays Castle in Cornwall. 1914.29214 was raised at RBG Kew from Forrest seed collected in the Tali Range ex Caerhays received on 15 May 1914. This still stands in the Berberis Dell and was originally No. 129. It is interesting that George Brown did not mention this particular tree in Brown (1977); however he did note that the nearby No. 116 (1914. 29211) was a good specimen but it succumbed a while ago. Sidbury Manor, Devon was also sent seed from this source.

By and large, however, most of the older trees in Great Britain and Ireland originate from George Forrest's 1924 and later collections, e.g. seeds from *Forrest* 24213, 24214 [K!] and 24118, which were collected along the Shweli-Salween Divide in north-western Yunnan in 1924. These could include a tree at Bodnant in North Wales, which was awarded a First Class Certificate in 1953. There is also material held in the Kew Herbarium, which was sent by Lord Aberconway in 1937, 1940 and 1942.

According to Jim Gardiner *pers. comm.*, one of the original trees is still growing at Caerhays.

A Kew specimen was collected by S.G. Harrison on 18 April 1951 from *F.* 24214, with "flowers white flushed pink, darker towards the base." Could this be the plant that grew in the Himalayan House (a section of the Temperate House)? The latter was grown from Forrest seed (1924) and came to Kew from J.C. Williams at Caerhays (1-25/J.C.W.). It flowered for the first time on 27 February 1945 and was c. 11 m in height. Further material was collected on 28 May 1945 and 15 March 1949, possibly in preparation for a *Bot. Mag.* plate that was never published or perhaps for Stella Ross-Craig's magnificent plate in Johnstone (1955).

'Bernie Hollard' – This is a New Zealand clone that was named after Bernie Hollard who has a very good collection of woody plants on North Island near the Taranaki National Park. The flowers are a rich pink with rose-lavender tints to the inner tepals (Gardiner 2000).

'Borde Hill' - One of three trees grown from seed of *Forrest* 25655 (or the magnolia with a telephone number), which was collected in 1924 on the Salween-Kiu-chiang Divide. It grew at Borde Hill, Sussex, home of Colonel Stephenson Clarke, but died before it flowered in 1954; however, a layer from it grew in Mrs Johnstone's garden at Trewithen, Cornwall (Bean 1973). In flower it is very similar to 'Lanarth' (John Gallagher *pers. comm.*).

'Lanarth' ('Lanarth Variety', convar. *williamsiana* Johnston 'Lanarth') - The second tree raised from seed of *Forrest* 25655 was grown by M.P. Williams of Lanarth, Cornwall and awarded a First Class Certificate in April 1947 when it came into flower. The large flowers are deep magenta fading to a deep purple-violet and 23 cm across, while the leaves are mostly rounded at the apex, with the veins deeply impressed above, glabrous beneath.

On a Kew herbarium sheet is attached a letter from C.P. Raffill dated 3 March 1949 to Dr Turrill, then the Keeper of the Herbarium:

"Herewith the "remains" of the gorgeous variety of *Magnolia mollicomata* shown at the R.H.S. meeting on 1st March from the garden of M. Williams Esq., Lanarth, St Keverne, Cornwall. Some flowers of this variety were shown before Committee "B" in Mar. of 1948 & the variety was given a F.C.C. [No, he is mistaken; it was shown before Committee B on 15 April 1947.] This year the flowers are even darker and richer in colour than those shown in 1948 but I am assured that they are from the same tree.

I secured some pieces of this plant from the owner last year and succeeded in getting two grafts of it to take on a young seedling magnolia at the Temperate House Pits. Someday I hope, Kew will thus have a couple of specimen trees of it."

Hillier Nurseries also grafted 'Lanarth' and planted it against Jermyns House, where it flowered in 1975.

According to Treseder (1978), the Lanarth tree has been used extensively as a seed parent and has bred true to type. Seedlings planted out at Lanarth have flowered in 16 to 18 years as opposed to 19 to 23 years of the original three trees. Two of the seedlings flowered in 1968. Seedlings of 'Lanarth' are much more vigorous than grafted plants but the latter have the advantage of flowering before becoming very tall and also quite soon from ground level.

'Maharajah' ('The Maharaja', 'Maharaja') - A 1954 seedling from the W.B. Clarke Nursery, San Jose, California. It was named by Todd Gresham of Santa Cruz in 1963 and has a large (28 cm across), white cup-and-saucer flower with purple tints at the base of the tepals (Gardiner 2000).

'Maharanee' - Another 1954 seedling from the above nursery and named by Gresham in 1964. This has a slightly smaller (20.3- 25.5 cm across) flower than 'Maharajah' and is pure white (Gardiner 2000). The spring foliage is plum-red.



Magnolia campbellii at Overbecks, Cornwall.

photograph © John Gallagher

'Mary Williams' – This was raised at Caerhays and C. Williams received an Award of Merit for it in 1954 when it produced its rose-purple flowers.

'Peter Borlase' – Named after the former head gardener of Lanhydrock, Cornwall, who raised and selected this plant. It was planted in a shelter belt with nine other open-pollinated seedlings in 1967, first flowered in 1985 and was introduced into the trade in 1989. This is a distinctive bicoloured clone, with deep reddish rose-pink flowers with a paler band down the centre of the tepals.

'Werrington' – Also raised from *Forrest* 25655 and grown at Werrington Park, Cornwall, owned by Commander A.M. Williams. This tree was the first to flower in c. 1941-1943 (Treseder 1978). The flowers are slightly paler and more lavender than those of 'Lanarth' (J. Gallagher *pers. comm.*). It was named 'Werrington' in 1970 by Hillier Nurseries, who had also planted it against the wall of Jermyns House.

Hybrids between subsp. *campbellii* and subsp. *mollicomata*

According to Treseder (1978), Charles P. Raffill (1876-1951), an Assistant Curator in the Temperate Department at RBG Kew bred c. 100 crosses between subsp. *campbellii* and subsp. *mollicomata* in 1946. These are sometimes called the Raffill hybrids or *M.* × *raffillii*. The parents were grown in the Himalayan House, a



Magnolia campbellii subsp. *campbellii* 'Queen Caroline'.

photograph © John Gallagher

section within the Temperate House. Seedlings were distributed in large batches to a number of gardens between 1948 and 1951 and first flowered ten to 14 years later. These included Antony House, Caerhays, Lanarth, Trewithen and Trengwainton in Cornwall (Holman 1998). The first of these to flower occurred at Windsor 13 years after the seedling stage (J. Gardiner *pers. comm.*).

A batch of 20 plants was sent to a Mr James in Oregon, USA (Mrs Hinsdale *pers. comm.*), some of which were still surviving in 1978. Lord Rosse at Birr in Ireland also received some, according to material he sent to Kew in March 1960.

"In Loc. 126 the corner at the back of the Orangery, the *M. campbellii* hybrid No. 264 is a very good form, quite a deep intense pink and is very close to the clone of this cross 'Charles Raffill'. We have sent it up for an award and it did not get one, probably because it is very similar to 'Charles Raffill'.

G.E. Brown (1977)

The above was 1969.18377 which was removed in 2003 during the renovation of the Orangery. Others were 1969.18376 (planted in 1955) and 1969.18375, which are still in the Magnolia Glade:

"There is a seedling of the *M. campbellii* hybrid which is No. 250 which flowered two years ago for the first time [1975], no improvement on the 'Charles Raffill'."

“There are two of the *M. campbellii* seedlings, this is 339 and this also flowered a couple of years ago when the bulk of these came into flowering for the first time.”

G.E. Brown (1977)

Some 20 years earlier, a similar range of hybrids was raised at Sidbury Manor, Devon, the property of Sir Charles Henry Cave (d. 1932), which began to flower in the late 1930s. His head gardener was a Mr Barton. Sir Harold Hillier recalled that he had seen young plants at Sidbury in the 1930s (Bean 1973). One presumes that 1944.6902 near the Magnolia Glade at Kew might be one of these?

“The *M. campbellii* x *M. mollicomata* hybrid is No. 49. This was introduced into the Garden in 1944 from Hillier and was the original cross of these two species or whatever we call them before the Raffill crosses were made.”

G.E. Brown (1977)

In the Kew Herbarium the following sheet might also be linked. 72.44, Hillier, 7 April 1965. Its description was as follows: tepals light pink on inside with creamy-white band down the centre, magenta on the outside, deeper towards the base and with deeper lines down the centre. Filaments magenta, anthers creamy-brown. Bracts very dark, greenish-brown to black.

These hybrids are more reliable in flower when grown in colder areas. On 2 and 3 April 1968, various unnamed plants of the above hybrid were exhibited by RBG Kew at an RHS Show (Anon. 1968). This was repeated in 1969 and 1970 but adverse weather conditions affected the plants. Bean (1973) noted that this cross has also occurred spontaneously in cultivation.

‘Ann Jenkins’ – A dark purple-flowered plant, this was exhibited before RHS Committee B on 25 March 1980 by C.D. Fraser-Jenkins of Bridgend, Mid-Glamorgan and again on 16 March 1982 but it did not receive an award.

According to a note in the Wisley Herbarium, this Raffill hybrid seedling was presented to Admiral Walker-Heneage-Vivian of Clyne Castle, Swansea. In 1951 the Admiral’s widow presented the 6ft seedling to Fraser-Jenkins and it first flowered in 1971.

‘Charles Raffill’ – A vigorous plant. The large (23 cm diameter) flowers are deep rose-pink in bud, opening to rose-purple outside, white with a pinkish-purple marginal flush inside; slightly scented.

Sir Eric Savill at Windsor received several hybrid seedlings from Kew in 1948 to 9 and these were planted around the Valley Gardens. The most outstanding one flowered in April 1959 and he sent some flowers to Kew. In April 1963 it received an Award of Merit, after one of the longest and coldest winters in living memory. In March 1966 a First Class Certificate was awarded, followed in 1993 by an Award of Garden Merit.

The original tree is near the Punchbowl and is a stocky plant in an open position where it is much admired. The rest of the Kew batch of seedlings are unnamed (Mark Flanagan *pers. comm.*).

"M. 'Charles Raffill'. This is the first form of this cross which was given an award and this is the AM form of plant obtained from Windsor Park of course grafted, a clonal propagation. It is No. 265 and it flowered for the first time in 1975."

G.E. Brown (1977)

The above plant (1965.25101) at Kew is still in the Magnolia Glade.

'Eric Walther' – Named after the first Director of the Strybing Arboretum, San Francisco. It was bought in from the V. Reiter Jr Nursery in 1965 and planted in the Arboretum. Langford (1994) noted that Victor Reiter had acquired his plant in 1949 from Hyland Barnes, Vancouver, which had itself been propagated by layering from a tree in England. Callaway (1994) pointed out that Dr Elizabeth McClintock had described this plant in 1965. The flowers are rose-pink.

'Kew's Surprise' ('Kew Surprise') – This has larger (24 cm across) flowers than 'Charles Raffill' and is a richer pink on the outside. It is a fine example of the cup-and-saucer effect. It is also slightly scented.

Sent to Caerhays from Kew, where it was planted in 1951 and flowered in 1966. F.J. Williams was awarded a First Class Certificate and the Cory Cup for this plant in 1967. A sister seedling of 'Charles Raffill', it is much hardier and the buds are less tender (J. Gallagher *pers. comm.*).

'Sidbury' – This is a vigorous, medium to large-sized tree with strong pink flowers, which originally came from Sidbury Manor in Devon and was propagated by the Hillier Nurseries. They named it in 1970.

'Wakehurst' – Planted by Queen Mary on 12 May 1949, this hybrid was given to Sir Henry Price of Wakehurst Place, Sussex by Charles Raffill and is growing near the Slips. At the RHS Show on 2 April 1968 it was exhibited as No. 4 (Anon. 1968 + see reference on p.27). Afterwards it was named by Tony Schilling but it is not in the trade today. Wakehurst' has darker flowers than 'Charles Raffill' and is said to be a vibrant reddish-pink.

IDS members comments:

England

At a joint meeting of RHS Floral Committee B and the Rhododendron, Camellia and Magnolia Group Committee on 11 April 2003, Maurice Foster commented on a flourishing, white-flowered form of *M. campbellii*, near the village of Kensing, Kent, which had been planted on chalk in 1973. It was now 25 ft × 12" (Anon. 2004). This has led to a 10-trial of *Magnolia* to be planted on alkaline soil at Tim Whiteley's property at Evenley, Northamptonshire.

Mark Flanagan has commented that in general *M. campbellii* in cultivation appears to be wind resistant, as proved in various great storms, and is drought tolerant.

Scotland

John Anderson wrote in about the magnificent specimen at Inverewe, which is one of the largest and finest specimens in the Highlands at 57°N. It was planted in 1913.

Belgium

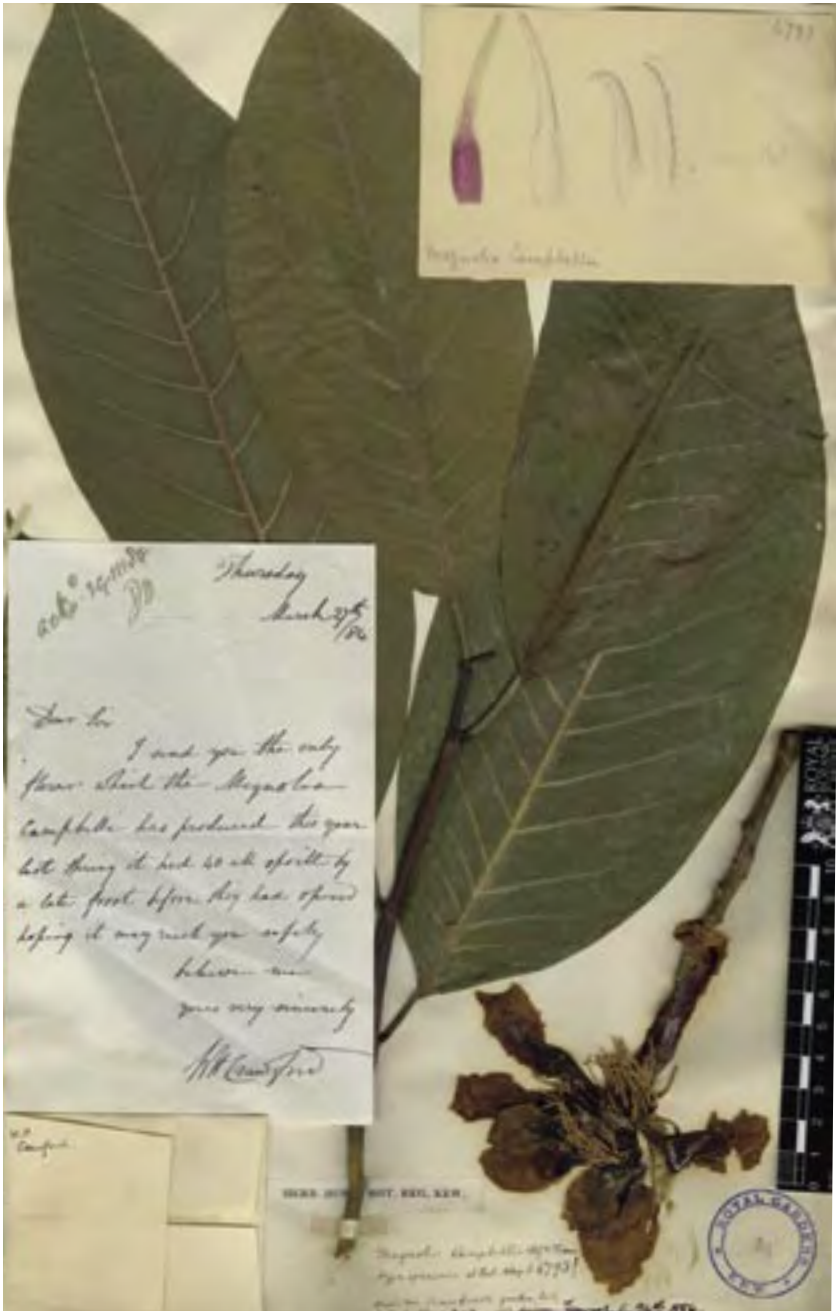
According to de Spoelberch (1998), *M. campbellii* was not hardy in Belgium, although some plants flower well in between hard winters but are then cut to the ground.

New Zealand

Alan Jellyman from New Plymouth (39°S) provided a detailed account of *M. campbellii* from his area of New Zealand. A Quaker nurseryman, Thomas Mason started one of the earliest gardens in the Wellington District at Lower Hutt. This 8 hectare plot became known as Mason's Gardens. A celebrated *Sophora japonica* 'Pendula' was planted there between 1840 and 1845. His *M. campbellii* measured 7.6 m high in 1896, so could he have introduced and distributed this species around New Zealand? In 1984, it was 10.4 m × 65cm. Mr Jellyman has always known this magnolia as the Quaker Mason Form. It is a rich pink and very early flowering (June, peaking in July, finishing in August) in frost-free areas and is reputed to have originated from Darjeeling.

Duncan & Davies, that great New Zealand nursery is based at Taranaki, where *M. campbellii* has been widely planted and no doubt distributed. It is a must-have winter flowering tree for many gardens. In inland Taranaki at higher elevations, it flowers a little later starting in August going into September.

At Stratford, some 400 m a.s.l., there are several very large specimens. The most noteworthy is a tree planted in 1918 by the current owner's (Hugh Thompson) father and it is regarded as the largest in New Zealand. In 1969 it was measured by S.W. Burstall at 15.55 × 21.03 m × 1.32 m @ 30 cm. He estimated that the tree displayed c. 3000 blooms up to 25 cm across. In 1993 it was 17 × 29.40m × 1.70m and by 2004 it stood 19.65 × 25.70 m × 1.87 m.



1884 specimen of *Magnolia campbellii* ex Lakelands, Co. Cork.

Argentina

Peter Laharrague informed us of the wonderful collection of magnolias that Count Guazzone di Passalacqua has in his garden at the Estancia El Mirador, 36° 57'S 60° 14'W. *Magnolia* 'Charles Raffill' and 'Kew's Surprise' are five years old and have yet to flower. Their growth is far superior to their counterparts in northern Italy at 45°N. All the plants were purchased on the same day from a Swiss nursery.

Measurements of *M. campbellii* taxa:-

* = specimen confirmed dead

M. campbellii

Location	Acc./Tree No.	Ht. + Spread (m)	Trunk Diam. (cm) + Year	Notes
Leonardslee, Sussex		23	72 (1996)	
Fota, Co Cork		21.5	(1967)	pl. 1870
Stratford, New Zealand		19.6 × 25.7	1.87m @ 30 cm (2004)	pl. 1918
Belgrove, Co.Cork		19.5	1.55m @ 1m below fork (2001)	
Seattle, Washington State		19.5	(1994)	pl. 1978
Westonbirt, Glos.	240443	18.7	41 (1995)	pl. 1960
Abbotsbury, Dorset		18	1.82m (1980)	First flowered c. 1900
Westonbirt, Glos.	190040	17.8	80 (2004)	pl. c. 1907
Westonbirt, Glos.	200041	14.1	23 (1996)	pl. 1965
Westonbirt, Glos.	250283	13.6	26 (1995)	pl. 1973
Overbecks, Devon		11	(1988)	pl. 1899
Mason's Garden, New Zealand		10.4	65 (1984)	? first one pl. in NZ
Trengwainton, Cornwall		x 43	1.72m below multiple stems (2003)	

subsp. *campbellii*

Location	Acc./Tree No.	Ht. + Spread (m)	Trunk Diam. (cm) + Year	Notes
Trebah, Cornwall		24	c. 3.30m (1991)	
Inverewe, Scotland		22	2.71m (2005)	pl. 1913
RBG Wakehurst Place, Sussex	1969.32386	21 × 20	3.1m @ 1.2m (1996)	Said to be largest plant in UK
Rosehill, Cornwall		15	1.87m @ 1.2 m (1945)	pl. early 1900s
Kilmacurragh, Co Wicklow		14	(1980)	pl. 1876
RBG Kew	1969.18378	9.9 × 18	forked girth (2006)	
Bosahan, Cornwall			3.30m (1997)	pl. 1888

Alba Group

Clyne Gardens, Glamorgan		22	50 (2000)	
Borde Hill, Sussex		20	53 (1995)	pl. 1925
Westonbirt, Glos.	240280	15.2	36 (1995)	
Westonbirt, Glos.	250285	14.8	31 (1995)	
Westonbirt, Glos.	130371	12.32	30.2 (1994)	
Caerhays, Cornwall		11.10		1926 seed
?		10.5	56 @ 91cm (1966)	pl. 1957

'Betty Jessel'

Ladham House, Kent		c. 9	(2005)	pl. 1950s
--------------------	--	------	--------	-----------

'Darjeeling'

Savill Garden, Berks.		14	(1993)	
-----------------------	--	----	--------	--

'Queen Caroline'

RBG Kew	1904.17003	8 × 5	forked girth	Scion ex Calcutta 1904
RBG Kew*	1904.17001			Propagated ex 1904.17003. Died 1983

subsp. *mollicomata*

Location	Acc./Tree No.	Ht. + Spread (m)	Trunk Diam (cm) + Year	Notes
Borde Hill, Sussex		20	39 (1995)	pl. 1940
Trewithen, Cornwall		19	116 (1993)	pl. 1912
Bodnant, Colwyn		18.6	136 (1981)	? pl. 1924
Caerhays, Cornwall		12	(1966)	Fastigate habit
RBG Kew*	1-25/J.C.W.	11.41	(1945)	Himalayan House ex J.C. Williams, ex <i>Forrest</i> 1924 seed
Savill Garden, Berks	1999.3994	11	43 (2000)	Ex Hillier 1947 (HIL 82139)
RBG Kew	1914.29214	10	(1994)	Ex J.C. Williams ex <i>Forrest</i> seed
Caerhays, Cornwall		9.91	91 @ 1.2m (1966)	
RBG Kew*	1914.29211	8.83	64 (1970)	Ex J.C. Williams ex <i>Forrest</i> seed

'Lanarth'

Lanarth, Cornwall		21	(1997)	
Killerton, Devon		18	64 (2001)	
RBG Wakehurst Place, Sussex	1973.28	4 × 1.6	0.2m (1996)	Ex Treseder Nurseries, pl. 1980



Below: *Magnolia campbellii* subsp. *mollicomata* 'Borde Hill' at the Hillier Arboretum.

Below left: *Magnolia campbellii* subsp. *mollicomata* 'Lanarth' at the Hillier Arboretum.

Below right: *Magnolia* 'Wakehurst' at Wakehurst Place, Sussex.

photograph © John Gallagher



subsp. *campbellii* x subsp. *mollicomata*

Location	Acc./Tree No.	Ht. + Spread (m)	Trunk Diam. (cm) + Year	Notes
RHS Wisley		19.5	(1998)	
RHS Wakehurst Place, Sussex	1969.32389	18 × 12	0.9m @ 1.2m (1994)	Ex RBG Kew 1966
Savill Garden, Berks	1999.6853	17	0.43m (2000)	
RBG Wakehurst Place, Sussex	1969.32388	16 × 9	0.5m @ 1.2m (1996)	Ex RBG Kew 1966
RBG Wakehurst Place, Sussex	1969.32392	13 × 16	1.9m (1996)	Exhibited at RHS Show 2/4/1968 as W.1 (Anon. 1968).
RBG Wakehurst Place, Sussex	1969.32387	12 × 10	2.2m @ 1.2m (1996)	Exhibited at RHS Show 2/4/1968 as W.2 (Anon. 1968).
RBG Kew	1944.6902	11.5 × 14	forked girth (2006)	Ex Hillier, ex Sidbury Manor
RBG Kew	1969.18375	10.8 × 10	1m (2006)	C.P. Raffill hybrid, ? pl. 1955
RBG Kew	1969.18376	10.5 × 11	forked girth (2006)	C.P. Raffill hybrid, pl. 1955
RBG Kew*	1969.18377	8.5 × 3	forked girth (1994)	C.P. Raffill hybrid, ? pl. 1955

'Charles Raffill'

Antony House, Cornwall		19	67 (1991)	pl. 1948
Trengwainton, Cornwall		16	68 (1995)	
Valley Gardens, Berks	1999.3993	11	71 (2000)	Ex RBG Kew, pl. 1948
RBG Wakehurst Place, Sussex	1969. 32391	10 × 11	1.5m (1996)	Exhibited at RHS Show 2/4/1968 as W.5 (Anon. 1968).
RBG Kew	1965.25101	7.5 × 7	forked girth (2006)	Ex Windsor Great Park

'Kew's Surprise'

Caerhays, Cornwall		6+	(1968)	Ex RBG Kew, pl. 1951
--------------------	--	----	--------	----------------------

'Sidbury'

Sidbury Manor, Devon		17	(1994)	
----------------------	--	----	--------	--

'Wakehurst'

RHS Wakehurst Place, Sussex	1969.32390	10 x 13	1.4m (1996)	Exhibited at RHS Show 2/4/1968 as W.4 (Anon. 1968).
-----------------------------	------------	---------	-------------	---

Acknowledgements

James Armitage (RHS Wisley), Chris Clennett (Wakehurst Place), Mark Flanagan, John Gallagher, Jim Gardiner, John Hillier, Sabina Knees, Simon Owen (RBG Kew), Malcolm Pharoah (Marwood Hill Gardens), Brian Schrire, Ray Townsend (RBG Kew).

References and further reading

- Anon. (2004). Proceedings of the Rhododendron and Camellia Committee, 11 April 2003 (Bournemouth). *Extracts from the Proceedings of the Royal Horticultural Society* 128: 68.
- Anon. (1991). The story of Hillier plantsmanship. In *The Hillier Manual of Trees & Shrubs*. (Ed. 6) pp.8-17. Redwood Press Ltd.
- Anon. (1984). Plants to which awards have been made in 1983-1984. *Proceedings of the Royal Horticultural Society* 109: 76-88.
- Anon. (1977). Plants to which awards have been made in 1974-1977. *Proceedings of the Royal Horticultural Society* 103: 100-114.
- Anon. (1972). Plants to which awards were made in 1971 and 1972. *J. Roy. Hort. Soc.* 97(12): 544-546.
- Anon. (1968). Notes from the Shows. April 2/3, 1968. *J. Roy. Hort. Soc.* 93: 236-238, fig. 118.
- Anon. (1904). Floral Committee on 10/3/1903. *Extracts from the Proceedings of the Royal Horticultural Society* 28: li-iii.
- Bean, W.J. (1914). *Trees & Shrubs Hardy in the British Isles*. Vol. 2. 736 pp. John Murray, London.
- Bean, W.J. (1973). *Trees & Shrubs Hardy in the British Isles*. Vol 2 (D-M). (Ed. 8) 784 pp. John Murray, London.
- Brown, G.E. (1977). The trees and shrubs of Kew. Unpublished notes held in *Kewensia* at RBG Kew.
- Burbidge, F.W. (1895). The Indian or Sikkim Yulan. *The Garden* 48: 142-143. pl. 1028.
- Callaway, D.J. (1994). *Magnolias*. 260 pp. B.T. Batsford Ltd., London.
- Clarke, D.L. (1988). *Supplement to W.J. Bean's Trees & Shrubs Hardy in the British Isles*. 616 pp. John Murray, London.
- Cox, K. (ed.) (2001). *Frank Kingdon-Ward's Riddle of the Tsangpo Gorges*. 319 pp. Antique Collectors Club.
- Crawford, T. (1978). W.H. Crawford, a 19th century horticulturist. *Ir. Nat.J.* 19(6): 205.
- Elwes, H.J. & Henry, A. (1912). *Magnolia*. In *The trees of Great Britain and Ireland*. Vol. 6. pp. 1581-1599. Privately printed, Edinburgh.
- Figlar, R.B. & Nooteboom, H.P. (2004). Notes on Magnoliaceae IV. *Blumea* 49(1): 87-100.
- Frodin, D.G. & Govaerts, R. (1996). *World checklist and bibliography of Magnoliaceae*. 72 pp. RBG Kew.
- Gardiner, J. (2000). *Magnolias, a gardener's guide*. 329 pp. Timber Press.
- Grierson, A.J.C. (1984). Magnoliaceae. In A.J.C. Grierson & D.G. Long. *Flora of Bhutan*. 1(2), pp. 232-237. RBG Edinburgh.
- Gumbleton, W.E. (1907). *Magnolia campbellii*. *Gard. Chron.* ser.3. 42: 33.



Magnolia 'Charles Raffill' at Abbotsbury, Dorset.

photograph © John Gallagher

- Holman, N. (1998). Magnolias in Cornwall. In D.Hunt (ed.). *Magnolias and their allies*. pp. 247-257. David Hunt, Milborne Port.
- Hooker, J.D. (1855). Illustrations of Himalayan Plants. pl.1-24. Lovell Reeve, Covent Garden.
- Hooker, J.D. (1885). *Magnolia campbellii*. *Curtis's Botanical Magazine* pl. 6793.
- Hunt, D. (ed.) (1998). Magnolias and their allies. *Proceedings of an International Symposium*, Royal Holloway, University of London, Egham, Surrey, UK, 12-13 April 1996. 303 pp. David Hunt, Milborne Port.
- Johnstone, G.H. (1955). *Asiatic magnolias in cultivation*. 160 pp. Royal Horticultural Society, London.
- Johnson, O. (2003). *Champion trees of Britain and Ireland*. 192 pp. Whittet Books, Stowmarket.
- Langford, L.W. (ed.) (1994). *Check List of the Cultivated Magnolias*. 83 pp. The Magnolia Society, USA.
- Mitchell, A.F. et al. (1994). *Champion trees in the British Isles*. 88 pp. Forestry Commission Technical Paper 7.
- Nelson, E.C. (1979). *Magnolia campbellii* in County Cork. *The Garden* 104(12): 495-496.
- Rankin, G. (1999). *Magnolia, a Hamlyn care manual*. 128 pp. Hamlyn.
- Spoelberch, P., de (1998). Growing magnolias in Belgium. In D. Hunt (ed.). *Magnolias and their allies*. pp. 201-230. David Hunt, Milborne Port.
- Spongberg, S.A. (1989). Magnoliaceae. In S.M. Walters et al.(eds). *The European Garden Flora* Vol. 3, pp. 302-314. Cambridge University Press.
- Thurston, E. (1930). *British and foreign trees and shrubs in Cornwall*. 287 pp. Cambridge University Press.
- Tresexder, N.G. (1978). *Magnolias*. 246 pp. Faber & Faber, London.

TEXT © SUSYN ANDREWS