Magnolias at Herkenrode

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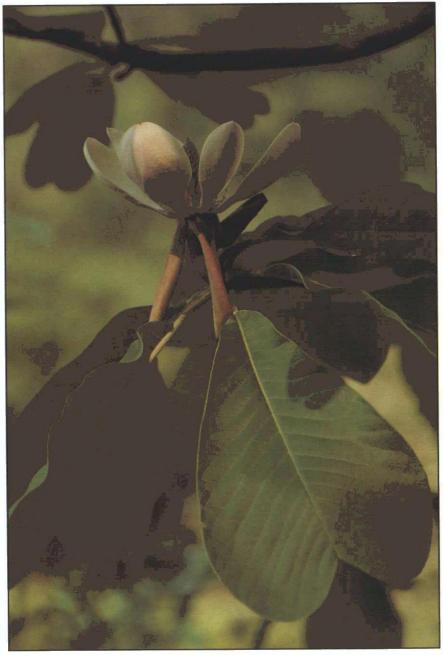
The plant collection at Herkenrode was started around 1970. There are today approximately 6,000 trees and shrubs of which nearly 500 are magnolias. They were planted in this garden from 1983 onwards. Herkenrode is located 15 miles north of Brussels, and it enjoys a typical Belgian maritime climate with some cold spells in winter. The soil varies from good loam to heavy clay, and magnolias have done very well in this environment.

The best way to review *Magnolia* in this garden is probably to follow the taxonomic sequence by section and place hybrids close to the parents or at the end. The presentation is essentially visual, and the text without slides will probably be less than optimal. Major species are reviewed with some of the first generation hybrids.

Section Magnolia

Magnolia virginiana has not been lucky with us. Several plants were lost, and it hasn't really flowered well. Clearly, it is important to have a good specimen—both for habit and flowering. The plant does grow well in Belgium as an old tree at Vordenstein Parc near Antwerp demonstrates: it stands on a single stem, has reached 10 meters high and one meter in girth. It was discovered recently growing among tall Rhododendron ponticum gone wild, which probably explains the single stem.

Better flowers are found on *M.* x thompsoniana, the hybrid between *M. tripetala* and *M. virginiana*, but *M.* x thompsoniana remains more of a shrub, although some clones seem to do better in this respect (Kapelleberg collection). The flowers seem mostly influenced by *M. tripetala* (the smell is not very attractive either), but the leaves have retained the glossy aspect of *M. virginiana*. In general, it is an untidy thing. Branches always seem to fall back. I find it a good background plant, but the flowers are lost in the foliage. They never stand



Magnolia officinalis var. biloba at Herkenrode

up straight on the shoot and are really no good as cut flowers. As for most magnolias, these need a good, rich soil and don't like competition from grass. Several such weakened plants, in poor locations, were lost to spring frosts.

Section Gwillimia

I have grown *M. delavayi* on a west wall since 1989. It is growing very vigorously and has been through -10°C in 1991. Leaves were browned, but otherwise the plant has not suffered. It will surely not survive our next -20°C winter. But it is nice to be able to see it growing with its large wavy leaves and nearly exotic look.

Section Rytidospermum

Most of the plants in this section are quite rare in continental Europe. They are not quite hardy and not really spectacular. They also have a very untidy look and probably are collectors items. The best for us is probably *M. hypoleuca*. It is the only treelike magnolia for our country. It is nevertheless often hit by late frost and may lose its top and terminal stem. It has not flowered with me yet, but it should show good flowers one day.

An interesting phenomenon is the change of color on the bark of *M. hypoleuca* when wet by rain or otherwise. I remember once returning to a spot in a garden, after a shower, to take a picture of a beautiful amber barked tree. I couldn't find it. Indeed, the bark had dried and had returned to its usual silvery—white coloring.

M. × wieseneri, its putative hybrid with M. sieboldii, is difficult to grow. I have had several losses and, if it was not for the spectacular flower seen elsewhere, I would give up trying.

I have several small plants of *M. hypoleuca* and *M. officinalis* but I do not see the difference yet between the species. I also have a few hybrids resulting from a cross by August Kehr (1988/No.33) and hope to be able to look at all these as they grow side by side.

The bilobed form, *M. officinalis* var. biloba is a very attractive plant. The flowers of one particular plant, which was purchased from Hilliers Nursery in 1974, are quite spectacular and seem larger than those of *M. officinalis* descriptions. Could it be a polyploid, or hybrid? Only this year did I collect seed for

the first time on one single pod of this plant. Previously, all parts would fail to develop, and I am not sure what I could do to encourage fertilization. This is really a handsome plant. Further, it shows good color for a few days in the autumn.

Magnolia tripetala is never much of a tree here, mostly a large shrub to 5m high with several stems. One reasonably good plant at Herkenrode is still a single stem specimen sixteen years after it came from Hilliers. It flowers discretely, late in May or early in June. The flowers are interesting for a short time. Unfortunately, they soon fade away. Magnolia 'Charles Coates' opens up as M. tripetala finishes, like the other parent (M. sieboldii). It is shy flowering with us. I try to grow it as a tree, but it refuses to do so.

There is not much to say about *M. fraseri* or *M. pyramidata*. Much too rare here. There is a good plant of *M. pyramidata* at Hemelrijk, the superb plant collection of the de Belder family near Antwerp. But this is closer to the sea than my garden. A little seedling, one of the only plants to germinate from the Magnolia Society seed exchange lot number 1988/56 has survived -10°C up to now.

Magnolia macrophylla is quite rare in Belgium. One plant in the Botanical Garden at Liège has reached a good size; well protected in a sunny spot in this city botanical garden. It seems reasonably hardy in our country. A seedling of M. ashei, planted out in 1987 managed to flower in May of 1990 and then get through a couple of -10° winters. I thought that the autumn foliage might be nice, but late in October these plants had not matured and many green leaves were caught by early frost. The same thing happened with many lovely seedlings from seed collected on a good tree in the garden of the Henry Foundation near Philadelphia: in mid-January the many green leaves stood all twisted by the frost. The plants got through our average 91/92 winter without being cut back.

Section Oyama

This section is a much more satisfactory one, although most of the plants require a continental climate which we do not have. Several species do quite well, in particular M. sieboldii and M. wilsonii. We probably do not have the true M. globosa, and I have never seen M. sinensis or anything which matches its description. The only difference seems to be the presence of

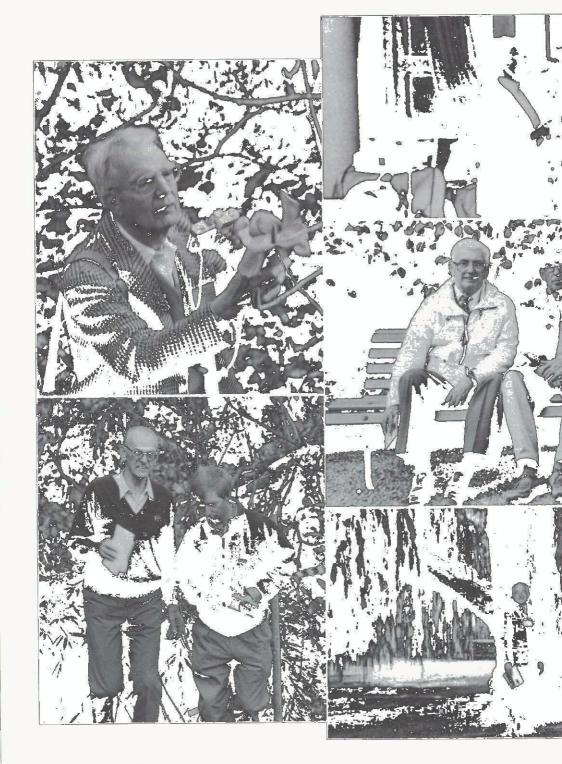
crinkled hairs on the underside of the leaf for *M. sinensis*, whereas they are straight for *M. sieboldii*. Of more importance to separate the more frequent *M. wilsonii* and *M. sieboldii*, is the color of the one year old twig. This is quite obvious, "dark chocolate" for *M. wilsonii*, "milk chocolate" for the other. *Magnolia sieboldii* is probably the best plant of the four species in this section. It is mostly a shrub, but one specimen in the collection is quite treelike and seems to retain this form with some help and pruning.

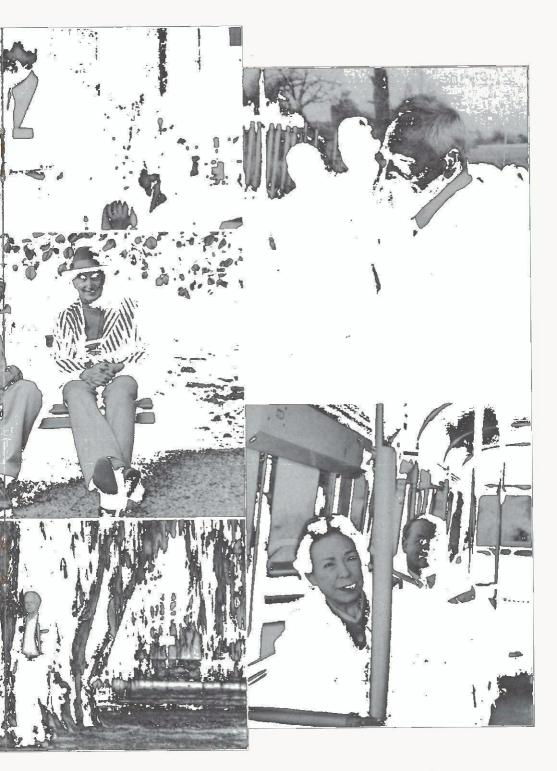
Magnolia sieboldii propagates easily from seed and from cuttings, and I look forward to observing the tetraploid seedlings produced by Dr. Kehr as they start to flower in the woodland garden in the future. Flowers from this section, and in particular M. wilsonii, first hang with a nice globose form, then open up and eventually some, although not all, look you straight in the eye. Magnolia wilsonii seems to flower all at once, whereas M. sieboldii sees its flowering spread over several weeks.

Section Theorhodon

Only one species in this section is found in Belgium: M. grandiflora is on the borderline of hardiness with us. I lost many plants in their young state, but one has done tremendously well against a north facing wall. It seems a well known fact that such plants do not like winter sunshine. This one is now up to 8m high and covers the whole wall at the back of my house. I do not know the name of the cultivar, but the plant came from Hillier's in 1974 and must be a good selection. Although positioned on a north facing wall, it will flower

Overleaf: (clockwise from top left)
August Kehr inspects M. Werrington,' a 'Lanarth' seedling;
Lola Koerting presents Dr. Kehr the Gresham Award; Otto Eisenhut
demonstrates grafting; Jeanne Holgate and John Gallagher take the bus;
Bernard de la Rochefoucauld and Karl Flinck take the shade
under Cupressus cashmeriana; Piet Van Veen and
Roger Gossler ponder the garden at large;
and Gresham Award recipient Ferris Miller joins Joe Hickman
and convention co-host Sir Peter Smithers in a brief pause





regularly every summer, providing approximately 30 superb well formed and beautifully scented flowers. It has grown an additional 1m in the last two years and will have to be cut back below the roof level.

I lost many of the well known cultivars such as 'Ferruginea,' 'Goliath,' and 'St Mary.' These were all too young in 1985 when -19°C of frost killed all young plants. Two plants, which survived, were labeled *Magnolia grandiflora* 'Maryland'! I understood why, later, when I found out that 'Maryland' is a hybrid between *M. virginiana* and *M. grandiflora*. I have great hopes for this plant, which in our countries, will probably replace *M. grandiflora* in similar locations.

Section Yulania

Pure white forms of M. denudata are rare, and most so called M. denudata are probably hybrids. In particular, as M. x soulangiana does not always retain the M. liliiflora distinctive sepals, many white soulangianas may pass as M. denudata.... Typically, the beautiful M. x soulangiana 'Lennei Alba' could, if it was earlier flowering, pass for M. denudata. Of course, it has a much more substantial flower than typical M. denudata. Another, named M. denudata, is surely a hybrid: M. denudata 'Purple Eye.' It does flower early in the season and is often hit by frost, but the flowers seem to hold on quite well. Has it inherited M. liliiflora resistance to spring frost? Magnolia denudata 'Forest Pink' is a delicate plant with us. I can't get it to grow from cuttings, probably a sign that it does not contain any M. liliiflora genes. On the other hand, it is very reminiscent of M. sprengeri var. diva in terms of color.... It grows upright like M. denudata should, but it is always cut back by frost and remains a weak grower.

Nowhere have I seen *M. denudata* growing as strongly as at Longwood Gardens [Kennett Square, Pennsylvania]. There it is an upright tree with a good bole. Three plants in a row measure more than 170cm in girth at breast level.

Magnolia campbellii and M. campbellii ssp. mollicomata are hopeless on the northern European continent. We can only dream of the superb trees and flowers seen in the Himalaya. I thought I finally had a flowering mollicomata, but it turns out to be a late flowering hybrid of possibly M. sprengeri diva. This plant propagates easily from cuttings, and it grows so

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vigorously that I have multiplied it successfully. It appears to be a shy flowering tree. I nevertheless gave it a tentative name M. 'Hot Lips,' suggested by the rich, voluptuous base of the petals.

Magnolia dawsoniana is not very hardy with us. I have lost many 'Chyverton' and 'Strybing' cultivars. One plant from Hillier's (1982) has attained 4m in height, but it has been repeatedly bark split and cut back by spring frosts. It hasn't flowered yet. I will probably find out that it is a hybrid of something else....

Magnolia sargentiana seems problematic here as well. Magnolia sargentiana var. robusta has survived in protected environments under the canopy of Douglas fir, but there is no sign of it flowering yet.

Magnolia sprengeri seems much more promising and should probably be more planted in the lower parts of Belgium or coastal areas of the European continent. Magnolia sprengeri var. diva is a good plant of vigorous growth and flowering well with us. Unfortunately, it is particularly loved by rabbits who nibble at the base of even good sized plants. Magnolia sprengeri flowers are one of spring's delights. The very luminous color of the tepals is, I believe, unique to the species and its better hybrids. The buds open to show their well filled flowers with twelve tepals which, of course, get frequently frosted and then hang-on miserably to the shrub or tree for a couple of weeks, as in April 1991.

Magnolia sprengeri var. elongata is a rare and attractive plant. It is not as vigorous as the pink form of M. sprengeri var. diva, but it has the same well filled truss with twelve (short) white tepals. The small flowers are somewhat reminiscent of those of M. cylindrica. Although trying repeatedly, I have not managed to grow this plant from cuttings. I hope that I am only being clumsy. Good hardy forms of this variety should be maintained in cultivation.

Section Buergeria

Magnolia stellata is probably one of the most important contributions from the genus to general horticulture. It is hardy, variable, adaptable and most decorative in early spring. Spectacular buds surround the dormant flower like cosy little fur coats. They open white, occasionally tinted pink. Most

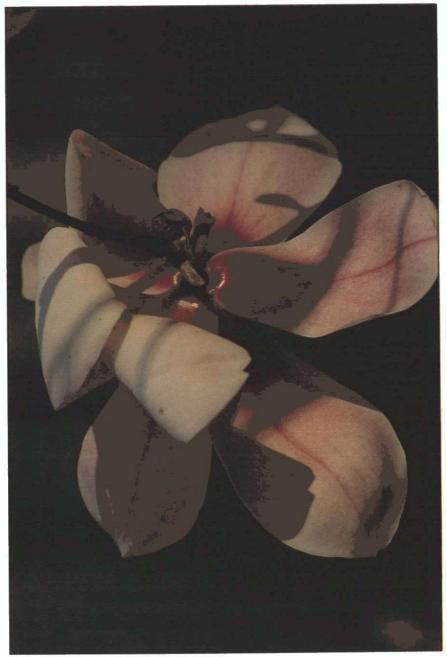
clones seem to do well and so do seedlings. Some of the better selections growing with me are 'Centennial,' 'King Rose,' Norman Gould' (the colchicine polyploid raised at Wisley), 'Royal Star,' and 'Waterlily.' The species does not seem to sprout so eagerly from the base as seen in warm continental climates. For ease of maintenance, I have pruned most of my plants to provide a single stem of 1 meter, if possible. My hope is that, if they remain well branched above their single stem, they will not produce shoots too soon from the base (wishful thinking?). The main purpose of this pruning is to facilitate maintenance and protection from rabbits. Although it is my recent impression that rabbits do not like the stellata and loebneri magnolias as much as those in Section Yulania.

Magnolia x loebneri is closely allied and even sunk by some taxonomists into M. kobus along with its other parent, M. stellata. It provides us with some very vigorous and floriferous plants, combining the qualities of both parents. Most will agree that M. x loebneri 'Leonard Messel' is one of the best magnolias to have. If given plenty of light and room to develop it will provide a consistent, long lasting, frost resistant display of flowers. In suitable locations it can reach 4m in ten years time. The clear pink color cannot be beaten. Magnolia x loebneri 'Merrill' is a strong grower, very much influenced by M. kobus. One of my favorite plants is M. x loebneri 'Neil McEacharn,' named for the creator of the great Villa Taranto garden, which we visited on this tour. Again, this is a vigorous upright plant which seems to be more of a tree than others. Treseder describes it as "an arborescent form of M. stellata rosea." Magnolia x loebneri 'Snowdrift' and 'Star Bright' are other successful cultivars.

Magnolia kobus might be mentioned at this stage. It is, of course, a small tree and has reached 17m high in some Belgian gardens, but this again, is nothing compared with the tree at Villa Taranto or the great specimen at the Morris Arboretum [Philadelphia, Pennsylvania] which measured 226cm in girth when we saw it at our last meeting. Magnolia kobus needs heat.

Magnolia x kewensis might be discussed next in connection with 'Wada's Memory' which is now considered by some to be a form of kobus. Like it or not, it is one of the most spectacular trees in the genus. The floppy tepals are so typical that the

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Magnolia 'Hot Lips' at Herkenrode

tree is difficult to miss. Further, its growth is so vigorous, possibly even here in Belgium, as the superb tree seen at Winterthur [Delaware] in April of 1991. It had flowered generously and the lawn below was carpeted with a thick layer of pure white petals. Further, 'Wada's Memory' shows, here, some good autumn coloration. It is truly a tree and quite like the next species.

Magnolia salicifolia is also upright in habit, which is not the case with M. kobus (here at least). It is only rarely seen as a truly narrow "willow leaved" magnolia. A good plant purchased from Hillier's in 1974 shows exceptionally small and narrow leaves. It flowers early, just after M. x proctoriana and before all kobus and loebneri forms. The flowers are supported by 3 long yellowish sepal like tepals. From a distance, they give a creamy "lemon" tint to large plants. Nevertheless, seed grown from my narrow leaved plant only show a small percentage with narrow leaves. The good form does propagate well from cuttings. Many forms of M. salicifolia have much larger, thicker leaves much as M. salicifolia var. concolor grown from a cutting from Karl Flinck's garden at Bjuv in Sweden. The narrow leaf form of M. salicifolia is very brittle and upright branches will tear away easily. I would advise pruning out anything that will compete with the leading shoot. Wounds heal quickly but weakness may remain within the trunk.

Magnolia \times proctoriana is always the first magnolia to flower with us. On a warm spell, it opens to a loose pose somewhat reminiscent of M. 'Wada's Memory' with similar but much smaller tepals. It soon makes a rounded shrub or small tree inheriting this characteristic from M. stellata.

Magnolia cylindrica was introduced to the United States from the Lushan Botanical Garden. The tree in the Henry Foundation is probably the original introduction. Contrary to the clone widely available in Europe, and more specifically in the United Kingdom, this plant has vigorous upright branches. Nevertheless, as in the UK plants, terminal branchlets are thickly set with many flowers on zigzagging flowering shoots. Both the upright and shrubby forms have this in common. Upright forms are in cultivation now in Europe and show vigorous growth and typical narrow flowers lasting for many days. I suspect, therefore, that it was more the form than the

climate which produced the differences which I have noticed. There are surely many forms and hybrids in cultivation and the species will remain confused. One thing, nevertheless, seems consistent: the formation of flowering twigs and the shape of the flowers.

Section Tulipastrum

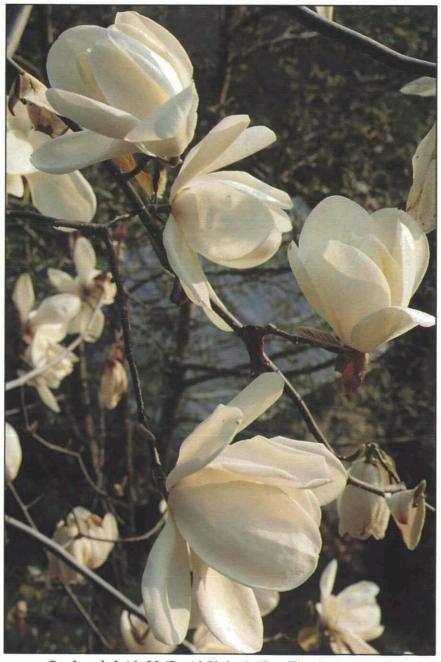
Both species in this section grow well in Belgium. Our national champion M. acuminata is 25m high and 320cm in girth. The tree sometimes displays superb autumn color, albeit for a short while. The coloration in some specimens is of a warm light brown color. Magnolia acuminata var. subcordata is not very hardy, at least when young. I have lost several young plants. Magnolia x brooklynensis is doing well with us. Their late flowering sometimes goes by unnoticed because of

the dull color of the flowers and the presence of leaves.

Magnolia liliiflora is a hardy but rather inconspicuous plant, flowering late in the season when there is so much else to see. It shiny dark foliage is probably its most attractive asset. It does well with us and its flowers are quite frost resistant. The same can be said of the De Vos and Kosar hybrids. These are attractive shrubs, but they never flower in our part of the world as they seem to do in the warm eastern parts of the United States and particularly as in the collection at the Scott Arboretum at Swarthmore College. In warm climates, flowers seem to bloom before the growth of leaves in one big flush, whereas in our maritime climate, they will only open at the same time as the leaves and continue to flower during the whole summer (as liliiflora does). On the other hand, both leaves and flowers are extraordinarily resistant to late spring frost.

Magnolia x soulangiana is by far the most popular plant in the genus and rightly so. Many cultivars are being tested here, and I hope in some years time to be able to report on these as on the many other hybrids now available to us. I am sure, also, that these first notes by a recently addicted magnoliaphile will

be much revised.



Gresham hybrid M. 'David Clulow' (Otto Eisenhut's garden)