



## Magnolias at Arboretum Wespelaar

1 – *Magnolia x loebneri* 'Leonard Messel' is one of the most beautiful of our cultivars. It is a hybrid between two important botanical species of the *Buergeria* group: *M. stellata* and *M. kobus*, both native of Japan. Fortunately, 'Leonard Messel' is very resistant to the frosts that regularly hit us in spring. This beautiful plant is 40 years old. It is a small tree or large shrub suitable for all gardens. It is most floriferous in full sun.



1. *Magnolia x loebneri* 'Leonard Messel'

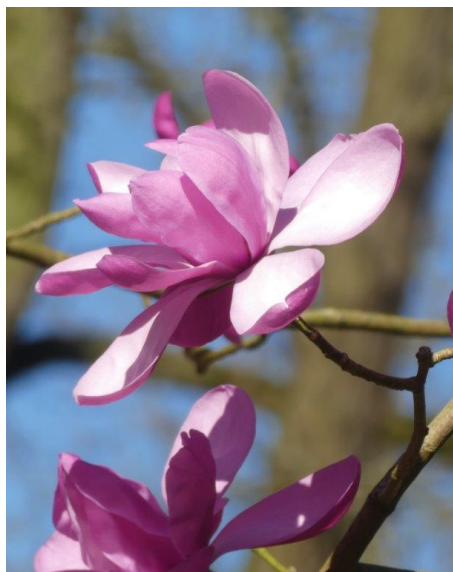
2 – There are 3 botanical species in the *Buergeria* group (Section *Yulania*): *Magnolia kobus* (2.a) with typically 6 tepals (a floral part that is neither sepal nor petal), *M. stellata* (2. b) with up to 20 to 30 tepals and finally *M. salicifolia* with six narrow, pointed tepals, supported by 3 particularly long sepaloïd tepals; it is a tree (2.c) which is increasingly used for city plantings. Horticulturists around the world have crossed these 3 species and produced a whole series of hybrids: the best known are *M. x loebneri* (*kobus* x *stellata*), and *M. x proctoriana* (*salicifolia* x *stellata*). *Magnolia biondii* (2.d), a very early flowering tree, may be part of this group; the colourful flowers (red flame on the tepals) appear in the last days of February, and are quite frost resistant.



2.a *Magnolia kobus* 'Isis' 2.b *Magnolia stellata* 'Kikuzaki' 2.c *Magnolia salicifolia* 'Concolor' 2.d *Magnolia biondii*



3 – Also very early-flowering are the large magnolias of the *Yulania* section with their generous flowers with 12 tepals. They are of Asian origin (from the Himalayas to China). These include *Magnolia campbellii*, *M. sprengeri* and *M. sargentiana*. *M. sprengeri* (3.a) has a delicious fragrance. The cultivar 'Burncoose' (3.b) produces a gigantic flower with particularly strong colours.



**3.a** *Magnolia sprengeri* 'Diva' **3.b** *Magnolia sprengeri* 'Burncoose'

4 – Crosses between various species of the *Yulania* section have produced impressive flowers as is the case with 'Caerhays Belle' (4.a). *Magnolia* 'Purple Breeze' (4.b) is a Wespelaar selection, probably a *Magnolia sargentiana* crossed with *M. sprengeri*. There are many forms of *M. sprengeri* in the wild in China. The only thing they have in common are their 12 tepals. A white form has been named *M. sprengeri* var. *elongata* (4.c). When comparing, *M. sprengeri* var. *sprengeri* clearly has larger flowers than the *elongata* variety or *M. cylindrica* (4.d).



**4.a** *Magnolia* 'Caerhays Belle' **4.b** *Magnolia* 'Purple Breeze' **4.c** *Magnolia sprengeri* var. *elongata* **4.d** *Magnolia sprengeri* compared

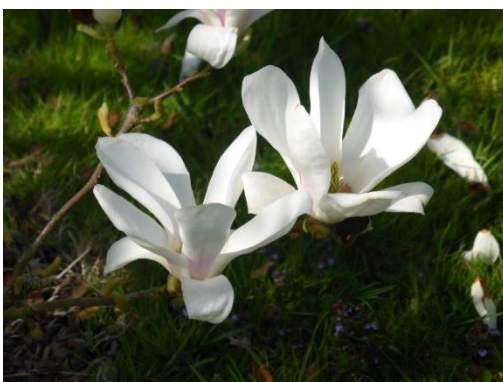


5 – It was at the beginning of the 19<sup>th</sup> century that Mr. Soulange-Bodin made the first known cross between two Chinese species: the very early white *Magnolia denudata* with 9 tepals (5.a) and the later flowering purple *Magnolia liliiflora* with 6 tepals (5.b). This cross has produced many of the forms of *Magnolia x soulangeana* that we know in our parks and gardens. The flowers have 6 to 9 tepals and the colour ranges from white to dark purple.



**5.a** *Magnolia denudata* **5.b** *Magnolia liliiflora* 'Gracilis'

6 – Among the many selections of *Magnolia x soulangeana* (*denudata* x *liliiflora*), let us note *M. x soulangeana* 'Verbanica' (6.a) an old and hardy cultivar, one of the last to flower, *M. x soulangeana* 'Lennei Alba' (6.b) with its pure white flowers, also an old cultivar that is still very recommendable. *M. x soulangeana* 'Speciosa' (6.c), quite close to *denudata*, seems modest, while 'Brozzonii' (6.d) remains the champion of the old selections of *M. x soulangeana*.



**6.a** *Magnolia x soulangeana* 'Verbanica' **6.b** *Magnolia x soulangeana* 'Lennei Alba'  
**6.c** *Magnolia x soulangeana* 'Speciosa' **6.d** *Magnolia x soulangeana* 'Brozzonii'

7 – The magnolias of the *Oyama* group flower later, together with the leaves; they are therefore less spectacular but no less charming. The flowers normally hold 9 tepals. They are either a little sideways in *M. sieboldii*, (7) or pendant in *M. wilsonii*, (8). To quote the English gardeners *M. wilsonii* modestly looks down, while *M. sieboldii* "looks you in the eyes".



7. *Magnolia sieboldii*

8 – You almost need to lie down under *Magnolia wilsonii* to be able to observe its flower (8a). *M. wilsonii* and *M. sieboldii* are very similar, and there are certainly hybrids between both. All are very fertile and produce beautiful fruits sometimes as early as the end of August (8.b)



8.a *Magnolia wilsonii* 8.b *Magnolia wilsonii*

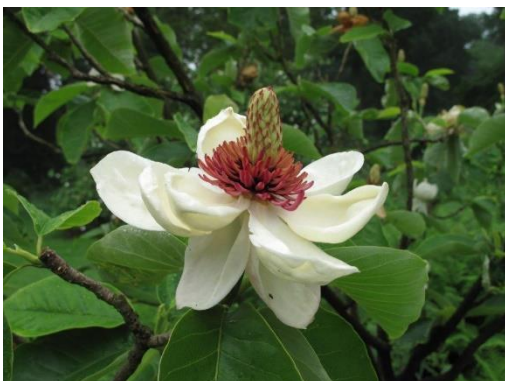


9 – In May and June, some big leaf magnolias will be flowering. They belong to the section *Rhytidospermum*. We know one American species *M. tripetala* (9.a) and three Asian species: *M. officinalis* (9.b), *M. obovata*, *M. rostrata*. Here too, there are many hybrids whose relationship is sometimes difficult to determine. Typically, the 3 outer tepals bend over and the 6 inner tepals can remain erect for some time. Many small beetles will be found in the flower; they enter between the base of the closed tepals to feed on the pollen.



9.a *Magnolia tripetala* 9.b *Magnolia officinalis*

10 – *Magnolia officinalis* var. *biloba* (10.a) has, like all members of the section *Rhytidospermum*, a gigantic leaf but in addition, it is curiously bilobed. Its flower is very similar to that of *Magnolia obovata* (10.b). Here again one encounters many hybrids: *Magnolia* x *wieseneri* (*obovata* x *sieboldii*) has an extraordinarily fragrant flower (10.c); furthermore, the red stamens are always spectacular. *Magnolia* 'Nimbus' (*obovata* x *virginiana*) (10.d) is another hybrid known for its extraordinary fragrance; the flower is more modest, but it is a large tree like its parents.



10.a *Magnolia officinalis* var. *biloba* 10.b *Magnolia obovata* 10.c *Magnolia* x *wieseneri* 10.d *Magnolia* 'Nimbus'



11 – A typical structure can be recognised in the centre of each *Magnolia* flower (11.a): the top, loaded with stigmas which will be pollinated by an insect, and the stamens at the base containing pollen. For an effective pollination, the pollen will have to come from another flower because on a particular flower, the stamens will only open well after the stigmas have closed up. This favours cross pollination between flowers and possibly different shrubs. A month later, stamens have disappeared and stigmas have dried out and the fruit can develop (11.b). Each fruit contains two red seeds that will eventually be carried away by birds.



**11.a** *Magnolia grandiflora* 'Samuel Sommer' **11.b** *Magnolia grandiflora* 'Bracken's Brown Beauty'

12 – *Magnolia grandiflora* (12.a) has lush, dark green, evergreen, glossy foliage. It is a much hardier tree than previously thought and grows beautifully in Wespelaar. *Magnolia virginiana* (12.b) is another North American botanical species; its flower is more discreet but very charming and the foliage is sometimes evergreen (especially in the *australis* variety). *Magnolia laevifolia* (12.c) is covered with a mass of small delicate flowers. These emerge from russet-hairy buds which are also spectacular. A beautiful floriferous hybrid *M. maudiae* x *laevifolia* (12.d) surprised us with its hardiness in Wespelaar.



**12.a** *Magnolia grandiflora* **12.b** *Magnolia virginiana* var. *australis* **12.c** *Magnolia laevifolia* **12.d** *Magnolia* (*laevifolia* x *maudiae*)

13 – The yellow colour found in magnolias hardy in Belgium always comes from a remarkable North American species: *Magnolia acuminata*. It can become a giant tree in the Appalachian Mountains of North America. The flowers of the botanical species are modest and often located at the very top of the tree; moreover, they are more or less greenish in colour. The southern variety, var. *subcordata* (13.a), has the most yellow flowers. This beautiful tree (13.b) in Arboretum Tervuren is probably not much older than 100 years.



**13.a** *Magnolia acuminata* var. *subcordata* **13.b** *Magnolia acuminata* in Arboretum Tervuren with Philippe de Spoelberch

14 – The colour of the flowers of *M. acuminata* ranges from greenish in the typical species, to pure yellow in the *subcordata* variety and almost bluish in the selection 'Seiju' (14.a). This curious tone comes from a sort of glaucous waxy layer on the outside of the flower which reflects the colour of the blue sky. It disappears when the flower opens. *M. acuminata* has been crossed with *M. liliiflora* to give rather curious hybrids: the copper-toned, orange or yellowish *M. x brooklynensis* (*acuminata* x *liliiflora*). *Magnolia x brooklynensis* 'Woodsman' (14.b) is one of the most controversial. You either love it or hate it, but it does not leave you indifferent!



**14.a** *Magnolia acuminata* 'Seiju' **14.b** *Magnolia x brooklynensis* 'Woodsman'

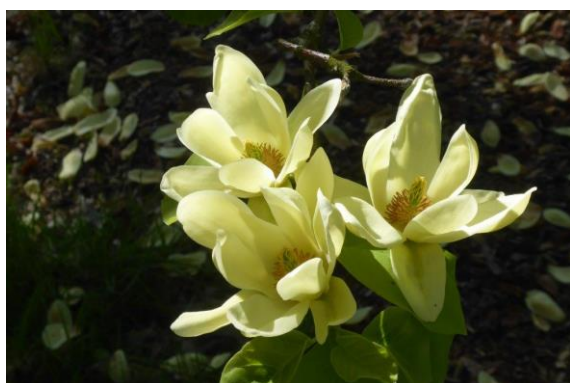


15 – In 1992 the Arboretum received a large number of seeds resulting from crosses made in the USA by Dr. August Kehr with the specific aim of producing yellow-flowered magnolias, hardy in our temperate climate countries. We sowed these seeds and waited for their first flowering for a good ten years. We were able to select and compare them in 2002 (15.a). The old hybrid 'Elizabeth', which is a cross between *M. acuminata* and *M. denudata*, is much paler than the recent crosses selected by the Arboretum. All these hybrids flower late with the leaves. The tepals on some selections are probably too large and tend to hang down loosely as they fade. This is the case with our selection (15.b) *Magnolia* 'Green Bee' ('Miss Honeybee' x 'Gold Crown'). Again, you either love it or hate it. But this tree is impressive and even blooms on low branches.



15.a Yellow Magnolias compared 15.b *Magnolia* 'Green Bee'

16 – *Magnolia* 'Elizabeth' (*acuminata* x *denudata*) is shown here in all its glory (16.a): a slightly pale yellow but a really excellent plant. *Magnolia* 'Daphne' (16.b) is probably less hardy but has a beautiful dark yellow flower. The flowers appear at the same time as the leaves but in this cultivar the compact flowers are clearly visible, set on three leaves at the tip of the branches. *Magnolia* 'Lois' (16.c) is a pale yellow in the same group; it has the advantage of being floriferous and hardy and is highly recommended. *Magnolia* 'Butterflies' (*acuminata* x *denudata*) (16.d) is probably less successful in our maritime climate.



16.a. *Magnolia* 'Elizabeth' 16.b *Magnolia* 'Daphne' 16.c *Magnolia* 'Lois' 16.d *Magnolia* 'Butterflies'

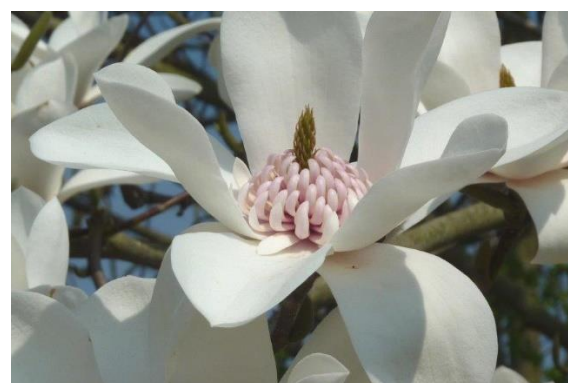
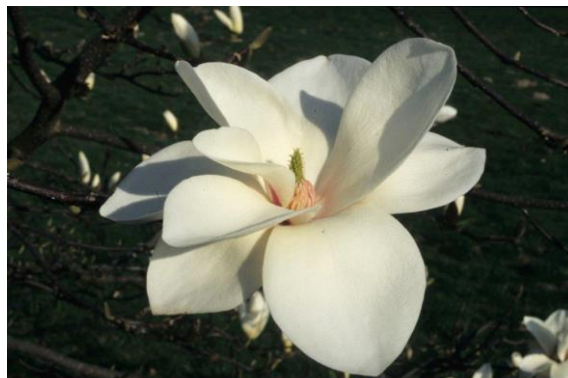


17 – Photographs taken by drones now provide us with spectacular views of the Arboretum: this plot features a range of *Magnolia x loebneri* cultivars, with 'Leonard Messel' in the foreground (also visible on frame 1).



17.a Drone luchtfoto van de *Magnolia x loebneri*

18 – Horticulturists around the world have produced many modern hybrids using all known species. Among the better modern white hybrids, we should mention *Magnolia* 'Tina Durio' (18.a and 18.b); it is a large shrub resulting from the cross of *Magnolia x veitchii* with *M. denudata*. We have created some beautiful white hybrids in Wespelaar: *Magnolia* 'Sybille' (18.c) is the result of a cross of 'White Giant' with 'Leda', two white cultivars. *Magnolia* 'Joli Pompon' ('David Clulow' x *sprengeri* var. *elongata*) (18.d) has 12 large tepals and stamens with spectacularly enlarged filaments.



18.a *Magnolia* 'Tina Durio' 18.b *Magnolia* 'Tina Durio' 18.c *Magnolia* 'Sybille' 18.d *Magnolia* 'Joli Pompon'

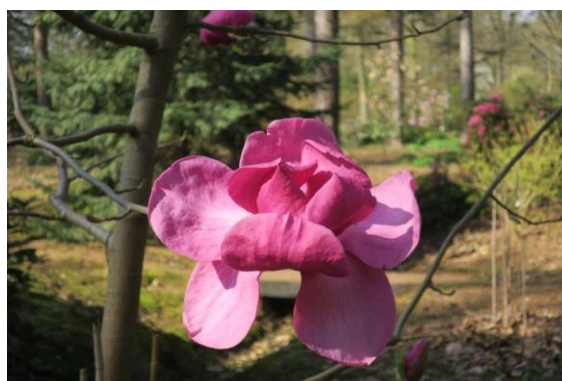


19 – Many modern hybrids are also purple. This colour often comes from the botanical species *M. liliiflora* shown in frame 5. The flower of *Magnolia* 'Shirazz' (19.a) is particularly dark and the fact that the inside of the tepals is also coloured further enhances its character. *Magnolia* 'Pickard's Garnet' (19.b) is a double form of *Magnolia* x *soulangeana*; it has the distinction of producing up to 12 tepals instead of the usual 6 tepals in the *M. x soulangeana* group.



**19.a** *Magnolia* 'Shirazz' **19.b** *Magnolia* 'Pickard's Garnet'

20 – The large purple hybrids with gigantic flowers will certainly conquer the world; unfortunately, they are early and probably not too hardy. *Magnolia* 'Black Tulip' (20.a) is probably the most hardy, but 'Felix Jury' (20.b), 'Charisma' (20.c), 'Anne Leitner' (20.d) are incredibly spectacular and well worth the risk of losing the flowers in a late spring frost.



**20.a** *Magnolia* 'Black Tulip' **20.b** *Magnolia* 'Felix Jury' **20.c** *Magnolia* 'Charisma' **20.d** *Magnolia* 'Anne Leitner'