Magnolia ⁎ 13–14 April

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In mid-April, we were kindly invited to Arboretum Wespelaar in Belgium where almost 80 participants gathered at the beautiful site for an informative and enjoyable study weekend. After a warm welcome from Koen Camelbeke, the Director, we met the three speakers for the day. Paul Goetghebeur started with a talk on the taxonomy and phylogeny of the genus *Magnolia*. Paul suggested an answer to the question of whether horticulturists and botanists should still use *Magnolia* in a narrow sense or *sensu stricto*, with *Magnolia* being a genus strictly separated from other closely-related genera like *Michelia* and even *Yulania,* or should all those genera be lumped together to form one big genus, *Magnolia sensu lato*? He explained that due to new discoveries in genetic work, most taxonomists now treat *Magnolia* as one big genus. In the *Flora of China* (2008) *Magnolia* is used in the strict sense, therefore recognising 13 genera in the Magnoliaceae family. But this view is rarely accepted these days, even among Asian botanists. Furthermore, he showed us the most important characteristics for identifying different groups within *Magnolia.* These are the arrangement of the leaves and whether they are deciduous or persistent, the timing of branching, the persistence of the stamens, the type of stomata, the presence and length of stipular scars on the petioles, and the presence of an auriculate leaf base. Our take-home message was that *Magnolia* should be treated as one big genus, which can be divided into 15 sections – a view that is clearly supported by molecular data. These sections did not appear before the mid-Oligocene (30 million years ago), due to the slow evolution within the genus.

The second speaker was our co-host for the weekend, Philippe de Spoelberch, the founder of Arboretum Wespelaar. He began with what to consider when starting a *Magnolia* collection. Climate plays an important role, since *Magnolia* trees from a warm continental climate will become more shrubby when planted in cooler and maritime conditions. We were shown historical pictures of Arboretum Wespelaar, which helped to illustrate the importance of good garden design. You need to think about things like drainage, orientation, which plants to put together, planting distance, and frost protection. Drainage is needed, otherwise the roots will not grow deeply into the soil. There is one exception, however, namely *Magnolia virginiana* and its var. *australis*, which likes wet feet. When comparing different cultivars of *Magnolia*, it can be a good idea to put them close to one another, to see the colour variation. Spring frost can damage flowers, whereas early autumn frost is a problem if shoots are not yet hardy enough. Snow can break the branches of evergreen magnolias. Plants can be attacked by wildlife (especially male roe deer) and insects; some can be anticipated and protection against them provided. He ended his talk with the joy of propagating *Magnolia*, by pollinating and sowing or by softwood cuttings, and with the importance of an inventory and good labelling.

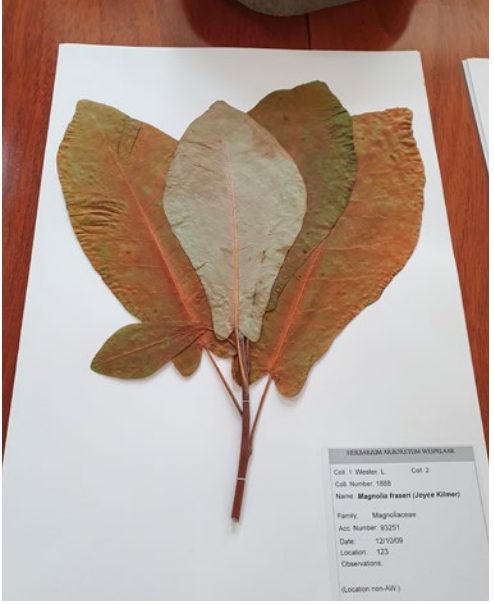


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The library at Wespelaar, with a display of herbarium specimens of *Magnolia*.

The last speaker of the day was Maurice Foster. He discussed his favourite *Magnolia* species and why they can bring pleasure to you and your garden. He started off with a story about *M. campbellii*, which was described as a purple flowering *Magnolia* by Joseph Dalton Hooker. Nevertheless, Maurice saw only white and no pink forms in three weeks of trekking through Bhutan in 1989. This contradiction can be explained by the fact that the white form is the most common one in its area of distribution, but near the city of Darjeeling the pink form is more dominant. It grows in thickets, woodlands and mixed forests where the soil is cool, deep and rich in humus. Many beautiful groups of cultivars have been bred. White, pink and even pale yellow forms exist.

The next species was *M. sargentiana.* The variety *robusta* tends to branch from near the ground, which makes a bushier tree. It has been an important parent for breeding, with 'Blood Moon' and 'Premier Cru' at White House Farm as examples. The Caerhays dark form comes true from seed and has never reverted. The large, often floppy flowers of *M. sargentiana* are curiously nicknamed 'pink Kleenex tissues', 'parachutes' or even 'toilet paper' (see also https://www.treesandshrubsonline.org/articles/magnolia/magnolia-sargentiana/). The third highlight was *M. dawsoniana,* which is multibranched and has flowers that pale with age. Seedlings appear to be consistent in colour and shape of the flowers. Another favourite is *M. sprengeri* 'Diva'. *M. sprengeri* has an incredible variety of flower colour and shape in the wild, leading to



Left: herbarium specimen of *Magnolia fraseri* in the library.

Opposite left: *Magnolia* 'Daphne'

Opposite right: M*agnolia laevifolia* 'Church Mouse'

a stunning selection of trees. 'Copeland Court', for instance, is "almost too much for colour", with its bright pink flowers. Maurice concluded with *M.* 'Westonbirt Hope', from which he hopes a new series of garden plants can arise, especially for growing in alkaline soils.

There was an opportunity to visit the arboretum's extensive library during a break between the talks. In the beautifully arranged room, several herbarium specimens of different *Magnolia* species were displayed. I looked for the characteristics we learned about in Paul's talk and found the typical auriculate leaf bases of *M. fraseri* and *M. macrophylla*.

After a delicious lunch we enjoyed a stroll through the Arboretum and the Potager of Wespelaar. Participants were divided into groups and each group was assigned a guide. My group was led by Christophe Crock, one of the three gardeners who take care of the garden of Herkenrode (Philippe's private residence). The tour started in the Arboretum, where we caught the first glimpse of the magnificent trees, surrounded by unique woodland plants. In this area, we learned about their nursery and their strategy for raising plants in their own (improved) garden soil. Those young trees will need to adapt less when transplanted at their final destination. A mulch is used, consisting of leaves, pine bark and manure, in combination with ground cover plants. While heading to the *Magnolia* collection we encountered *Fagus orientalis*, a native of the Caucasus. This is a tree to keep in mind for the future, since it is able to survive cold in winter and heat in summer. In the *Magnolia* collection, the flowering period of many white and pink flowering species was nearing its end. However, we had the chance to see beautiful yellow-flowered trees which had also started flowering earlier, for example *M.* 'Daphne'. Multiple trees were planted in shady and sunny spots. This was an interesting experiment, since only the trees in the shaded environments survived. We also





encountered *M.* 'Frank's Masterpiece', the only weeping *Magnolia* (in fact a bit messy). *M. laevifolia* 'Church Mouse' (for the splitters known as *Michelia yunnanensis*) is scented, and attractive in winter with its rusty-haired flower buds. We learned about fertilising *Magnolia* with phosphorus and magnesium to improve their hardiness. The Arboretum does not only specialise in *Magnolia*, but also in acid loving plants in general, like *Rhododendron, Stewartia* and *Acer* and also in plants that display a palette of magnificent autumn colours, like *Sorbus ulleungensis* 'Olympic Flame'.

For the second part of the tour, we went to the Potager, which was partly designed by the Belgian landscape designer Jacques Wirtz, famous for his cloud-pruned *Buxus* plantings and hedges of medium height. In the garden there was so much to see that you did not know where to look first! There was a beautiful water garden with a former baker's oven room decorated with different kinds of shells and a 30 m-long orangery. Back inside, we enjoyed a delicious dinner and reflected on what we had seen during the day.

On Sunday there was a similar plan, with three speakers in the morning followed by a tour in the gardens. Jim Gardiner spoke first, on *Magnolia* collections in the gardens of the Sussex High Weald at the heart of south-east England, and especially at Borde Hill. The area has 50 different kinds of *Magnolia,* including some champion trees. At Gravetye Manor one can admire a bright pink-flowered *M. campbellii*. Leonardslee is known for its *Rhododendron* collection, which consists of more than 1,000 plants. The National Collection of *Stewartia* can be admired at The High Beeches, and you can also find *Magnolia sargentiana* var. *robusta* here. Nymans, a National Trust property, houses southern hemisphere plant collections, as plants were collected in the Andes and Tasmania. About 40 plants are named after the garden. Here, the head gardener raised *Magnolia* × *loebneri* 'Leonard Messel' by crossing *M. stellata*

and *M. kobus*. Champion trees of *M.* 'Cecil Nice' and *M.* × *wieseneri* can be found here as well. Wakehurst Place houses the Millenium Seed Bank and has a pinetum and the national collection of *Betula*. *Magnolia campbellii* (Raffillii Group) 'Wakehurst' is named after this garden. Lastly, Jim talked about Borde Hill. It houses many rare trees that were planted in the different gardens across the estate, like *Emmenopterys henryi*. In the *Azalea* ring, the orange flowers of Knap Hill azaleas can be experienced. Robin Williams designed the Jay Robin's rose garden in 1996. Via the Paradise Walk, one can enter the Italian garden with a big pond and the Round Dell, with plants from modern-day collectors. In Warren Wood, the rare *Chamaecyparis formosensis* and *Meliosma alba* can be admired. In the Garden of Allah, the holy trinity of *Magnolia* is present, with *M. officinalis, M. fraseri* and *M. obovata.* The Gardiner Grove, designed in 2018 for horticultural, educational and scientific value, consists of 50 hybrids of *M. acuminata* and hybrids of *M. sprengeri.* An example of a double-flowered *Magnolia* is *M. campbellii* subsp. *mollicomata* 'Jim Gardiner'. Jim accompanied his overview with many beautiful pictures which will have undoubtedly encouraged many people in the room to visit the gardens of Sussex in the near future.

Next, Tom Christian introduced the Trees and Shrubs *Online* website. It is an online source of a huge amount of information on taxonomy, cultivation, and distribution for genera and individual species of temperate trees and shrubs, and gardens can also be searched for. It is based on Bean's *Trees and*



The Water Garden, Potager of Wespelaar



Magnolia × *brooklynensis* 'Woodsman'

Shrubs Hardy in the British Isles, his *Supplement* and the book *New Trees: Recent Introductions to Cultivation* by John Grimshaw and Ross Bayton. He showed us the record on *Magnolia*, which is already quite extensive with more than 400 cultivars listed. This ended with a fruitful discussion about how to better finance the project.

Lastly, Koen Camelbeke spoke about his big passion: yellow-flowered *Magnolia*. As the magnolias were flowering early this year, Koen said "The topic all of a sudden became important". Also, people should plant more yellow magnolias in their gardens, since they remain uncommon. With some jokes here and there, he listed which attractive cultivars or species he thought deserved a star. It was difficult to choose one, as the update of 2021 of the Magnolia Cultivars Checklist listed 126 names of yellow flowers. Many of the 'good yellows' have *M. acuminata* var. *subcordata* 'Miss Honeybee' in their parent lineage. The first generation of hybrids flower before their leaves emerge, but this is risky for frost damage. The second generation are backcrosses of the first generation with *M. acuminata*, to obtain later flowering and more intense yellow colouration. Koen's number one is *M.* 'Elizabeth'.

After lunch, we visited Philippe's personal garden, named Herkenrode and the park at Wespelaar. During the tour we encountered a specimen of *Magnolia* × *brooklynensis* 'Woodsman' in full bloom, and a blue-flowering



View of the pond at Herkenrode with *Quercus rubra* Aurea Group.



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The group in the central courtyard of the arboretum.

Magnolia acuminata var. *subcordata*. *Davidia involucrata* var. *vilmoriniana* was also displaying its white bracts, reminiscent of handkerchiefs. The design of Herkenrode was carefully conceived to include multiple vistas from the house outwards. An eye-catching element in the garden is the pond with a peninsula and view of *Quercus rubra* Aurea Group. Next to the pond, *Enkianthus campanulatus* was in full flower.

The group picture is a lovely memory of an interesting weekend filled with extraordinary plants, many enthusiastic people and a great atmosphere.