

Yellow-flowering magnolias at Herkenrode and Arboretum Wespelaar – an update

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MAGNOLIA X BROOKLYNENSIS 'YELLOW BIRD' was registered in 1984 and is still an outstanding selection. The compact, upright, deep yellow flowers stand out even when the tree is in full leaf. (AW #87054 – 30 April 2005)

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WHEN OUR YEARBOOK EDITOR contacted me with the request to write an update to the yellow-flowering magnolia article written by Philippe de Spoelberch in the 2003 Yearbook, I enthusiastically accepted the job not realizing what I was letting myself in for. My list of yellow-flowering *Magnolia* taxa now counts 104 names and that is excluding the cultivars that may have yellow flowers but of which I haven't seen a flower or a picture. Discussing 104 taxa is a hopeless task and probably not very useful

or pleasant for the reader. Instead of discussing these selections I have chosen in this paper to focus my attention on the ones that stand out for whatever reason (with recommended taxa in **bold**). This is thus a personal choice and I am happy to hear your comments on this selection. A more objective study was recently published by Donna C. Fare (2011), but the number of taxa in that study was relatively limited and further evaluation of the planted specimens is needed.



MAGNOLIA FRASERI The flowers of this species are often described as creamy white. (AW #93251 – 12 May 2006) ARBORETUM WESPELAAR

THE SPECIES

Several *Magnolia* species hardy in our climate can have creamy flowers. This is the case on some of the individuals of *Magnolia fraseri* and *M. denudata*, although one can argue that creamy flowered *M. denudata* are not true to species (i.e. *M. denudata* ‘Sawada’s Cream’ and *M. ‘Yellow River’* [= ‘Fei Huang’]).

But the only temperate species that has significantly contributed to the yellow pigment

in *Magnolia* flowers is the American *Magnolia acuminata*. There are at least 28 selections of *M. acuminata* according to my most recent count. However, not all of these were selected for flower colour (e.g. ‘Aurea’ for leaf variegation, ‘Allison’ for good fall colouring or ‘Ontario’ for its northern provenance.) Nor were they necessarily selected for the yellow pigment (eg. ‘Blue Opal’ and ‘Seiju’ which were selected for their ‘blue’ flowers.) Nevertheless, most of the *M. acuminata* cultivars were selected for the good yellow pigmentation of their flowers. Unfortunately, we have found many of these to be difficult to grow here in Wespelaar and some plain statistics illustrate this fact. (See Table)

These depressing results can in some cases be ascribed to inadequate care from our part (deer damage or not watering newly planted specimens for instance) but more often cold winter and/or spring frost were the decisive factor. Of the above selections I would recommend *Magnolia ‘Kinju’* (good yellow) or ‘Seiju’ (bluish appearance and thus out of the ordinary).

Although the flowers of *M. acuminata* are small and hidden in the crown, it is still a tree that I would recommend. As a young individual the shape of the crown is near perfect and the relatively big leaves give an exotic touch to a garden. Moreover, it is one of the very few magnolias which actually colour well in autumn. But it becomes a big, way too big tree for the ordinary garden. Even in collections it is useful to renew the specimens as over time one is left with a crown high up and only the trunks clearly visible (with an attractive bark though).

MAGNOLIA	NUMBER PLANTED	NUMBER SURVIVING
‘Blue Opal’	1	0
‘Busey’	2	1
‘Kinju’	6	1
‘Koban Dori’	4	0
‘Large Yellow’	3	0
‘Moegi Dori’	3	0
‘Patriot’	3	1
‘Seiju’	5	2

TABLE Our experiences with *Magnolia acuminata* cultivars have not been very successful as these figures illustrate



TOP ROW, LEFT TO RIGHT: **MAGNOLIA ACUMINATA 'KINJU'** has small but good yellow flowers (AW #01233 – 20 May 2006), **M. ACUMINATA** – the crown of young specimens has a near perfect shape (AW #76179 – 29 October 2006)

BOTTOM ROW, LEFT TO RIGHT: **GOOD AUTUMN COLOUR** on an unnamed *Magnolia acuminata* x *cylindrica* hybrid (AW #95011 – 7 November 2010), **M. ACUMINATA 'SEIJU'**, the so-called 'blue magnolia' (AW #87053 – 30 April 2005)

PHILIPPE DE SPOELBERCH/ARBORETUM WESPELAAR



MAGNOLIA X BROOKLYNENSIS 'HATTIE CARTHAN'
(Parc de la Beaujoire, Nantes, France – 1 April 2011)
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The southern variety, *Magnolia acuminata* var. *subcordata* is not recognized as a different taxon in the *Flora of North America*. But from a horticultural point of view, and for breeding purposes, it is a useful entity; *M. acuminata* var. *subcordata* generally remains smaller and the flowers are of a more intense yellow than in typical *M. acuminata*. At least seven selections are known for *M. acuminata* var. *subcordata* of which 'Mister Yellowjacket' most attracts our attention. 'Miss Honeybee' is probably the best known selection as it has been used in several breeding programmes and proved to be an excellent parent for good yellow-flowering magnolia hybrids. For this reason we have tried 'Miss Honeybee' three times but without success.

FIRST GENERATION HYBRIDS

Most of the selections of *M. x brooklynensis* (= *M. acuminata x liliiflora*) are not yellow flowered due to the influence of the purplish colour of *M. liliiflora*. However, those that are yellow flowered (often *M. acuminata* var. *subcordata* back crosses) are mostly good plants, although they may have a shade of pink which can put off the purists (e.g. 'Hattie Carthan'). But one *M. x brooklynensis* selection is essential: 'Yellow Bird'. The flowers have a good, deep yellow colour; but they are

relatively small and appear together with the leaves. This does not mean that the flowers are hidden, on the contrary, they are visible even from a distance. Our oldest plant at the Arboretum is now 28 years old and has the habit of an old, knotty apple tree and it surely is a favourite of many visitors.

One of the most rewarding first generation crosses has been *Magnolia acuminata x denudata* which has produced at least seventeen named selections. Undoubtedly this figure is far too high and several of those will disappear over time as the differences between most of them are too subtle for the average magnolia enthusiast. In our maritime climate, the Chinese *M. denudata* is mostly a multi-stemmed shrub, sometimes a small but wide tree. The snow-white flowers with nine tepals appear very early (mid-March in our climate). The cross with the later flowering *M. acuminata* will thus result in big plants which flower early (before appearance of the leaves). The flowers will logically be pale yellow (yellow is often an euphemism in this case). If you only have room for one plant, 'Elizabeth' remains your best choice. It is reliable and perfectly hardy. 'Robust, resilient and a good all-rounder' is Stefan Cover's verdict (2009). But, you need to have a big garden as the plant seems to have some of the vigour of *M.*



MAGNOLIA 'ELIZABETH' will become a big tree over time, but it remains one of the best selections for early, pale yellow flowers. (AW #85094 – 25 April 2013)
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TOP ROW, LEFT TO RIGHT: **MAGNOLIA 'PETIT CHICON'** is the very first yellow magnolia to flower (AW #90187 – 25 April 2013), **M. 'IVORY CHALICE'** is perhaps just too pale to be included in an overview of 'the yellows' (AW #02241 – 24 April 2010)

BOTTOM ROW, LEFT TO RIGHT: **M. 'SUNDANCE'** has pale flowers which will have the tepals reflexing on warm, sunny days (AW #90118 – 25 April 2013), **M. 'BUTTERFLIES'** in full flower can be impressive but the flower shape and tree habit can be disappointing (25 April 2006)

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acuminata. It will indeed become a big specimen over time. The very first yellow magnolia to flower is 'Petit Chicon'. It is a bit paler than 'Elizabeth' but the flowers appear 6–10 days earlier and therefore it never fails to attract attention. In his interesting overview of yellow *Magnolia* hybrids, Stefan Cover (2009) states that '*Magnolia* 'Goldfinch' in all characters is even better than 'Elizabeth' but that it flowers "slightly earlier" and thus it is almost guaranteed to disappoint if one is plagued by late frosts.' I can confirm that we actually lost one specimen of that selection due to frosts; a second one is too young to be evaluated. 'Ivory Chalice' is very fast growing and soon makes for an impressive upright tree. But we've found its vase-shaped flowers really too pale to be admitted in an overview of the yellows. Equally pale is 'Sundance' but it remains an attractive plant especially on warm, sunny days when the tepals have the tendency to reflex which makes for a delightful and surprising sight. The cultivar which set a lot of tongues wagging is 'Butterflies'. When in full flower and on the right day it will indeed create a nice impression but I have been disappointed more than often by its poor habit and flower shape. I would not recommend this selection. 'Legend' received both positive and negative comments over the years. It has flowers typical for the cross and it probably is no improvement but the tree is floriferous and has



MAGNOLIA 'LEMON STAR' flowers open star-like and their colour reminds us of lemon ice cream, hence its name (AW #96287 – 18 April 2005)

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a good shape; moreover it has good autumn colour and that is probably the main reason why it has so far escaped the chainsaw. Several of these crosses have the prefix 'golden' (e.g. 'Golden Endeavour', 'Golden Gala', 'Golden Pond' or 'Golden Sun') or 'yellow' (e.g. 'Yellow Fever', 'Yellow Garland', 'Yellow Joy' or 'Yellow Sea') but don't let yourself be fooled: all of those are really pale and you need a different cross if you are into real yellow flower colour.

Magnolia acuminata has been crossed with several other species and some have yielded good plants such as 'Limelight' and 'Yellow Lantern' (*acuminata* (or 'Miss Honeybee') x *soulangeana* 'Big Pink') or 'Lemon Star' (*acuminata* x *kobus* 'Norman Gould'). In the Arboretum we grow an unnamed cross of *M. acuminata* with *M. cylindrica* which gets good comments from visitors and nurserymen (and has thus been propagated under its number 95011-C); it has great autumn colour. But I remain hesitant in naming just another good yellow. The most innovative first generation cross certainly was 'Gold Star' (*M. acuminata* var. *subcordata* 'Miss Honeybee' x *M. stellata* 'Rubra'). *Magnolia* enthusiasts and specialists are unanimously positive about this selection.



MAGNOLIA 'LIMELIGHT' is a cross of *M. acuminata* with *M. x soulangeana* 'Big Pink' (AW #90170 – 18 April 2005)

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MAGNOLIA 'GOLD STAR' produces charming and first-class, frost-resistant, pale yellow flowers reminiscent of *M. stellata* (AW #95384 – 22 April 2005) ARBORETUM WESPELAAR

It combines the yellow flowers and tree habit of *M. acuminata* var. *subcordata* with the delicate, early, white, star-like flowers of the Japanese *M. stellata*. It produces charming, frost-resistant, first-class pale yellow, 'stellata-like' flowers. But I must agree with Cover (2009) that it does not remain small. In fact, the only *stellata*-like thing about the trees are the flowers.

SECOND GENERATION CROSSES AND BEYOND

Since the first generation crosses described above, many well-known magnolia breeders have back-crossed those F1 hybrids with *Magnolia acuminata* or other yellow-flowering hybrids in order to obtain more intense flower colours and better garden plants. This list, again, is endless with at least 39 named selections! And my choice of taxa, as highlighted in this paper, is of course a personal one. I am focussing here on the European selections as these have in the meantime grown

into good specimens, easy to observe and evaluate. The American selections that we grow are often too young for evaluation. A good account of several of those can be found in the article by Cover (2009).

An interesting cultivar, if size matters, is *Magnolia* 'Banana Split' ('Woodsman' x 'Lennei' X 'Elizabeth'). The flowers are really huge (up to 27cm) but rather pale and with shades of white, pink and green. Its sister seedling 'Green Snow' is too pale to be included in this list and it is one of those names and selections that we should forget about.

Our most recent selection has been named *Magnolia* 'Butterbowl' ('Yellow Bird' x 'Sundance'). This tree, of almost 20 years old, is 5 metres high and 6 metres wide and has a nice, perfectly round habit. The compact flowers appear before the leaves and are a good yellow with a slight shade of pink. The flowers are erect and the short, rounded tepals give them a cup or bowl shape hence the cultivar



TOP ROW, LEFT TO RIGHT: **MAGNOLIA 'BANANA SPLIT'** has huge flowers, up to 27cm across when open, but these are rather pale with shades of pink and green (AW #99151 – 25 April 2013), **M. 'BUTTERBOWL'** has compact flowers of a good yellow, on a perfectly round tree (AW #95416 – 21 April 2005)
BOTTOM ROW, LEFT TO RIGHT: **M. 'HONEY BETH'** is the palest of the three named siblings from the very successful cross between **M. 'Miss Honeybee'** and **M. 'Elizabeth'** (AW #95403 – 4 May 2006), **M. 'HONEY FLOWER'** is a good choice if you like real yellow vase-shaped flowers. (#95414 – 4 May 2006)

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name. I would certainly recommend this selection but must admit that I may be somewhat biased.

Another very successful cross made by August Kehr in 1991 was between *Magnolia* 'Miss Honeybee' and 'Elizabeth', and three good yellow seedlings of that cross have been named: 'Honey Beth', 'Honey Flower' and 'Honey Liz'. 'Honey Liz' undoubtedly has the most impressive flowers of this triplet: deep persistent yellow, big and floppy. The tree has a good upright form but grafted specimens can be a bit irregular in their habit. I find the rounded leaves a bit too big and floppy on young trees. Flower colour can differ greatly from one season to another; in some years, the tepals of 'Honey Flower' were even more yellow than those of 'Honey Liz'. In general, though, it can be said that 'Honey Flower' has better, less floppy flowers. 'Honey Beth' has vigorous leaves and is an upright tree, better shaped than 'Honey Liz'. The flowers are paler and smaller than those of the two sister seedlings but it is a good, floriferous tree in its own right (it has however been cut, in the original trial grounds, to make space for 'Honey Flower').

Another cross which yielded two interesting plants is (*acuminata* X *acuminata* x *denudata*). *Magnolia* 'Lois' is an excellent, upright floriferous cultivar, somewhat similar to 'Elizabeth' but the flowers are of a deeper yellow than those of 'Elizabeth'. 'Anilou' (*acuminata* x 'Elizabeth') has deeper yellow flowers than 'Lois' but is less precocious. It seems that both will become big trees over time (remember that 75% *M. acuminata* blood runs through their vessels).

I have always been charmed by the cultivar named *Magnolia* 'Maxine Merrill' ('Miss Honeybee' x *lobneri* 'Merrill'). The flowers are not deep yellow but have an almost perfect shape and they stand out on the tree. Unfortunately, I have made the mistake of planting it in the plot with our deepest yellow-flowering magnolias where it cannot be fully appreciated. Without doubt, I must buy a new one and put it in a better location where, I am sure, it will be enjoyed by many of our visitors.

But the best parents so far for deep yellow flowers remain ('Miss Honeybee' x 'Gold Crown') and we must thank Dr. Kehr again for sharing seed of that cross with us. Three



TOP: *MAGNOLIA* 'HONEY LIZ' has impressive flowers of persistent deep yellow but on a rather untidy tree with very big leaves (AW #03217 – 4 May 2006)

MIDDLE: *M. 'LOIS'* is an excellent, upright, floriferous cultivar but its colour is somewhat paler than more recent selections (AW #04390 – 17 April 2007)

BOTTOM: *M. 'ANILOU'* has deeper yellow flowers than 'Lois' but is less precocious.

(AW #95014 – 4 May 2006) ARBORETUM WESPELAAR



MAGNOLIA 'MAXINE MERRILL' is a charming plant and although the flowers may not be deep yellow, they have a perfect shape and stand out on the tree (AW #01225 – 22 April 2005)

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seedlings have been named: 'Daphne', 'Green Bee' and 'Olivia'. But it is really *Magnolia* 'Daphne' that steals the scene! The flowers of 'Daphne' are good deep yellow and are held upright at the end of the branches which means that they will always stand out, even when the tree is in full leaf. The mother plant (planted in 1995) is now about 5m high which is small for a *M. acuminata* hybrid of almost twenty years old. And grafted specimens, although more vigorous, seem to keep an acceptable compact habit. The outstanding qualities of 'Daphne' were recently confirmed by Jaimie Parsons (2013) of the Caerhays Estate in Cornwall, home to an NCCPG National Magnolia Collection.

In May of this year, the Royal Horticultural Society published their new and revised list of AGM (Award of Garden Merit) plants. Of the 42 featured *Magnolia* taxa only five have yellow flowers: 'Daphne', 'Elizabeth', 'Gold Star', 'Lois' and 'Yellow Lantern'. And, we agree that this is an excellent choice.

CONCLUSION

Although a huge number of yellow-flowering magnolias have been selected and named, the main challenges remain: shall we ever have a hardy, well shaped, early flowering compact magnolia with deep yellow tepals opening before the leaves?

The deep yellow selections are generally late bloomers which is great as they escape flower damage by late spring frosts but the flowers will appear more or less together with the leaves and the blooming spectacle will be much less overpowering than that of the precocious magnolias. Those precocious selections can indeed be breath-taking as the huge quantities of flowers will emerge before the unfolding of the leaves. But, these are more sensitive to frost damage and the influence of *Magnolia denudata* or other early bloomers will always yield pale or even whitish colours.

The search for a small, early flowering magnolia with deep yellow colours remains.

LITERATURE CITED

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KEY TO IMAGES

Plant and date information is provided with the majority of images used to illustrate this article as an additional guide to the flowering times of the varieties described. 'AW #' refers to the plant's accession number at Arboretum Wespelaar followed by the date the image was created.

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TOP: *MAGNOLIA* 'DAPHNE' remains the best flowering magnolia to date. The flowers are a good, deep yellow and compact, notable even when the tree is in full leaf (AW #95399 – 9 May 2006)

BOTTOM ROW, LEFT TO RIGHT: *M.* 'GREEN BEE' is an ascending, pyramidal tree with bright yellow flowers which fall open as they mature (AW #95401 – 18 April 2005), *M.* 'OLIVIA' has firm, upright flowers of the deepest yellow colour of all the magnolias growing at Wespelaar (AW #95410 – 29 April 2004)