Magnolias in My Garden in Sweden

by Karl Evert Flinck

As a chemical engineer for the Nestle Company, Mr. Flinck's employment takes him twice a year to the United States, where his father and grandfather lived until his grandfather contracted malaria, after which he returned to the colder climate of his native Sweden. Karl, like that earlier Karl, (Linnaeus), now adds American and other foreign species of many genera to his own garden. On his March 1973 visit to Urbana, Ill. he acquired two seedlings of M. ashei, which species had flowered the previous year in my garden, plus seeds and cuttings of other species and cultivars.

We could use several articles like this from members who have tried various magnolias in difficult northern (or southern) climates.

- J. C. McDaniel

It is somewhat difficult to see a justification for an article on Magnolia growing in Sweden. When I was requested to produce this article I agreed to do so only because it might be of interest to Magnolia growers in the colder part of the United States to hear that Magnolias can be grown in subarctic Sweden.

My place in southern Sweden is located in a small community named Bjuv about 40 miles distant as the birds fly from Copenhagen in Denmark. The latitude is 56° north, which is

comparable to Labrador or Hudson Bay. The nearness to the Gulf Stream modifies the winters somewhat but the lack of summer heat makes the cultivation of several so-called hardy species difficult. The average annual minimum temperature that I can expect at my place is around 0°F. The coldest month is February with an average temperature of 30°F. The warmest is July with an average temperature of between 61° -63°F. The coldest temperature ever recorded in this area is -20°F. Since I started my garden twenty years ago I have once experienced -14°F. All temperatures measured in weather house at five feet above ground. The frostfree period can be expected to vary between 150 - 175 days, and the average annual rainfall is about 25 inches. Unfortunately it falls too little in the spring, and too much in the fall.

For satisfactory cultivation of Magnolias in this area a number of requirements should be fulfilled. There is a need for watering during May and June in most years. If this is done properly the annual growth comes sufficiently early to give a chance for a good ripening of new wood. Perfect drainage is a great help for improving the hardiness of the plants. Most Magnolias enjoy good shelter. I have found that in my garden most species like semi-woodland or woodland conditions. Quarter to half shade is probably best.

I do not believe that any Magnolias like alkaline soil. I am convinced that a free rootrun in a soil which is slightly acid with good humus content and a reasonable nutritional level is ideal. Many Magnolias grow well amongst Rhododendrons.

Below are comments on performance of my various Magnolias. Where diameters are mentioned, the measurements have been taken five feet above ground. When I indicate in the list of Magnolias cultivated by me, that they are fruiting, late frost or cold summers no fruit occurs. I have never noticed any spontaneous seedlings.

I give below my comments to my Magnolias grouped for species sections and for hybrids under Hybrids.

1. Section Yulania

This group is quite unsuitable for Swedish growing conditions. The summers are unsufficiently warm for a proper growth in this group.

M. denudata

I grow two forms, the traditional British one and the form that is named denudata, 'Purple Eye'.

"Typical" denudata I grow on a wall to protect the flowers from late frost. The plant is fully hardy and flowers regularly. No fruits have been observed.

Denudata 'Purple Eye' looks like a hybrid to me. It does not grow well and its wood is damaged in cold winters. It is not a plant suitable for general cultivation is southern Sweden.

M. dawsoniana

More than ten years ago I planted a small tree of this species in woodland. It stood as a small plant below 0°F, but

has since then been protected. It is, however, probably hardy, and has outgrown the arrangement for its protection, so time will show its real hardiness.

Height: 16 feet

Diameter: Three stems, each 3 inches M. sargentiana robusta

I planted a small plant against a wall some years ago, where it stood subzero conditions. It has since then been replanted in a protected location. I have, however, in Lausanne in it should be noticed that in years with Switzerland seen a large plant of this cultivar that has stood subzero conditions without damage. This variety must therefore be hardier than what is normally claimed.

2. Section Tulipastrum

M. acuminata

Grows relatively well in southern and middle Sweden. The largest plant I have seen is about 50 feet high. I grow specimens of various origins. Two plants originate from two different commercial nurseries. They grow strongly like a poplar with straight stems. One plant that I dug fifteen years ago as a seedling near Ashville, North Carolina grows multistems and with the stem nodes in zigzag pattern. I have raised one plant from Arnold Arboretum seed. The seedtree was labeled sub. cordata. This tree has clear green annual growth and the tips of this growth may be cut in cold winters. I have one form that originates from Morton Arboretum where it is named M. cordata. It looks to me like acuminata, however. The two plants from commercial sources are fruiting.

My largest tree has the following

dimensions:

Height: 30 feet

Diameter: 10 inches

M. acuminata var. cordata

Grows well and flowers regularly in my garden. I have two plants, one very slowly growing, the other more treelike.

The dwarf one has the best flowers, clear yellow. This plant was about 3 feet when supplied and flowered from the start. I have never seen any fruit on M. acuminata var. cordata.

Dimensions for my largest plant:

Height: 17 feet Diameter: 3 inches

M. liliflora

I have never tried any other form than *liliflora nigra*. It is unsuitable for general gardening here. Annual growth is often cut back and damage on older wood can occur. Strangely enough, in cold winters, a few flower buds come through unharmed. My plant has never been cut to the ground during the 15 years I've had it.

Height: 8 feet

3. Section Rytidospermum M. tripetala

This species has been cultivated in Sweden infrequently during the last 75 years. What I have seen look like big bushes, but so does *tripetala* I have seen growing wild in Tennessee. I have half a dozen plants in my garden. Three plants grow very well with single stems and are fully hardy. I have had two from Robbins Gardens of the Blue Ridge in North Carolina and raised one from New York Botanical Garden. The Robbins plants flower regularly and set fruit.

My largest plant has the following dimensions:

Height: 18 feet Diameter: 3 inches

M. Fraseri

I have never seen this species grown in Sweden outside my garden. I have two plants that came from Robbins in N.C. They are hardy and dependable in their flowering. Fruit is produced in warm summers. Fall coloring is very good.

9

Dimensions:

Height: 15 feet Diameter: 3 inches

M. hypoleuca

This is a tree well suited for southern Sweden. The largest specimens I have seen are about 50 feet high, but they are still growing vigorously and will, no doubt, grow larger. They flower dependably and set fruit. I have a flowering plant in my garden which I have raised from Swedish grown seed. I have plants grown from seed collected in the wild, and from seed produced in Sweden and Switzerland. I also have plants supplied from several commercial nurseries. There is a great variation in the habit of the plants, as well as in leaf shape and hardiness. Most are completely hardy, but a couple suffer in hard winters. The area, over which this species occurs wild, is, however, large and variations can be expected.

Dimensions for my largest plant:

Height: 10 feet Diameter: 5" M. officinalis

I have a plant from Hillier that is supposed to represent the species. It resembles hypoleuca quite closely. The plant has flowered but not produced fruit. Fully hardy.

Height: 15 feet M. officinalis biloba

I once lost a plant which was grafted on M. acuminata. It decayed at the graft, but I do not know if this was a result of winter cold or incompatability. A layer of this variety is now 10 feet high and shows no sign of tenderness, but has not flowered.

4. Section Magnolia

M. virginiana

I have never seen this species grown in Sweden outside my garden. Twenty years ago I bought a plant from a commercial nursery. It grew quickly into a tree 15 feet high, was quite evergreen and flowered regularly. It died, however, after 10 years, showing bark damage at ground level. It was probably var. australis.

I then got seeds from Arnold Arboretum and raised a number of plants. The largest are about six feet high. Most seem to be winter-hardy but grow very slowly. Only a couple have flowered but one when only 8 inches high. They hold their leaves during the better part of the winter.

5. Section Oyama

I find four members of this group equally charming. For hardiness sieboldii is, however, outstanding. Many gardeners have difficulties with this group. I believe they should be grown as Rhododendrons. They are also charming companions to that group.

M. sieboldii

M. sieboldii have been proven hardy in southern Sweden. It flowers dependably and sets attractive fruits. The flowers on well grown plants are as large as those of the rest of the section. The form semiplena occurs quite frequently amongst seedlings, but I personally do not think much of this form. In its way of growing this species varies a lot. Some grow quite upright, others very spreading. I have seen in Sweden an upright tree form growing 18 feet high, which characteristic was inherited by its progeny. This tree has unfortunately died. My highest plants are 12 feet high.

M. sinensis

This species is not dependable in Sweden, but I have seen an old plant in Denmark. I have raised from seeds of plant seedlings, now 6 feet high which look hardy. I had previously a flowering plant 10 feet high, which probably died from winter. cold.

M. wilsonii

Is very rare in Sweden. I have only seen flowering plants in Gothenburg Botanic Garden.

I have raised plants from seeds produced in Gothenburg. These plants grow well but have not yet flowered. M. wilsonii is strictly a border-line plant with regard to hardiness. Plants in Gothenburg were severely damaged during a cold winter with a minimum temperature of -15°F. The Gothenburg plants are about 10 feet high.

6. Section Buergeria

M. kobus

A hardy species in southern and middle Sweden. The form named borealis is far superior to other forms I have in my garden. After it has reached six feet high it flowers and fruits regularly. It is fast growing.

Dimensions for my largest plant:

Height: 30 feet Diameter: 8 inches

M. kobus var. stellata

M. stellata is not very hardy in southern Sweden. That is, the bushes are not cut to the ground by winter cold, but flower buds are frequently destroyed, and unripe wood cut back. The plants grow very slowly and unconvincingly. After good summers seed is produced.

My largest plant is 8 feet high. M. cylindrica

The cultivar under this name that is grown in the western world is fully hardy. It is far superior to *denudata* as it presents flowers better in my garden. Absolutely hardy and bud hardy. Sets seed but they never ripen fully in the Swedish climate.

Dimensions:

Height: 15 feet Diameter: 3 inches M. salicifolia

The Magnolias normally grown in Sweden as salicifolia are actually plants of the group known as kewensis. I have never seen anything but kewensis disguised under the name of salicifolia in German nurseries. This accident happens in the U.S. also. I have plants from the Morton Arboretum originating from what Dr. D. Wyman claims is one of the best salicifolias in the United States, but which is in fact undoubtedly kewensis.

I only have small plants of the true salicifolia. They flower well from the size of one foot. My largest plant is 8 feet but has not set fruit up to now.

HYBRIDS

M. 'Charles Coates' (sieboldii × tripetala)

This plant is hardy, vigorous and flowers dependably. I like the flowers which I find a great improvement on *tripetala*, and the strong pleasant fragrance. It grows like an enormous bush, but does not produce fruit.

My largest plant is:

Height: 18 feet

Diameter: Numerous stems between 3 and 4 inches each

M. × kewensis (salicifolia × kobus)

A group of fast-growing hybrids normally very floriferous. I find the original *kewensis* less dependable with regard to flowering than several others that I have bought by chance under false names.

Dimensions:

Height: 18 feet

Diameter: 5 inches

M. × Loebneri

Of this group I grow Ms. 'Merrill' and 'Leonard Messel'.

'Merrill' is hardy and floriferous but grows more slowly than *kobus* and *kewensis*. It sets fruit.

'Leonard Messel' is lovely with its rose flowers. As a young plant, it is slightly tender. The tips of annual growth may be cut, but grows and flowers well. It does not produce fruit.

Dimensions for M. 'Merrill'

Height: 14 feet Diameter: 4 inches M. highdownensis

I consider this as M. wilsonii. See this species.

M. proctoriana (salicifolia \times kobus var. stellata)

I grew this hybrid for many years until it was killed by an invasive bamboo. It was a very dependable flowerer. I never saw any fruit. I have now planted it again.

M. X soulangiana.

I dislike the "typical" form of this plant. It reminds me of a lady overloaded with the wrong type of jewellery. It does not do very well in Sweden either, feeling the lack of summer heat so that it's unripened wood is cut by hard winters. I find the form 'Picture' much better than most others and an attractive plant. This hybrid group produces viable fruit.

Dimensions for my largest plant:

Height: 15 feet

Diameter: Many stems 4 inches each

M. × thompsoniana

This plant is relatively hardy. It flowers regularly. It grows slowly in a snaky way. The branches crawl around along the ground. I probably have too little summer heat. No fruit is produced. M. × watsonii

Grows very slowly. It flowers regularly and is hardy. It is a lovely plant. After quite a few years it is only 8 feet high. It does not set fruit.

I have planted the following species and cultivars but have no experience yet for a report:

M. macrophylla

M. ashei

M. sprengeri 'Diva'

M. pyramidata

M. loebneri 'Spring Snow'

M. loebneri 'Ballerina'

M. kewensis 'Wada's Memory'

The National Arboretum's hybrid group $stellata \times liliflora$.

The ten Magnolias I like best for my Swedish climate are:

Species: M. acuminata cordata

M. cylindrica

M. kobus borealis

M. hypoleuca

M. sieboldii

M. kobus stellata

Hybrids: M. 'Charles Coates'

M. X loebneri 'Leonard Messel'

M. 'Picture'

M. X watsonii

Should any reader wish to visit my garden or contact me, they are obviously welcome to do so. I must, however, point out that I work and live in Switzerland since many years and only spend 3 – 4 weeks annually in Sweden. A warning in advance about a visit would, therefore, be welcome.