

## Plants for the Northwest Garden and Nursery®

### Roger Gossler

Gossler Farms Nursery, 1200 Weaver Rd., Springfield, Oregon 97478-9691

Magnolias have undergone an enormous breeding and naming boom in the last 30 years. There are a large number of new magnolias coming to the market from breeders primarily in the U.S.A., England, and New Zealand.

Rather than focus on new magnolias we will look at magnolias that have been really tested for years in our garden in Springfield, Oregon.

Even though these plants are older species or hybrids they have proven to be hardy, easy to grow, disease and insect resistant, and, most of all, great flowering trees.

If a new magnolia is named it should be definitely superior to any magnolia seen before. The current craze of naming every yellow magnolia dilutes truly superior varieties.

The beginning of our magnolia growing was in the late 1950s. By 1965 we had 35 different cultivars. We now have 450 to 500 taxa so this talk is a distillation of our growing magnolias for over 40 years.

The enormous range of magnolias can be a starting point for the structure of a garden. Magnolias can be used with a wide range of different plants (examples: rhododendrons, hydrangeas, and a wide range of perennials). Magnolias make a good canopy under which to grow innumerable woodland plants. Why grow a shade tree when the magnolia can provide shade and blooms?

***Magnolia 'Vulcan'***. This relatively new magnolia is a beginning of what is happening in the magnolia world. The flowers are large, bloom at a young stage, and have richer colors than we have had before.

***Magnolia campbellii* subsp. *mollicomata* 'Lanarth'**. This 30- to 40-ft tree is a semi-hardy tree (to 0 °F) with enormous deep pink-purple buds and flowers. In early March the 10 to 12 inch flowers appear on the bare branches.

***Magnolia sargentiana* var. *robusta* 'Blood Moon'** is a cultivar from Strybing Arboretum with rich darker pink flowers. The new foliage is flushed purple.

***Magnolia sargentiana* var. *robusta*** is hardier than *M. campbellii*. Perhaps the most beautiful flowering tree to grow in the milder areas of the Northwest and California.

***Magnolia denudata***. One of the best adapted magnolias, *M. denudata* will grow in Zones 5 to 9. This 40-ft tree is very picturesque with ivory white flowers in early spring. Should not be grown from seed due to the variability.

***Magnolia stellata***. This species has single white flowers on an 18 to 20 ft shrubby tree. *Magnolia stellata* 'Waterlily' has double pink flowers that fade to white. *Magnolia stellata* 'Jane Platt' was named for Portland gardener Jane Platt. The flowers are unfading pink that have double the number of tepals. The original *M. stellata* 'Jane Platt' is 15 to 18 ft tall and blooms for an extended time in March-April.

***Magnolia salicifolia* 'Elsie Frye'**. The willow magnolia gets to be 18 ft tall and 10 ft wide. The star-shaped white flowers have pointed tepals. The stamens are tipped with pink. Named for Seattle gardener Elsie Frye.

***Magnolia liliiflora*, the lily magnolia.** The basis for a majority of magnolia hybrids. This large shrub has small, dark-purple flowers in March. *Magnolia liliiflora* 'O'Neill' has much larger and darker flowers. Named by Joe McDaniel, this variety is hardy to -30 °F.

***Magnolia denudata* 'Forrest's Pink' (syn. *Magnolia* 'Forrest's Pink').** This 30-ft tree is hardy to -20 °F and even when in bloom will take a moderate frost with little damage. The flowers look like *M. denudata* but are medium pink.

***Magnolia* 'Heaven Scent'.** This upright grower has light-purple to pink flowers in March. Blooms as a young plant (2-3 year).

***Magnolia* 'Marj Gossler' (*M. sargentiana* var. *robusta* × *M. denudata*)** has large white flowers flushed pink. This Phil Savage hybrid is hardy to -30 °F.

***Magnolia* × *soulangeana* 'Pickard's Schmetterling'.** A seedling of *M. × soulangeana* 'Picture' that is hardy with rich purple flowers. This magnolia is superior to *M. × soulangeana* 'Picture' in all respects.

***Magnolia* 'Susan' (*M. stellata* × *M. liliiflora*).** 'Susan' has dark rich purple flowers over a month in March-April. This 15-ft shrub is very hardy and long-flowering.

***Magnolia* × *loebneri*.** These are is upright 25-ft *M. stellata* hybrids that are hardy and bloom young. *Magnolia* × *loebneri* 'Spring Snow' is pure white, *M. × loebneri* 'Leonard Messel' is pink, and *M. × loebneri* 'Ballerina' is a multi-tepalled white.

***Magnolia* 'Galaxy' (*M. sprengeri* var. *diva* × *M. liliiflora*).** Grown for its columnar form of 30 ft by 15 ft. This makes a great street tree with its growth and heavy crop of medium-purple flowers.

***Magnolia* 'Star Wars'.** This *M. campbellii* hybrid grows fast and blooms young. The flowers are upright light-purple and produced in great numbers.

***Magnolia* × *soulangeana* 'Coates'.** One of our selections of *M. × soulangeana* 'Rustica Rubra'. We have 30-ft tall specimens that are 25 years old. Flowers are medium purple. The tree has been hardy to -30 °F and also grows in hot climates.

***Magnolia* 'Pristine' (*M. denudata* × *M. stellata* 'Waterlily').** A medium-sized tree with ivory flowers and many tepals.

***Magnolia* 'Elizabeth'.** The best yellow to grow in cooler climates. The yellow fades to white in California or the South. Fast growing and vigorous.

***Magnolia* × *brooklynensis* 'Woodsman'.** A narrow growing upright tree with glossy dark-green leaves. Flowers are purple, pink, green, and can make a great parent for the next generation.

***Magnolia sieboldii*,** one of the greatest of all magnolias, *M. sieboldii* is a 15-ft shrub with white flowers blooming from April to August. The flowers are pendant with red stamens and a rich tropical fruit scent.

***Magnolia acuminata* var. *subcordata* 'Miss Honeybee'**, eventually a large 60-ft tree with yellow flowers in late spring. The flowers appear just before the leaves are fully matured.

***Magnolia macrophylla***. This is the largest-leaved American native tree and is hardy to -25 °F. The leaves can be 2 to 3 ft long. The flowers are 15 inch across in early summer.

***Magnolia virginiana* 'Satellite'**. This evergreen magnolia has 3-inch dark-green leaves that have a silver tomentum underneath. The flowers are creamy white from late June-September. It can grow in very wet areas.

***Magnolia grandiflora***. The glossy green leaves are the perfect backdrop for the large white flowers in summer.

***Magnolia hypoleuca***. This species has 18-inch dark-green leaves all summer. In fall the foliage color turns to yellows, tans, and rust.

The winter silhouette and bark of magnolias can be used to great effect in the garden during winter.

It's time for spring to come again. The buds of magnolias can be very attractive during fall to spring. Magnolias can be used for the winter buds, spring to late summer blooms, deciduous or evergreen foliage, and structure for the garden and shade to grow other woodland plants.

---

## Breeding Plants for a Better Tomorrow®

### Sarah Doane and Harold Pellett

Landscape Plant Development Center, P.O. Box 442, Aurora, Oregon 97002 and P.O. Box 444, Mound, Minnesota 55364

The Landscape Plant Development Center is a relatively young organization. It was established in 1990 with a mission of developing superior landscape plants with emphasis on plants that are more tolerant of biological and environmental stresses. The Center was started because there is a need for greater diversity of landscape plants that are tolerant of environmental and biological stresses. Unfortunately, many landscape plants that are presently available are not well adapted to withstand the harsh conditions of the man-modified environments found on many landscape sites. The Center is a nonprofit corporation with a Board of Directors from all over the United States. The Center relies completely on grants and donations for the support of its research efforts. It operates as a cooperative effort of researchers located at many different institutions across North America, Europe, and Asia. Headquarters for the Center is at the Minnesota Landscape Arboretum.

We utilize the following general approach for our breeding projects: the cooperative nature of the Center, allows us to use the plant collections of participating institutions to do hybridization. This gives us access to a very broad range of diverse germplasm. First generation hybrids ( $F_1$ s) are grown at a location with a very favorable climate. When a plant with good tolerance to a given environmental stress is crossed to another plant that may not be very tolerant but that possesses other desirable qualities, the first generation hybrids are intermediate in tolerance to the stress between that of the two parents. Thus, if these hybrids were grown in a severe climate the  $F_1$  population may not survive. However when the next generation of plants is produced by intercrossing the  $F_1$  siblings, some of the progeny will be as stress tolerant as the most tolerant of the original parents and a few plants may