

- Magnolia Notes -

After the Big Freeze

by JIM GOSSLER

Being a collector and grower of a wide spectrum of magnolias, I have been prompted by our editor to contribute some comments on freeze damage which will be enlarged to cover cold hardiness. We also grow a large variety of rhododendrons, cornus and many plants showing a frailty to extreme cold. I can confidently say I am proud and satisfied at the cold hardiness characteristics shown by most of the magnolia family.

Many of you may have read an account of the extreme freeze in Western Oregon in December 1972. With a usual waterlogged mild fall and with no warning or preparation or hardening off, an Arctic front abruptly dropped temperatures to extremes of -15 degrees. This cold persisted for nearly two weeks accompanied by brilliant daily sunshine and the fatal consequences to rhododendrons, camellias, daphne, cornus, and walnuts needs no elaboration. Considering the conditions surrounding this ordeal, it is really fortunate that even more trees and plants were not killed.

Of my collection of 60 varieties of magnolias, the only complete casualties were *M. campbellii*, *M. sargentiana robusta*, and *M. grandiflora* 'St. Mary'. Some bark split was evident the following summer on *M. dawsoniana* and some 8' plants of *M. X soulangiana* as well as some *grandifloras*. The highly encouraging note is that practically all of these trees and plants flowered normally even following this radical bout with nature.

Reports from cold climates such as Michigan and the midwest bear out some cheerful notes on magnolias and cold. Many growers find the plants can withstand vicious sub-zero cold if a hardening off process precedes the winter. After the plants plunge into the deep cold they will withstand surprisingly low readings. Perhaps the worst enemy to magnolias is the false spring - a freak warming most notable in early spring followed by a bad frost which wreaks havoc to developing buds. The phenomenon is commonly referred to in English books as a "cutting frost." Not only are pushing flower buds very susceptible but hidden damage to wood and pith may show up for years.

Perhaps I should go into some simple cultural practices relating to cold injury of plants. In the case of bark split, surgery must follow to assure continued health of the tree. Left untended, bark split acts as an open focus of infection to disease, fungus, and insects. You should cut the bark back slightly from the split injury using a very sharp knife. Brush all the damaged wood completely clean of the wound and paint the wound with a generous application of tree heal or other good repair compound.

Usually this early spring repair should be repeated in fall if the material cracks or opens up. In fact large repairs of this kind will require continual

cleaning out and repainting until the cambium steadily covers the wound. We find in Western Oregon that *M. dawsoniana* is especially prone to this damage and often requires attention.

Another caution must be noted to growers with magnolias in cans, pots, or other containers. The fleshy tender roots are especially susceptible to freeze damage when above ground and unprotected. These same plants planted in the ground and mulched can take frosts of high intensity. If you have plants in containers for winter protection, put them in a cool house or cover containers with soil, sawdust or other insulating material. We advise our customers who receive plants ahead of their later spring, to house in a lighted garage, cool greenhouse, or lighted basement before setting out after danger of heavy frost is over.

I have previously noted in the Newsletter the wisdom of selecting planting sites for magnolias away from frost pockets and away from wind. Careful choice of planting locations will reward the grower in years to come.

SALES POPULARITY LIST

The following is a list of the most popular magnolias from a sales standpoint over our years in the growing of plants:

1. *M. denudata*
2. *M. sieboldii*
3. *M. sprengeri* 'Diva'
4. *M. grandiflora* 'Samuel Sommer'
5. *M. sargentiana robusta*
6. *M. stellata* 'Royal Star'
7. *M.* 'Royal Crown'
8. *M.* 'Wada's Memory'
9. *M. dawsoniana*
10. *M. X loebneri* - 'Merrill', 'Spring Snow', 'Ballerina'

Perhaps the two most sought after and difficult to propagate . . . *M. X watsoni* and *M.* 'Wada's Picture'. Both (below) bloom very young.

