

USDA-ARS NC-7 Regional Woody Ornamental Trials[®]

Paul Ovrom and Mark Widrlechner

USDA-ARS North Central Regional Plant Introduction Station (NCRPIS), Ames, Iowa
50011-1170 U.S.A.

Since 1954, the NC-7 Regional Woody Ornamental Trials have addressed landscape horticulture needs of the North Central Region and parts of the country with similarly challenging growing conditions by conducting long-term evaluations of new and promising trees, shrubs and vines. Currently, trial plants are evaluated at over 30 sites in 16 states. Besides collecting and disseminating evaluation data, another goal of the trials is to increase the range of useful plants in the region's nursery trade. Trial site cooperators in the NC-7 Trials coordinate to varying degrees with their local nursery industry to introduce promising accessions.

The NC-7 Trials are one of the longest running evaluation networks for landscape plants in the U.S. Many sites have been participating since the 1950s and now have extensive collections of interesting plants. These plants are available for public observation and teaching, and are often featured in field days for local nursery and landscape workers.

Each year, the NCRPIS ornamentals program offers about 8 to 15 new plants for testing. About 50% of the accessions have been trees, 40% shrubs, and the rest, vines, groundcovers, or herbaceous perennials. Plants offered for trial are selected from accessions acquired through plant explorations, seed or other propagule exchange, or direct donations from other institutions. Factors influencing what accessions are selected include assessments of hardiness, ease of propagation and culture, the number and size of the plants, and the specific interests of the trial site cooperators. Plants are shipped or hand-delivered to the sites in the spring. The cooperators then establish the plants in the field and observe and evaluate them through the seasons. From their evaluations, cooperators prepare performance reports 1, 5, and 10 years after planting. These reports are sent to the NCRPIS, where the data are recorded and examined for trends. The evaluation data are currently being entered onto the Internet. The NC-7 Trials website contains a list of accessions evaluated from 1984 to the present, completed 10-year evaluation data for plants offered since 1984, plant descriptions, performance summaries, and when available, images of accessions. The website also contains a list of cooperators with links to their homepages. The site can be accessed on the internet at:

<http://www.ars-grin.gov/ars/Midwest/Ames/trialhmpge.html>

In addition to maps detailing the location of the trial sites, the NC-7 Trials website contains hardiness zone maps of China and the Ukraine. Developed by the NCRPIS horticulturist, Dr. Mark Widrlechner, the depicted zones are based on those found on USDA hardiness maps. Our website also includes a moisture balance map for the North Central region.

For more information about the USDA-ARS North Central Regional Plant Introduction Station, visit the Station's website at <http://www.ars-grin.gov/ars/Midwest/Ames/index.html>