

Minnesota Nurserymen's newsletter

Prepared by
UNIVERSITY OF MINNESOTA
Institute of Agriculture
• Agricultural Extension Service
• Horticulture Department

In Cooperation with
• Minnesota Nurserymen's Association
• Minnesota State Horticultural Society

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MINNESOTA NURSERYMEN'S CONVENTION
Thirtieth Annual Meeting
Dykman Hotel
Minneapolis, Minn.
Dec. 5 - 6, 1955

EVEN TREES AND SHRUBS ARE GOING MODERN¹

L. C. Snyder, R. J. Stadtherr,²
R. E. Widmer, R. A. Phillips

Monday, Dec. 5

- 9:30 A. M. Social Hour, Complimentary Coffee and Registration
- 10:30 A. M. Report from Prof. Thor Aamodt, State Entomologist
- 12:00 Noon Luncheon (Be on time)
President's Message
Treasurer's Report
Appointment of Committees

Afternoon Session

- 1:30 P. M. Address by Geo. Grimm,
Topic: Current World Events
- 2:15 P. M. Management Round Table
Topics:
Advertising by Seymour V. Pederson,
Graves and Associates
Personnel Problems by Gil Bakeberg,
Minneapolis Moline
Credit Policies by Cullie Wiles,
Mpls. Retail Credit Association
Better Business Practices by Cecil
Shirk, Mpls. Better Business Bureau
- 6:30 P. M. Banquet and Entertainment

Tuesday, Dec. 6

- 9:30 A. M. Complimentary Coffee
- 10:15 A. M. Report of Committees
- 11:00 A. M. Report of University of Minnesota
Fruit Farm
New Varieties by Dr. A. N. Wilcox
Progress Report by T. S. Weir
- 12:00 Noon A. A. N. Luncheon
Washington Report by Curtis Porterfield
- 1:30 P. M. Report from University of Minn.
Div. of Horticulture
Hardy Mum Introductions-R. A. Phillips
Experimental Progress Report-
R. J. Stadtherr
Woody Plants-Dr. Leon Snyder

The shift toward the one-story ranch style of home has brought with it sweeping changes in home landscaping. Shrubs such as lilac, honeysuckle, and vanhoutte spirea--once used to hide the high foundations of older homes--are no longer needed for foundation plantings. Large trees like the American elm are no longer in scale with the modern home and grounds. The need now is for small, compact shrubs and small to medium-sized trees.

An active project of testing and breeding woody ornamentals was started by the University of Minnesota Department of Horticulture in the spring of 1954 to help solve this need. To date, over 600 species and varieties have been obtained for test, including cotoneaster, viburnum, dogwood, forsythia, lilac, honeysuckle, caragana, hawthorn, crabapple, barberry, redbud, azalea, rhododendron, holly, boxwood, deutzia, weigela, and Japanese quince to mention a few.

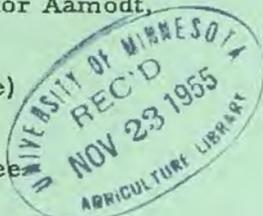
One of the aims of the program is to make available to Minnesota gardeners such desirable ornamentals as redbuds, azaleas, forsythias, daphnes, and magnolias. These varieties, as propagated by Eastern and Southern nurseries, are not hardy under Minnesota conditions, but we hope to develop some that are.

Ornamentals found desirable will be made available through local nurseries as quickly as they have been adequately tested. An active breeding program for azaleas, weigelas, forsythias, flowering crabapples, and redbuds will keep pace with the testing. We also hope to find superior selections of the gray and pagoda dogwoods, nannyberry, highbush cranberry, scarlet elder, red maple, showy mountain ash, and winterberry.

Since many of the materials must be started from seed or cuttings, an active program of plant propagation is developing. New techniques are being developed that will be of great benefit to the nursery industry.

Actually the present project continues important work done in the past by members of the Horticulture Department and Extension specialists.

For example, the late Dr. L. E. Longley made many crosses of flowering crabapples, and some of his selections are considered to be superior to any



now offered for sale. One of these, 6C, will be introduced as soon as nurserymen can build up a sufficient stock of it.

The Flame crabapple and the Newport plum are other well-known ornamentals developed by the department.

Try These Ornamentals

The following are recommended for trial:

Japanese Tree Lilac, Syringa amurensis japonica. A small tree with year-around beauty for specimen planting. Grown to a single stem, it is a graceful, small, rounded tree up to 30 feet tall. Grown with multiple stems, it is a large shrub valuable for windbreaks or screening borders. Requires little pruning. Flowers are delicate, creamy-white, and fragrant, borne in large clusters. The last lilac to flower, blooming from mid-June to late June. Provides winter color and interest with cherrylike bark of the older branches and trunk and large persistent brown seed heads.

Showy Mountain Ash, Sorbus decora. Attractive, medium-sized tree of about 40 feet. Compound leaves, dense flower clusters, and bright orange-red fruits.

Toba Hawthorn, a Crataegus hybrid. Related to our native hawthorns but not so thorny. Many rich pink, slightly fragrant, long-lasting flowers, which keep their coloring until they drop. Flowers succeeded by bright red, medium-sized fruits which last far into the winter. Tree small and rounded--seldom growing as tall as the ornamental crabapples.

Sungary Rockspray Cotoneaster, Cotoneaster racemiflora soongorica. More attractive medium-sized shrub than Common Peking Cotoneaster. Produces plant of about 6 or 7 feet with nice rounded shape. Leaves are small, round, and grayish-green. The white flowers that appear in June are showy, followed by profuse bright red berries. Outstanding for foundation and border plantings.

Lemoine Deutzia, Deutzia lemoinei. Flowers are attractive, starlike, white, forming pyramidal clusters. Plant grows 5 to 7 feet tall. Excellent for foundation or border plantings because of dense moundlike growth habit and small pointed light-green leaves.

Early Korean or Round-Leaf Golden Bell, Forsythia ovata. A 4 to 5 foot shrub that is a harbinger of spring. Bright, golden-yellow, bell-shaped flowers literally cover long, graceful branches. The hardiest forsythia and thus the one offering the greatest possibilities here. Occasionally starts growth so early in spring that flower buds are lost when warm days are followed by freezing weather. Useful in foundation or border plantings.

Winterberry or Black Alder, Ilex verticillata. Grows wild in moist, acid soils--especially in northern Minnesota. Tolerant of shade but does best in full sunlight with plenty of moisture. Small, bright red berries appear in September, contrasting markedly with bright green rugose leaves. Berries persist into winter and provide food for birds. Sexes are

separate, so a male shrub is needed in order to have fruits on female shrubs.

Prairie Almond, a hybrid species of Prunus. Attractive, medium-sized bush that is smaller than the flowering plum, having finer branches and leaves. Flowers slightly smaller, less double, and lighter pink, with a darker pink center. Flowers profuse, tending to be earlier and longer lasting. Has reddish, round, woolly fruits in summer.

St. Johnsworts, Hypericums. Flower on new wood and have a long blooming season. One of best varieties is Henry St. Johnswort, Hypericum patulum henryi, which usually reaches a height of 2 to 3 feet. Has glossy green leaves on willow brown branches. Clusters of golden yellow, 1½ to 2 inch, five-petaled flowers appear from June until frost. Many fine, hair-like stamens near center of flower add much to its attractiveness. Tops die back over winter but new growth comes from the base. Recommended for foundation and border plantings.

Dwarf Peashrub, Caragana brevifolia. Seldom grows more than 2 feet tall. A rounded small shrub with graceful drooping or arching branches. Fine leaves look like evergreen needles.

Dwarf Cranberrybush, Viburnum opulus nanum. One of the most outstanding new dwarf plants, handsome, compact, and rounded. Seldom reaches more than 2 feet. Excellent plant for formal or informal hedge or for foundation planting. Dark green, three-lobed leaf turns reddish or copper colored in fall.

1. Taken from:
Minnesota Farm & Home Science p 4, 7 Oct. 1955
2. Head and Professor, Research Fellow, Assistant Professor and Assistant Professor, respectively, Department of Horticulture, University of Minnesota.

PREDATOR CONTROL FOR NURSERY STOCK

Contributed by the
Section of Nursery Inspection
State Department of Agriculture

Cold weather, snow and recollection of past experiences with predatory animals, inspires the nurseryman to take measures toward protecting his crop. The time for action against these pests is now at hand. Insurance from future damage is guaranteed by the watchfulness of the nurseryman who keeps a weather eye open for the presence of predators throughout the dormant season. The threat of damage to potted or canned nursery stock is increased because of the concentration of valuable stock in a relatively small area.

1. DEER. A wide variety of nursery stock is susceptible to damage by deer. Repellents have given protection in some instances. Suggested for use are Z. I. P. deer repellent or bone tar oil. Both materials have been used with success.

2. RABBITS. Control of rabbits in the nursery involves the use of careful observation by the nurseryman. The youthful hunter is a valuable ally in the battle against the rabbits. As a rule, a private bounty arrangement with several of the neighborhood youngsters will eliminate the problem. The rabbit season is open in Minnesota from October 1st to March 1st. There is no conflict with the law through the use of firearms unless you are in a refuge area. In such a case you may apply to your local game warden for a permit to hunt rabbits. The rabbit is not a difficult animal to trap, thus trapping may also be used to reduce the population.

A netting fence approximately two feet high will discourage rabbits from entering a specific area such as the place where the canned stock is kept. This fence should be lightly embedded in the soil to prevent the rabbits from crawling underneath. The use of fresh, palatable brush as a bait can be of help in keeping the pests away from the stock you wish to protect. Culled stock, destined for discard, may be used for this purpose. A number of rabbit repellents are on the market, of these Z. I. P. is probably the most popular. A wide divergence of opinion appears to exist in regard to the results obtained. However, the writer has observed that some of the individuals who have used it, are using it again as a result of their past experience with the product.

3. MICE. Probably the biggest threat of damage from predators to young nursery stock stems from mice. Several species may be involved. However, it is believed that the meadow mouse is by far the most important as a pest; second, the white-footed mouse; and third, the house mouse.

Habits.

1. The meadow mouse, Microtus, is a very prolific breeder. Under favorable conditions these mice can produce 8 to 10 litters a year. An average litter consists of five mice. This animal constructs shallow tunnels and nesting chambers underground but feeds on the inner bark of nursery stock near the surface. Travel is restricted to areas near the nest. It is preferably done in grassy runways on the surface of the ground. Of passing interest is the fact that the meadow mice do not care for the bark of cherry trees. Breeding is confined to the warmer seasons of the year. These pests are active throughout winter days except in the very coldest weather. They do not like the wind and will remain in their nests when such weather occurs.

2. The white-footed mouse, Peromyscus, does not ordinarily make runways of its own but uses tunnels of other animals. Nests are often maintained in abandoned retreats of other animals which may be convenient for their use. They work nocturnally and their tracks may be found following the coldest nights of the winter. They are very prolific and breed each month of the year. Seeds, grains, and bulbs are preferred as food. If these are scarce, they may feed on the bark of nursery stock.

3. The house mouse, Mus, is the only introduced species of those mentioned. The damage that it might ensue to the nursery would probably be confined to stock located inside of a building. Range is generally restricted to a radius of 20 feet of their nesting quarters. Nesting is done in as comfortable a place as is possible to find. They like all the food that people eat. An odd fact is that they prefer sweet liquid to plain water for drinking. Seeds, bulbs, and grains constitute their preferred diet. They may also feed on the bark of nursery stock when other sources of food are scarce. Under ordinary conditions this species should not be a serious pest on stored trees and shrubs.

Control

Canned nursery stock areas should be placed on clean soil which has either been cultivated or provided with a surface unfavorable for nesting and construction of runways. Straw or hay cover for this stock should be placed rather late in the fall to avoid giving the mice a chance to establish nests. Poisoning operations should be initiated before cover is applied. Strychnine-treated oats or warfarin may be used in stations, under clumps of straw around the perimeter of the area you wish maintained, as long as there is any evidence of mice present. There should be at least one bait station provided for each 200 square feet of area in canned or potted nursery stock. In cases where grassy areas are adjacent to protected areas, poisoning operations should be carried on in the runways which may be found on the ground surface.

Field stock may be protected by baiting trails in adjacent areas which are good mouse harborages. At least one bait station should be provided for each 400 square feet of area. Snow should be pushed down along the rows of field planted stock, the runways which may be present under the snow are thereby eliminated.

Source of Baits. Warfarin may be purchased from many good garden or farm supply houses. Nurserymen using large quantities should be entitled to wholesale prices. Poisoned-oats bait may be purchased from the following sources:

1. Minnesota Horticultural Society, St. Paul Campus, University of Minnesota.
2. La Crescent Farm and Orchard Supply Co., La Crescent, Minnesota.
3. U. S. Fish and Wild Life Service, Experiment Station Annex, West Lafayette, Indiana.

Once areas are cleaned up in the fall, it is unlikely that very much trouble will be encountered during the winter. However, situations have developed where mass migration of mice have occurred to infest susceptible areas and then do considerable damage later in the season. Periodical checking should be carried on to determine whether such migrants may be present. If their presence is indicated, bait stations should be checked and serviced.

CHRISTMAS MARKET

C. Gustav Hard
Extension Horticulturist
University of Minnesota

The nursery is a gold mine of ideas for good substantial gifts. During the Holiday Season the buying public naturally loosens up the family purse strings in the spirit of giving. So, during these days of weakness, wouldn't it be a good idea to do a little promotion of your business and capture some of those extra dollars?

Gift certificates have become a popular technique for letting the customer make his own selection. Such certificates can be designed to provide specific amounts of materials or they can apply to certain materials such as roses, specimen trees, etc. Gift-envelopes make it easy for the customer to mail or send the present. The gift certificate can be made for various values such as 3, 5, 7, 10 dollars.

A Christmas display can attract many new customers to your nursery. A new and original setting depicting the Christmas story or using the Santa Claus theme is appropriate. Some nurseries have Santa Claus on hand to entertain the children while mother and father shop. Most important is to get the public to come to your store.

Christmas trees, wreaths, boughs, holly and mistletoe are musts for Christmas sales. Since these materials are associated with nursery products the "tie-in" is good from an advertising point of view.

All the little items that are used in the garden care are good for Christmas giving. Don't hesitate to suggest a power lawn mower or a pair of green thumb gloves.

The nursery industry has an opportunity to increase sales during the pre-Christmas season. It takes a little time to prepare displays. There is a strain on the budget for advertising, but returns from promotion during this season will pay off in dollar returns.

EDITORS COMMENTS R. J. Stadtherr

Correction

Several words were omitted on page 4 of Volume 2 (9 and 10) for September and October, 1955. The first line in the eighth paragraph in the second column should read, "The use of disodium methyl arsonate at the rate of 4 oz. per 1000 sq. ft. was recommended for the control of crabgrass in lawns."

PLANT PROPAGATORS MEETING

The Fifth Annual meeting of the Plant Propagators Society will be held December 14-17, 1955 at the Wade Park Manor, Cleveland, Ohio.

Again the list of prominent speakers, outstanding in their particular field of propagation, and interesting topics fill the program. A highlight of the program will be the discussion on the development of new

plants by Dr. F. L. Skinner, Skinner Nursery Ltd. of Dropmore, Manitoba, Canada. He has introduced many plants that we are using in our area. As you might know, they have a more rugged climate than Minnesota and thus many of his introductions are sufficiently hardy in our area.

The use of light to obtain better rooting response could change methods of propagation considerably. Dr. H. A. Borthwick, USDA and a former Minnesotan, is the outstanding authority on photoperiodic response of plants. He will discuss his research in this field.

Dr. W. E. Snyder, Rutgers University, traveled to Europe this summer and visited many research centers and nurseries. He will discuss his observations when he addresses the annual banquet on Saturday evening.

I'm sure the sessions on *Malus* propagation container-grown stock and mist propagation will also be very educational. If you are invited to be a guest, don't miss it, you will be amazed by the discussions, I'm sure.

MORTON ARBORETUM

My only regret was that time was far too short when I visited this beautiful arboretum October 6 and 7. It was a pleasure meeting Director Godshalk, and visiting with Lowell Kammerer and Roy Nordine. One could spend a month here and still have much to learn.

At the present time the arboretum has over 1, 100 acres of land. Mr. Joy Morton, son of J. Sterling Morton who was founder of Arbor Day, founded the Morton Arboretum in 1921. There are over 4, 800 species, varieties and hybrids of woody plants included in the plantings. Many thousands of others have been tried, I imagine, and were not successful. The goal is to grow all woody plants that are capable of surviving in their climate.

Plantings are arranged according to four classifications: (1) Closely related systematic groups. (2) Geographical groupings. (3) Landscape plantings and (4) Timber trees of economic value.

At the time I was there I was especially partial to the following plants which were regally attired in beautiful fall colors: Black gum, *Nyssa sylvatica* and Sourwood, *Oxydendrum arboreum* were gorgeous with their red and reddish purple leaves. Probably the maples, dogwoods and viburnums showed more color than any other groups. The Yellow wood, *Cladrastis lutea*, the chestnuts, the witch hazels, birches and poplars had the best shades of yellow and orange. The colorful leaves and colored berries of the various euonymus and barberry species added much to the gay autumn scene. Seeing the different interesting evergreens was very educational also.

Unfortunately it rained on both days that I was there but in between showers I obtained seeds, cuttings and plants. We added 26 new plants to our list of materials we have obtained. I also managed to get a colored shot of some of the outstanding plants with their attractive fall attire.

MERRY CHRISTMAS TO ALL!