



# PROHORT

Vol. 11, No. 3

Summer, 1993

ProHort Seminars are planned and conducted cooperatively by Urban Horticulture/University of Washington, Washington State University Cooperative Extension Service, South Seattle Community College, and Edmonds Community College.

## PROHORT SEMINARS

Class sizes limited; please pre-register.

Parking is pre-paid for all ProHort Seminars conducted at the Center for Urban Horticulture. As you check-in for the program, ask for your pre-paid parking ticket. Parking at Washington Park Arboretum is free.

## FIELD DIAGNOSIS OF PEST AND DISEASE PROBLEMS

Thursday, July 1, 9 a.m. to 3 p.m.  
Graham Visitors Center, Washington Park Arboretum  
\$35, includes lunch

*This seminar earns 4 hours WSDA Pesticide Recertification Credit.*

Field diagnosis requires a systematic approach, a solid base of information, and practice. Dr. Art Antonelli, Extension Entomologist, and Dr. Ralph Byther, Extension Pathologist, both from WSU-Puyallup, begin the day with a slide lecture on field diagnosis principles and problems, including pest and disease symptoms. After lunch, Arboretum fieldwork will provide an opportunity to refine skills in diagnosing pest and disease problems.

## USING ALTERNATIVE METHODS AND MATERIALS

*This Seminar is presented by the Center for Urban Horticulture and the Washington State Nursery and Landscape Association*

Tuesday, August 17, 9 a.m. to Noon  
Center for Urban Horticulture  
\$20

**TO REGISTER:** Contact Vickie Wilson at WSNLA, (800) 672-7711, before August 13.

*This seminar earns 3 hours WSDA Pesticide Recertification Credit.*

I. Sharon Collman, Cooperative Extension Liaison to the US EPA, discusses public perceptions, research documentation, and regulatory issues relative to the use of alternative pesticides.

II. Mary Jo Buza, Environmental Educator (in IPM) for Thurston County, and author of a series of "Common Sense" gardening guides, will discuss alternative pest management strategies for crane flies, root weevils and aphids.

III. University of Washington IPM Coordinator Mike Johnson describes comparisons of alternative materials and methods used on campus,

including efforts to manage elm leaf beetle, and application strategies utilizing soil-injected systemics.

## OTHER EDUCATIONAL OPPORTUNITIES

The 1993 ANNUAL TRAINING CONFERENCE of the Pacific Northwest Chapter of the International Society of Arboriculture will be held October 5 to 7 in Olympia. General sessions will feature attorney Victor Merullo addressing the legal aspects of tree care, Washington State Senator Phil Talmidge discussing the Washington State Urban Forestry Bill, and Commissioner of Public Lands Jennifer Belcher. Other sessions will cover urban forestry programs, wind storms, hazard trees, tree entomology and pathology, moving large trees, planting practices and more. A field day will feature pruning and planting demonstrations. For further information, call the PNW ISA office at (206) 365-3901.

## EDMONDS COMMUNITY COLLEGE SUMMER COURSES:

Garden Photography, Japanese Garden Arts, Weeds, Drip Irrigation, Turf Management, Horticultural Taxonomy, Hardy Plant Review. For further information, call 771-1679.

**LAKE WASHINGTON TECHNICAL COLLEGE SUMMER COURSES:** Herb Garden Design, Pruning and Landscape Renovation. To register, call 828-5600.

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## PROHORT BOOKSHELF

by Valerie Easton

*Library hours: 9 a.m. to 8 p.m. Monday; 9 a.m. to 5 p.m. Tuesday through Friday.*  
*Phone: (206) 543-8616.*

New books of interest to landscape professionals include:

Feeney, Stephanie. *The Northwest Gardeners' Resource Directory*. 4th ed. Bellingham: Whatcom in Bloom Garden Society, 1993.

Each edition of this local directory gets larger and better. Look here for the most current information on gardens to visit, tool sources, seed catalogs, educational opportunities, plant societies, and just about anything else concerning gardening in the Northwest.

Isaacson, Richard T. *Anderson Horticultural Library's Source List of Plants and Seeds: A Completely Revised Listing of 1990-1992 Catalogues*. Chanhassen, MN: Anderson Horticultural Library, University of Minnesota Libraries, Minnesota Landscape Arboretum, 1993.

No other book can help in locating so many different plants. Over 400 North American nursery sources are given for more than 47,000 different plants, ranging from hundreds of listings for *Iris*

and *Hemerocallis* to single nursery listings for hard-to-find species and varieties. Nearly 50 Northwest nurseries are included in this edition—more than ever before.

Merullo, Victor D., and Valentine, Michael J. *Arboriculture and the Law*. Savoy, IL: International Society of Arboriculture, 1992.

For anyone who has tried to make sense of local codes governing tree jurisdiction, this book could prove very useful. Which neighbor has the legal right to prune a tree growing on a boundary line? Can a public utility trim or cut down trees growing on a landowner's property? What about compensation for a property owner whose trees are injured by herbicides? The duties, rights, and liabilities of homeowners in regards to the trees on their property, and the complex legal issues ensuing from litigation on the subject, are thoroughly explained in plain English by a task force of legal experts.

Also New:

Graf, Alfred Byrd. *Hortica: A Color Cyclopedic of Garden Flora in all Climates and Indoor Plants*. East Rutherford, NJ: Roehrs Company, 1992.

Marshall, Nina T. *The Gardener's Guide to Plant Conservation*. Washington, DC: World Wildlife Fund, 1993.

Neumann, Erik A. *Landscape Plants for the Twenty-First Century: 65 Superior Introductions from the U.S. National Arboretum*. Washington, DC: Friends of the National Arboretum, 1992.

O'Keefe, John M. *Water-Conserving Gardens and Landscapes*. Pownal, VT: Storey Communications, Inc., 1992.

## CALIBRATING PORTABLE SPRAYERS

by Dave Stockdale

Small portable sprayers are often the most economical, effective tools for many landscape maintenance pesticide application jobs. Hand-carried sprayers are the least expensive, but require frequent stopping to set the sprayer down and pump the pressure back up. Hydraulic, manually operated backpack sprayers are an improvement because they leave the operator's hands free to manually operate the pump. Engine-powered backpack mist sprayers use air to disperse liquids. Manually powered sprayers are more effective for selectively applying herbicides; air blowers are better used with insecticides or fungicides where broader coverage is desired.

With any type of sprayer, you must be sure it is calibrated properly. Calibration allows you to correctly apply the desired amount of material to your target area, reducing both the cost and the environmental impact of applying too much (or too little) of a pesticide/herbicide.

To calibrate a sprayer, fill it to a set level with water. Mark off a known target area—1000 ft<sup>2</sup> for instance. Have the operator spray the target area at the pace that will be used during the actual application, while trying to maintain steady pressure. Refill the sprayer with water and measure exactly how much it takes to fill back up to the starting level. Then convert this to gallons per 1000 square feet or whatever volume/area units you have used.

Knowing the rate at which your sprayer applies the pesticide solution and the size of the area to be treated will allow you to accurately mix the amount of chemical and water for the job to be completed. Keep in mind, however, that spray nozzles degrade over time and that amounts applied will continue to change. You should recalibrate your equipment on a regular basis.

## PLANT PROFILE

By Timothy Hohn

### A Calendar of Flowering Trees

Modified excerpt from *Arboretum Bulletin*, vol. 56, #1

One of the implied challenges of landscape design is to provide for a continuum of garden interest throughout the year. When considering flowering trees for such a purpose, one can put together several sets of trees that will provide interest year-round based upon characters of flower, bark, foliage, and fruit. The following small trees should bring to the garden nearly a full year of flowering satisfaction for your clients. They are listed according to their blooming order.

#### *Hamamelis mollis*

I confess to being a witch hazel lover, and I am always looking for new converts. The Chinese witch

hazel is only one of several good species, selections, and hybrids. The primrose yellow flowers are delicate structures the size of silver dollars. The four thin petals roll out of the bud like small streams of papier-mâché in January, releasing the most pleasant and permeating of aromas. The cultivars 'Early Bright,' 'Goldcrest,' 'Pallida,' and 'Westerstede' are very nice selections.

#### *Lindera obtusiloba*

The early blooms of this short, round-headed tree are very small golden-yellow flowers held in tightly clustered, round inflorescences much like *Cornus mas*. The flowers burst from the previous years nodes in late February or early March and cause those of *Cornus mas* to pale by comparison. As if the early bloom were not enough, the fall color of the sassafras-like foliage is a perfect, clear yellow.

#### *Magnolia 'Susan'*

In a stroke of objective brilliance while trying to decide which magnolia to include in this list, my dart landed on *M. 'Susan.'* One of the "girls" hybrids from the National Arboretum, Susan forms a small tree and produces striking red-purple flowers in upright April attention on the ends of the branches. Sister "Anne," a lighter, more maroon-pink, is also a fine selection.

#### *Embothrium coccineum*

The Chilean fire tree is without peer in the May landscape when set ablaze with its scarlet, tubular flowers. The stunning flowers appear in tight clusters, crowding each other in the leaf axils of the previous year's growth. The individual flowers are pert, slightly curved little trumpets about one and one-half inches long, muted with a prominent, and gold-tinged pistil. Once *Embothrium* commences flowering, it often remains in bloom for a month or more.

#### *Stewartia pseudocamellia*

Japanese stewartia has had no shortage of publicity recently, and for good reason. Large pearly white buds begin to swell on this small deciduous tree about the time the *Embothrium* is fading. Each flower bursts open with a large central boss of yellow-orange stamens surrounded by snowy-white silky petals with ruffled edges. The bark of this garden aristocrat is simply outstanding and the autumn color makes for a lovely fall kaleidoscope.

#### *Oxydendrum arboreum*

The sorrel tree or sourwood is a narrow-crowned deciduous tree handsomely displayed in groups. The large sprays of *Pieris*-like flowers fan out from the ends of the branches in August, forming small, floral petticoats over the entire height of the tree. During drier years, the notoriously rich fall color of sourwood commences early and

### PROHORT Seminar Registration

\_\_\_ FIELD DIAGNOSIS OF PEST AND DISEASE PROBLEMS \$35

TOTAL : \$\_\_\_

**Group Rates:** five or more persons, less 20%. Group registrations must be accompanied by ONE check or purchase order at least one week in advance.

Portion of fees may cover refreshments and speaker expense.

Make checks payable to the University of Washington; receipts available at the door. Mail payment and registration to: Center for Urban Horticulture/ProHort, University of Washington, GF-15, Seattle, WA 98195. For information, call 685-8033.

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To request disability accommodation contact the Office of the ADA Coordinator, at least ten days in advance of an event: 543-6450 (voice) 543-6452 (TDD); 685-3885 (FAX) access@u.washington.edu (E-mail)

coincides with the ivory flowers in a wondrous scene.

*Koelreuteria bipinnata*

Like the more common golden rain tree, *K. paniculata*, this medium size deciduous tree produces large, airy panicles of golden flowers—but much later in the season. Blooming in August, September, or even October (depending on the weather conditions), the large panicles of pea-like flowers burst out of the branch ends in gauzy profusion. What a sight it is to see the coarse, doubly pinnate foliage topped with such a pleasantly diffused and golden light in the waning summer sun. Then, unexpectedly, the curious inflated seed pods mature to a lovely shade of rosy pink rather than the unsightly brown of the more common species.

*Arbutus x andrachnoides*

A naturally occurring hybrid between the common strawberry tree, *A. menziesii*, and the Grecian strawberry tree, *A. andrachne*, this broad-leafed evergreen may flower in the spring or fall depending upon which parent has genetic dominance. It is the fall blooming offspring that I recommend with the typical blossoms of white urns held upside down in four inch panicles during October and November. Unlike the common strawberry tree, the smaller branches and twigs have smooth, dark maroon bark grading into a lighter salmon red on the polished older limbs.

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