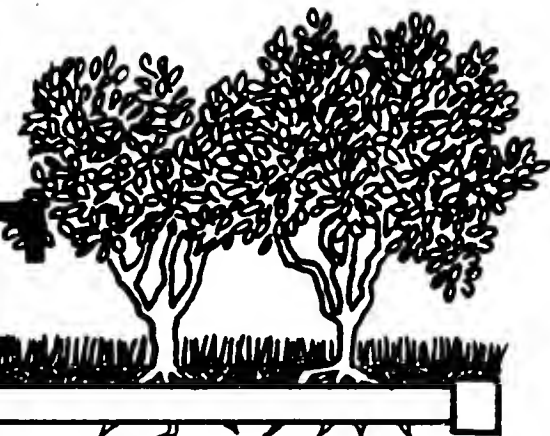


PRO HORT



**Center for Urban Horticulture
University of Washington**

Vol. 7, No. 1

**Cooperative Extension
Washington State University**

Winter 1989

LANDSCAPE MAINTENANCE SEMINARS

**. . . for the landscape
professional**

Cooperating: Center for Urban Horticulture, University of Washington; Cooperative Extension Service, Washington State University; Edmonds Community College; South Seattle Community College.

Rhododendrons— Ask the Experts!

Date : Wednesday, January 25
Time : 9 a.m. to 12 noon
Location : Center for Urban Horticulture

While rhododendrons are the staple of maritime Northwest landscapes, only a handful of cultivars are commonly planted. Furthermore, there is much conflicting information regarding rhododendron culture. Now is your chance to get credible answers. Submit your rhododendron questions to our panel of experts: Bob Badger, nurseryman, Rainier Vista Nursery; Thomas Berger, landscape architect, Thomas Berger & Associates; Clarice Clark, horticulturist, Rhododendron Species Foundation; Art Dome, dwarf rhododendron enthusiast, retired from the Chas. H. Lilly Co.; Richard Piacentini, director, Rhododendron Species Foundation; June Sinclair, hobbyist with a special interest in rhododendron diseases; Bill Stipe, manager, Meerkerk Rhododendron Gardens.

Trees for Urban Landscapes Featuring Alan Mitchell

Date : Thursday, February 23
Time : 9 a.m. to 12 noon
Location : Center for Urban Horticulture

A. "Choice Trees for Small Gardens" by Alan Mitchell, British dendrologist and author of *Trees of Britain and Northern Europe*, *Conifers in the British Isles*, and *Trees of North America*.

B. "Ask the Experts." Submit your toughest tree selection questions to our panel of authorities: Molly Beck, consulting arborist and plant diagnostician; Arthur Lee Jacobson, author of *Trees of Seattle—A Guide*; Alan Mitchell; and Iain Robertson, assistant professor of landscape architecture, University of Washington.

"New" Landscape Plants from the NCSU Arboretum

Date : Thursday, March 30
Time : 9 a.m. to noon
Location : Center for Urban Horticulture

Instructor : Dr. J. C. Raulston
The North Carolina State University Arboretum is testing "new" species and cultivars of landscape plants. Promising selections, such as a fruitless *Liquidambar styraciflua*, are being introduced to the nursery trade. Dr. Raulston will emphasize plants which should prove useful in Northwest landscapes.

J.C. Raulston is a professor of horticulture and director of the North Carolina State University Arboretum. A recent article in *Horticulture* magazine described the charismatic Raulston as a "plant evangelist" who is "determined to change the way we garden."

Parking

Free parking will be available for those attending Pro Hort seminars. Please park in parking lot if space is available.

OTHER EDUCATIONAL RESOURCES

South Seattle Community College Horticulture Courses—Winter 1989.

Daytime Courses: Greenhouse Operations, Winter Plant Identification, Pruning, Plant Propagation, Landscape Design II. Evening Courses: Plant Diseases, Small Engine Repair, Contracts and Specifications, Landscape Seminar. 764-5336.

Edmonds Community College Horticulture Courses—Winter 1989.

Daytime Courses: Winter Plant Identification, Soils and Plant Nutrition, Pesticide Laws and Safety, Pruning, Landscape Design I & II, Landscape Maintenance Design, Greenhouse Studies, Landscape Studies, Container Gardening. Evening Courses: Winter Plant Identification, Pruning, Plant Diseases, Plant Propagation, Landscape Business, Small Engine Repair, Sprinkler Design, Computers in Landscape Business. 771-1608.

Lake Washington Vocational Technical Institute Horticulture Courses—Winter 1989.

Pruning Techniques, Horticulture Pest Control, Plant Propagation, Plant Photography. 828-5627.

Plant Propagation.

The Washington State Nursery and Landscape Association and the Center for Urban Horticulture will sponsor an introductory plant propagation short course which will meet on Tuesdays, January 10, 17, and 24, 7 to 9 p.m. The registration fee is \$35 (\$45 with WCN/WCL credit); preregistration is required. For more information call the WSNLA at (206) 863-4482.

PRO HORT Editorial Staff:
Dr. John A. Wott
George J. Pinyuh
Van M. Bobbitt, editor

Bellingham Seminars. Professional horticulturists can attend two seminars at Bellingham Vocational Technical Institute this winter.

● "Pruning," by Dr. Ray Maleike, extension horticulturist, Washington State University—Puyallup. Thursday, January 19, 6:30 to 9:30 p.m. Registration fee is \$12.50 before January 13 and \$15 after that date.

● "Horticultural Business," by Dave Burt, CPA, and Craig MacConnell, Washington State University Cooperative Extension. Saturday, March 4, 9 a.m. to 4 p.m. Registration fee is \$25 before February 25 and \$30 after that date.

For more information call Van Bobbitt at (206) 545-8033.

WSU Pesticide Training

● Pre-License Training Short Courses (no recertification credits)

Mount Vernon January 11-13
Tacoma January 17-19
Kelso January 24-26
Everett February 14-16
Olympia February 22-24

● Recertification Training Programs

Mount Vernon January 9-10
Tacoma January 18-19
Kelso January 25-26
Everett February 15-16
Olympia February 21-22

Registration is on a daily basis. Registrations submitted five working days prior to the program date will qualify for the early registration fee of \$25 per day; the regular fee is \$35 per day. For registration packets, contact your local Washington State University Cooperative Extension office.

New Books at the Miller Library

Appleton, Bonnie Lee. *Landscape Rejuvenation: Remodeling the Home Landscape*. Pownal, VT: Storey Communications, 1988. 131 pp.

Blanchard, Robert O.; Tattar, Terry A. *Field and Laboratory Guide to Tree Pathology*. New York: Academic Press, 1981. 285 pp.

Colvin, Thomas S.; Turner, James Howard. *Applying Pesticides*. 3rd ed. Athens, GA: American Association for Vocational Instructional Materials, 1988. 80 pp.

Kaplan, Stephen, ed.; Kaplan, Rachel, ed. *Humanscape: Environments for People*. Ann Arbor, MI: Ulrich's Books, 1982. 480 pp.

Kourik, Robert. *Gray Water Use in the Landscape*. Metamorphic Press, 1988. Pamphlet.

Kramer, Paul Jackson; Kozlowski, T. T. *Physiology of Woody Plants*. Orlando: Academic Press, 1979. 811 pp.

McNair, George. *Shrub It Up: A Guide for Pacific Northwest Landscaping*. Bandon, OR: CGM Publications, 1983. 65 pp.

Whitcomb, Carl E. *Establishment and Maintenance of Landscape Plants*. Stillwater, OK: Lacebark Publications, 1987. 618 pp.

Wilson, William H. *How to Design and Install Outdoor Lighting*. San Francisco: Ortho Books, 1984. 96 pp.

Horticulture Library Open Monday Evenings. The Elisabeth C. Miller Library of the Center for Urban Horticulture will be open Mondays (except holidays), 9 a.m. to 8 p.m., through May 22. Tuesday through Friday it is open from 9 a.m. to 5 p.m. (206) 543-8616.

ARTICLES

Plant Palette: Azara microphylla

Timothy Hohn
Center for Urban Horticulture
University of Washington

One often wonders if our landscape needs for broadleaved evergreens can ever be satisfied? I presume that you are shaking your head in the negative. "Of course not" comes the reply since every landscape setting and context is slightly different and our imaginations run wild with each new challenge. Here's yet another rather obscure offering for our expandable palette of broadleaved evergreen trees—*Azara microphylla*.

The entry court at the Center for Urban Horticulture, featuring shade-tolerant groundcover plants and stripped-bark maples, contains a trio of 8' azaras against the wall of Isaacson Hall. I'm certain that these plants are usually overlooked under the assumption that they are simply some cultivar of *Ilex* or *Buxus*, a superficial resemblance that probably contributes to their obscurity. One whiff of the vanilla-scented flowers, which permeate the air for several meters, will immediately alert you to the unique identity of these plants.

The genus *Azara* is placed in the Flacourtiaceae, a pan-tropical family of 89 genera and 1,250 species with few temperate members including 10 species of *Azara* and the little-known ornamental tree *Idesia polycarpa*—a suitable subject for a future column. Azaras are found in Chile and bordering parts of Argentina in a range of different habitats. *Azara microphylla*, the hardiest member of the genus, grows as a large shrub or small tree in mid-altitude, somewhat dry habitats in association with *Nothofagus obliqua*, a southern beech which has grown quite large in the Arboretum.

Distinguishing features of *Azara microphylla* are the small, shining, dark green leaves which are very abundant toward the ends of the branchlets. They appear to be arranged in pairs with one leaf much larger than the other but, in truth, the smaller leaf is a stipule. The branchlets are covered in a very dense, dark brown tomentum or down and are arranged in two opposite rows in the same plane which gives them a frond-like appearance. The leaves are round, toothed and about the size of a dime. The most impressive ornamental feature of this azara is its flowers. They are minute powderpuffs of yellow stamens which appear in the leaf axils in great profusion in February or March. When in bloom, the entire plant glows with a golden aura, giving it the appearance of intense backlighting even on dreary days. The powerful scent of vanilla is nearly mouthwatering and detectable for a great distance from the plant. Certainly *Azara microphylla* would be a handsome addition to the winter landscape.

Azara microphylla is quite widely grown throughout Great Britain, where it survives in the open. Plants in the Washington Park Arboretum have suffered dieback and defoliation during hard winters. I suspect that this is partly due to poor siting—excessive shade and cold air pockets. Site plants where they receive partial shade, preferably in a semi-protected location, on moisture-retentive but well-drained soil. They should not require supplemental irrigation under these conditions. They are tolerant of full shade or sun but they become very leggy in the former and twiggy in the latter. Expect *Azara microphylla* to reach 12-15' with a narrowly upright form. Pruning requirements are modest with an eye for thinning and, occasionally, shaping.

The fine texture of *Azara microphylla* makes it an ideal background plant and companion for small, coarser shrubs and perennials. Their narrow form makes them useful for softening sharp corners and forming small groves in confined spaces. They should be placed where their vanilla-scented flowers can be appreciated—not far from entryways or walks. Propagation is easy from hardened-off cuttings or seed.

Insects and Mites to Watch for—Winter

Sharon J. Collman
Cooperative Extension
Washington State University

● **Spruce aphid** begins as a tiny dark green speck-of-an-aphid in the early winter months. By spring, when the gardener moves out into the yard, the tree will already be showing green and yellow banded needles (later turning tan or red brown). Check needles now for the presence of aphids and inspect again every other week or so. (EB 1053, EB 0826)

● **Aphids on Aucuba**—This is another winter aphid. Look for sooty mold on foliage or underlying plants. Check for evidence of parasitized aphids; these hardened aphid “mummies” indicate that natural parasites have been at work.

● **Aphid eggs on fruit trees**, especially apple, look like masses of little black specks on the branches.

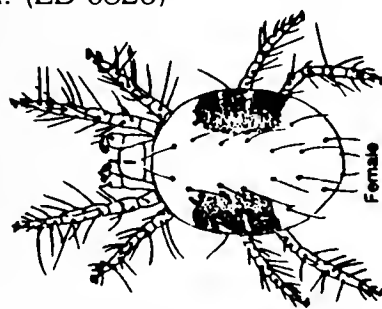
● **Bow-legged fir aphids** are large, shiny black aphids that often look more like spiders or little beetles. They are found on true firs, usually near cone buds at the ends of branches or in twig axils. (EB 0826)

● **Balsam woolly aphids** (actually adelgids) on true firs appear as woolly cottony masses on branches with swollen knobs (like knuckles) at the axils or tips. As the aphid feeds it injects a toxin which can kill trees. (EB 0826)

● **Woolly apple aphids** cause swollen bumps on the branches of apple trees.

● **Brown lacewings** are predacious insects, with finely veined wings held roof-like over the body. They often loiter about my porch light in winter. I think they grab meals of little beasts that are also attracted to the light. Let them “go forth and multiply” among the aphids and mites.

● **Mites on spruce** can be suspected if the tree appears dull-colored and has lost needles. With a hand lens, inspect branches for tiny, round, orange eggs. If they are numerous, plan your control strategy and put it on your calendar. Don't control until mites hatch. (EB 0826)



Tetranychus urticae (Koch)
The Two-spotted Spider Mite

● **Two-spotted spider mites on skimmia** appear as whitish or yellowish dust with spots. (Those of us over 40 will need to get out the reading glasses or hand lens.) Before unloading the entire mite arsenal against them, consider their life cycle. (EB 0826)

● **Citrus red mites on skimmia** look like tiny, red, dust-like specks on leaves, petioles, and stems near buds. There is some evidence to suggest the mite may migrate from leaves to soil. Therefore, be sure the mites are present before applying a pesticide. (EB 0826)

Consult the Washington State University extension bulletins listed in parentheses for more information.

“Key Plants” in the Landscape

Dr. James Clark
Center for Urban Horticulture
University of Washington

Integrated pest management programs have long recognized the importance of identifying a crop's “key pests.” These are the three or four pests which will require control during the growing season. A management effort can concentrate on monitoring and responding to these few problems.

In the landscape this is nearly an impossible task. For the hundreds of plant taxa used in cultivation, a monitoring program for each plant's key pests cannot be developed. This is true even though many insect pests will attack a number of genera and species.

However, the concept of key pest management has been expanded to consider “key plants.” These are high maintenance requiring taxa—plants that routinely require intensive management, due to either pest problems or growth/development patterns. The “key plant” concept reflects the idea that all plants in the landscape do not require the same amount of maintenance. “Key plants” require a disproportionate amount of maintenance activity. If “key plants” could be identified and avoided, reduced maintenance inputs should result.

One consideration for defining “key plants” relates to an emphasis on pest problems vs. other maintenance activities. While pest management efforts focus on insects and diseases, landscape management involves a range of tasks. A perennial border might not experience major or significant pest problems, but it would be considered a “key plant” group due to the other maintenance requirements.

Registration Form: Landscape Maintenance Seminars

___ Complete Series: Rhododendrons, Urban Trees, New Plants	\$31.50
___ Rhododendrons	\$13.00
___ Urban Trees	\$13.00
___ New Plants	\$13.00
TOTAL: \$_____	

Group Rates:

Firms/institutions sending two or more employees per seminar. The rates are:
2–5 employees. . . . \$10.50/person 6 or more employees. . . . \$ 9.50/person

To qualify for group rates: (1) firm's registration must be received at least one week in advance; (2) all registrants must be from the same firm; and (3) total registration fee must be paid with one check or purchase order.

Firms using purchase orders must make prior registration arrangements.

Make checks payable to the University of Washington; no bank cards.

Portion of fees may cover refreshments and speakers' expenses.

Receipts will not be returned by mail; they will be available at the door.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE (DAY) _____ PHONE (EVE) _____

Mail payment and registration to: Urban Horticulture Program, University of Washington, GF-15, Seattle, WA 98195

For more information please call 545-8033.

What are examples of "key plants"? In the mid-Atlantic states, high maintenance requiring plants included *Rosa*, *Prunus*, *Cornus*, *Pyracantha*, and *Malus*. Relatively problem-free material included *Viburnum*, *Taxus*, *Ilex*, and *Forsythia*. In southern California, *Ulmus*, *Ginkgo*, *Rosa*, and annuals were high maintenance requiring. *Liquidambar*, *Alnus*, *Betula*, *Celtis*, and *Mahonia* were low maintenance requiring.

People who have compiled these lists readily point out that small differences in site character may significantly impact the identification of a "key plant." Selection of individual species and/or cultivars within a genus is also critical. The use of disease/insect-resistant or well-structured taxa will greatly reduce maintenance needs. In addition, the intensity of management required by a site, or its owner, may define whether or not a plant is "key."

Can we identify "key plants" for the Puget Sound region? Molly Beck of Northwest Arborvitae points to *Picea* (especially *P. pungens*), *Skimmia*, *Raphiolepis*, *Escalonia*, and *Prunus subhirtella* "Autumnalis" as problem plants.

What are other plants and plant groups that require more landscape maintenance activities? Turf, in all forms, requires a routine program of care, but Kentucky bluegrass (*Poa pratensis*) must be considered a "key plant." Using Kentucky bluegrass in western Washington is programming a significant disease-control program, which could be avoided with fine fescue (*Festuca* sp.) and perennial ryegrass (*Lolium perenne*) mixes. *Rhododendron* cultivars susceptible to root weevil and *Phytophthora* root rot; *Prunus* cultivars susceptible to brown rot and bacterial canker; and *Malus* cultivars susceptible to scab and mildew must be considered as "key plants" (or perhaps "key mistakes").

To my knowledge, there is no comprehensive list of "key plants" for the Puget Sound region. If you have ideas about genera, species, or cultivars which either always require maintenance or never do, I would like to learn of them. Call (206) 543-8603 or send me ideas and suggestions. They will be compiled and made available.

For more reading about "key pests" and "key plants" (available in the Center's Miller Horticultural Library):

Ball, J. 1987. Efficient monitoring for an urban IPM program. *J. Arboriculture* 13: 174-177.

Raupp, M. 1985. Monitoring: an essential factor to managing pests of landscape trees and shrubs. *J. Arboriculture* 11: 349-354.

Raupp, M., J. Davidson, J. Holmes and J. Hellman. 1985. The concept of key plants in integrated pest management for landscapes. *J. Arboriculture* 112: 317-322.

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