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.

Landscape Power Equipment

Date: Monday, July 25
Time: 9 a.m. to 12 noon
Location: Center for Urban Horticulture
Instructor: Chuck Nolan

Proper equipment can save you time and money. It can also help you do a nicer job. Learn what's new in landscape power equipment—mowers, aerifiers, edgers, line trimmers, blowers, etc. Emphasis will be placed on the efficiencies of different types of equipment. You will be provided with the facts—pro and con—to choose the appropriate equipment for your specific needs. Several pieces of equipment will be displayed and demonstrated.

Chuck Nolan has spent most of his life in the landscape industry, first as a tree trimmer, later as a golf course superintendent, and for the past several years, as a representative of Northwest Mowers Inc.

Plant Parasitic Nematodes

Date: Tuesday, August 23
Time: 9 a.m. to 12 noon
Location: Center for Urban Horticulture
Instructor: Dr. Fred McElroy

Nematodes can weaken plants, cause dwarfing, and transmit plant viruses. Discover what nematodes are, how they are spread, which landscape plants they can affect, and what control strategies are available.

Dr. McElroy, owner of Peninsula-Lab in Kingston, Washington, offers diagnostic services to the forestry, agricultural, and horticultural industries. He completed his undergraduate work at Washington State University and received a Ph.D. in plant pathology/nematology from the University of California at Riverside.

This seminar qualifies for three hours of WSDA pesticide license recertification credit.

Managing Soil Compaction/Efficient Irrigation

Date: Thursday, September 8
Time: 9 a.m. to 12 noon
Location: Center for Urban Horticulture
Instructor: Dennis R. Pittenger

Understand how soil compaction occurs and possible solutions for it. Find out when and how to amend soils. Practical approaches for determining water needs and irrigation schedules of landscape plants will also be discussed.

Dennis Pittenger is the urban horticulture specialist with the University of California Cooperative Extension. He provides technical support for county extension advisors and members of the landscape industry. His main interests are landscape irrigation and soil management, species selection, and tree management.

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

OTHER EDUCATIONAL RESOURCES

Turf Management Seminar in Bellingham. Update your knowledge of herbicides, fungicides, insecticides, and growth regulators available to turf managers. Review fertilizer formulations and the importance of proper timing of application. James Chapman, manager of the commercial turf department at the Chas. H. Lilly Company, will present a seminar on turf management chemicals and fertilizers on Saturday, August 13, 9 a.m. to 12 noon, at Bellingham Vocational Technical Institute. This program qualifies for two hours of WSDA pesticide license recertification credit. The registration fee is $12.50 before August 5 and $15 after. For details, call Van Bobbitt, Center for Urban Horticulture, 545–8033.

An Inside View of How Plants Grow: Practical Plant Physiology. August 26–28 at the Center for Urban Horticulture. In this seminar, Dr. Barbara Smit, assistant professor at the Center for Urban Horticulture, will show you how plants really work—how they photosynthesize, how they use nutrients, how they react to stress. A $75 registration fee, which must be received by July 25, includes instructional materials, refreshments, Friday evening reception, and Saturday lunch. Registration forms may be obtained at the Center for Urban Horticulture. This is part of the American Rose Society's national seminar series which is designed to provide advanced training to rosarians and other horticulturists.
International Society of Arboriculture’s Annual Conference. August 14–17, Vancouver, B.C. This outstanding educational program will include speakers such as Dr. Alex Shigo and Dr. Richard Harris, author of Arboriculture—Care of Trees, Shrubs, and Vines in the Landscape. The registration fee, which must be received before July 15, is $190. To request a registration packet, call (217) 328–2032.


South Seattle Community College Horticulture Courses—Summer 1988. Plant Materials for the Northwest, Tuesdays, 5–9 p.m., June 21–August 9; Plant Propagation Workshop, Wednesdays, 9 a.m.–3 p.m., June 22–August 10. 764–5336.

ARTICLES

Is Chemical Defruiting Practical in the Landscape?

Dr. James R. Clark
Center for Urban Horticulture
University of Washington

In the past few weeks, the question of defruiting landscape trees has arisen a number of times. The inquiry usually centers upon a method to reduce or eliminate the production of unwanted fruit. The situations usually involve a litter problem, i.e., staining a paved surface, accumulating in hard-to-clean areas, serving as a weed source. In the absence of fruitless cultivars of many woody plants, the questioner wants to know of methods to solve the problem.

One possible approach is the use of chemical materials to either prevent fruit production or to induce premature fruit drop. This technique is utilized in the apply industry, where crops are routinely thinned, chemically and by hand. Harris discussed several chemical alternatives and possible approaches in Arboriculture—Care of Trees, Shrubs, and Vines in the Landscape. However, to my knowledge, the actual use of such techniques in the landscape has been limited.

Several reasons may explain this. First, there is a general concern about pesticide use in the landscape by clients. Second, the demand is small—it is a specialty market. Third, the information base about chemical defruiting is relatively limited.

Regarding the available information on chemical defruiting, the following facts seem important:

1. The 1987 Pacific Northwest Weed Control Handbook recommends the use of Ethrel or Florel for defruiting. The active ingredient in both chemicals is ethephon.

2. The Florel label reads: "...will reduce or eliminate undesirable fruit from apple trees, crabapple trees, carob trees, and olive trees." I spoke with the Washington State Department of Agriculture about this label, and the initial reaction of Mary Toohey was that an applicator could not use Florel on any tree species but the four mentioned.

3. Attreec is another plant growth regulator labeled for the "suppression of flower and fruit formation." It is labeled for use on olive (Olea sp.), and glossy privet (Ligustrum lucidum), multiflora rose (Rosa multiflora), and Japanese holly (Ilex crenata). Thanks to Duncan Murphy of AAA Spraying in Seattle for providing this information.

4. Sevin has also been suggested as a possible chemical defruiting material. It has been used as a thinning agent in commercial apple orchards. However, it is not labeled for defruiting of landscape trees and shrubs. When used in the control of tent caterpillars, reduced fruiting has been observed.

If there are any other personal experiences with these or other chemicals for use in defruiting I would be very interested in learning about them.

I think there is great potential for using these materials to solve the problem of unwanted fruit. But for now, it appears that the use of chemical defruiting methods will be limited to a small number of plant species due to the label restrictions of the chemicals available.

Plant Palette: Itea ilicifolia

Timothy Hohn
Center for Urban Horticulture
University of Washington

Some plants seem to be relegated to the shadows of horticultural awareness, shade loving or not, with an unexplainable lack of curiosity. Itea ilicifolia, though first introduced to British gardeners in 1895, still resides in relative obscurity there and is virtually unknown in North America. Pitiful neglect!

Described as a glossy, dark green shrub covered with thin, pendulous inflorescences of white flowers growing on cliffs along the Yangtse River in Hupeh Province, China, Dr. E. H. Wilson goes on to recommend Itea ilicifolia, occasionally known as the holly-leaved sweetspere, in the Aristocrats of the Garden, published in 1926. Not so much an unknown plant, but an undone one.

We have a single specimen of this particular evergreen Itea in the Arboretum, although we also have others of its deciduous American relative, Itea virginica. There are 20 known species of sweetspere with most of them inhabiting the subtropical and tropical regions of Asia. They belong to the family Grossulariaceae along with Ribes, Escallonia, and others. Superficial inspection may justifi the common name "holly-leaved," although it appears quite different from other known members of the genus and the family. The simple, evergreen leaves are alternate, ovate, 2-4" long, and do have marginal spines similar to holly, but the leaves are not nearly so stiff. The flowers appear in July on pendulous racemes up to 12" long! Each inflorescence has the appearance of a drooping pipe cleaner as they dangle from the ends of the branches. The flowers are not pure white, but tinged with a slight, cooling touch of green. The fruit is of negligible ornamental value.

The specimen in the Arboretum was planted in 1952 and is now approximately 6–8' in height. The stems emerge from a central crown and arch outward giving the shrub a spread nearly equal to its height. While hardiness ratings vary in the literature from USDA zone 7 to no less than zone 9, our plant has suffered only defoliation during our occasional severe winters. It appears unfettered by pest or disease problems. This specimen produces a showy display of flowers in the shade of big-leaf maple and Douglas fir.

Pruning, though it can be accomplished through old cane removal and heading back in the early spring, is usually unnecessary. Plants should perform well in a moist, well-drained soil of variable pH, in either sun or shade. Plants in full sun will probably require summer irrigation and mulched or shaded root zones. Propagation by cuttings taken from midsummer to early fall, treated with 8000 ppm IBA-talc, and placed under mist in a well-drained peat:perlite mix, should show good rooting.

Itea ilicifolia makes a striking wall shrub with its evergreen foliage and pendulous inflorescences. One could easily consider it the summer-blooming counterpart to...
Garrya elliptica, the silk tassel bush which is native to Oregon and California. The dark green leaves are a perfect background for showy companions, especially those with distinctly horizontal or vertical lines which contrast with the drooping pipe cleaners of the Ailanthus.

Ailanthus ilicifolia can be seen in the Asiatic maple section of the Washington Park Arboretum—ask for specific directions at the reception desk in the Graham Visitors Center. Please let me know if you would like propagules for establishing stock plants.

Low Water Use Trees

George Pinyuh
Cooperative Extension
Washington State University

Scientific name  Common name
Acer ginnala  Amur maple
Acer griseum  Rocky mountain maple
Acer saccharum  Bigtooth maple
subsp. grandidentatum
Acer negundo  Box elder
Aesculus californica  California buckeye
Ailanthus altissima  Tree-of-heaven
Albizia julibrissin  Silk tree
Aralia elata  Japanese angelica tree
Arbutus menziesii  Madrone
Arbutus unedo  Strawberry tree
Broussonetia  Paper mulberry
papyrifera  Incense cedar
Calocedrus decurrens  Chinese chestnut
Castanea mollissima  Western Catalpa
Catalpa speciosa  Atlas cedar
Cedrus atlantica  Deodar cedar
Cedrus deodora  European hackberry
Celtis australis  Common hackberry
Celtis occidentalis  Western hackberry
Celtis reticulata  Chinese hackberry
Celtis sinensis  Western redbud
Cercis occidentalis  Birch-leaf mountain mahogany
Cercocarpus ledifolius  Curl-leaf mountain mahogany
Chryssolepis chrysophylla  Golden chinquapin
Cornus nuttallii  Western dogwood
Cotinus obovatus  American smoke tree
Crateagus spp.  Hawthorn species
X Cupressocyparis leylandii  Leyland cypress
Cupressus glabra  Arizona cypress
Eucalyptus  Snow gum
niphophila  Common fig
Ficus carica  Claret ash
Fraxinus oxycarpa  'Raywood'
Fraxinus pennsylvanica cvs.  Ginkgo biloba
Gleditsia triacanthos  Gleditsia
var. inermis  var. floribunda
ilex aquifolium  Juglans hindsii
Juglans spp.  Juniperus spp.
Koerreutiera  Juniper species
paniculata  Golden rain tree
Laurus nobilis  Mediterranean laurel
Ligustrum lucidum  Glossy privet
Lithocarpus densiflorus  Tan oak
Maclura pomifera  Osage orange
Morus alba  White mulberry
Morus nigra  Black mulberry
Phellodendron amurense  Amur cork tree
Photinia serralata  Chinese photinia
Pinus spp.  most pines
Platanus x acerifolia  London plane tree
Prunus laurocerasus  Cherry laurel
Prunus lusitanica  Portuguese laurel
Pseudotsuga  Douglas fir
menziesii  Black locust
Quercus chrysolepis  Canyon live oak
Quercus garryana  Garry oak
Quercus ilex  Holly oak
Quercus kelloggii  California black oak
Quercus lobata  Valley oak
Quercus spp.  many other oak species
Robinia pseudoacacia  Black locust
Sambucus caerulea  Blue Elderberry
Sassafras albidum  Sassafras
Sequoia sempervirens  Giant sequoia
Sophora japonica  Japanese pagoda tree
Sorbus aucuparia  European mountain ash
Thuja plicata  Western red cedar
Tilia tomentosa  Silver linden
Ulmus parvifolia  Chinese elm
Umbellularia californica  Oregon myrtle
Zelkova serrata  Japanese zelkova

Registration Form: Landscape Maintenance Seminars

— Complete Series: Equipment, Nematodes, Compaction ............... $31.50
— Landscape Equipment ........................................... $13.00
— Nematodes ....................................................... $13.00
— Soil Compaction/Irrigation .................................... $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 drafts.

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 ____________________________ 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.
Homeoclimatic Approach to Plant Selection

Dr. Clement Hamilton
Center for Urban Horticulture
University of Washington

Landscape plants are most likely to perform well in areas whose climate is most similar to their native regions. This common-sense proposition is gaining adherents once again, as man-made landscapes in the Pacific Northwest suffer the consequences of last year’s severe (but not outrageously unusual) drought. It is no wonder that azaleas need more summer watering than do Gaultheria shallon, for instance; the latter, native to our area, “expects” summer drought, whereas an azalea from the south-east U.S. is “accustomed” to plenty of summer rainfall.

Given that general principle, which sometimes goes under the heading “homeoclimatic horticulture,” we in the Puget Sound area can look to several regions in the world for predictably successful plant material. Our climate may be characterized as “cool winter-rain,” that is, having a preponderance of precipitation in the winter, relative drought in the summer, and cooler temperatures than truly Mediterranean-type climates. Our conditions are duplicated broadly in (a) cooler parts of the Mediterranean basin and (b) the lakes region in south-central Chile. (Other winter-rain regions, namely southern Australia and South Africa, are generally too warm to match our climate, even though several species from these regions do well in our landscapes.)

Perusal of two lists of proven drought-resistan
trees, one compiled by George Pinyuh (Washington State University) and one in the Sunset New Western Garden Book, reveals a preponderance of species from winter-rain regions. Several examples from the cooler Mediterranean areas are Albizia julibrissin, Cedrus atlantica, Ficus carica, Tilia tomentosa, and several species of Pinus and Quercus. Winter-rain western U.S. has yielded many tough customers, such as Aesculus californica, Sequoiadendron giganteum, and yet more species of Pinus and Quercus. This is not to say that all drought-resistant trees hail from winter-rain regions—witness Koelreuteria paniculata from eastern Asia—but rather that these are indeed the logical places to look first for the best results.

Plants from Chile have not yet made great inroads in Pacific Northwest landscapes; that requires remedy, especially in light of

our climatic similarity with the “lakes region” between Valdivia and Puerto Montt. To that end, I and a graduate student, Ms. Sarah Reichard, recently spent two months in that area conducting taxonomic and plant materials research. We saw old favorites Escallonnia and Araucaria araucana (female cones appear usually to break up on the tree before they can fall and glibber someone) as well as lesser known species such as Drimys winteri, Desfontainea spinosa, and Eucryphia cordifolia. Some areas—known as “nadis”—are characterized by particularly poor drainage; this is also a problem plaguing many street tree sites. It was therefore gratifying to see that one of the most common (and variable) hafad plants, Embothrium coccineum, is also one of the most successful street trees in Puerto Montt. The many species of Nothofagus, which North Americans have inexplicably ignored, also have tremendous potential for landscape use here.

Our work in Chile illustrates the essence of the homeoclimatic approach: locate an area with a similar climate and concentrate especially on habitats with “urban-type” stresses. This is one crucial step towards an urban landscape with ever more appropriate plants.