# Nursery News

March 2002



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## SOD found in Oregon

by Eric Reusche

Sudden oak death (SOD), *Phytophthora ramorum*, was detected for the first time in Oregon last year. There have been nine confirmed sites in Curry County outside the town of Brookings. All the sites found were small isolated infections, ranging from less than one acre to up to five acres.

Oregon's sudden oak death quarantine states that the area under quarantine is the entire state of California and any other area where the pathogen is established. Host material coming from a county in California not known to be infested is required to be certified. In Oregon, host material originating from any property where sudden oak death is found is also under quarantine.

As of this time, this disease has not been found on any nursery stock or on the properties of any nurseries within the state. Ongoing surveys are being made, both on the ground and by air, and an eradication program is being developed to deal with the small infestations we have found.

The current host list for SOD is as follows:

- Arbutus menziesii
- Lithocarpus densiflorus
- · Quercus agrifolia
- Q. kelloggii
- Q. parvula var. shrevei
- Rhododendron spp. including but not restricted to 'Catawbiense Grandiflorum,' 'Colonel Coen,' 'Elegans (R. roseum),' 'Gomer'
- Umbellularia californica
- Vaccinium ovatum
- Viburnum bodnantense
- Acer macrophyllum

- Aesculus californica
- Arctostaphylos manzanita
- Heteromeles arbutifolia
- Lonicera hispidula
- · Rhamnus californica

All plants and plant parts are quarantined. This includes nursery stock, logs, lumber, bark chips, mulch, firewood, sawdust, other plant products that may contain pieces of bark or are constructed from pieces of bark, and associated soil. This host list is subject to change as more is learned about this disease and more studies are done to determine plant susceptibility.

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# Oregon Department of Agriculture Sudden oak death (*Phytophthora ramorum*) on rhododendron species

## Oregon grower nurseries 2001 survey results

This survey was conducted in response to the threat of the sudden oak death pathogen, *Phytophthora ramorum*, spreading on infected rhododendron nursery stock. Researchers in California and the California Dept. of Food and Agriculture both reported that the pathogen could spread to new areas via this pathway. Similar reports have come out of Germany and The Netherlands, countries also infested with *P. ramorum*.

The Oregon Department of Agriculture conducted this survey to ensure that Oregon *Rhododendron* spp. nursery stock remains free of *P. ramorum*. Rhododendrons and azaleas are important parts of Oregon's nursery industry. The wholesale value of florist azaleas alone is over \$15 million annually (1999, 1999-2000 Oregon Agriculture and Fisheries Statistics).

### **Field Survey**

All of ODA's Nursery Inspectors conducted the field surveys and collected leaf and stem samples for laboratory analyses. ODA's Nursery Inspectors are all experienced inspectors that have identified *Phytophthora* foliar blight symptoms on *Rhododendron* spp. before.

The inspectors were asked to visually inspect a minimum of 2% of the *Rhododendron* spp. nursery stock. The inspectors concentrated their efforts on cultivars already identified as highly susceptible to P. *ramorum* (e.g., 'Catawbiense Grandiflorum,' 'Colonel Coen,','Gomer,' and 'Elegans' (*R. roseum*)). However, the survey was not limited to those cultivars alone.

The inspectors collected symptomatic leaves and/or shoots from each nursery. Asymptomatic leaves were also collected if no symptomatic leaves could be found. The samples were delivered to the ODA Plant Health Laboratory and processed within 72 hours of collection. Most inspectors reported it was difficult to find potentially symptomatic leaves to collect; the majority of leaves appeared to be suffering from sunburn.

### **Laboratory Analyses**

The leaves were processed as recommended by Dr. David Rizzo and Dr. Jenny Davidson, UC-Davis. The leaves were processed as soon as possible after arrival. Isolation techniques focused on the disease margin, if present, on each leaf. If a leaf was asymptomatic, the leaf tip was treated as the suspect tissue.

Each leaf sample was thoroughly rinsed in sterile water and then cut into subsamples using sterile tools. The subsamples were then placed in a moisture chamber and onto PARP, a medium selective for *Phytophthora* species. Leaf subsamples in the moisture chamber were examined under light microscopy after 24 or 48 hours. Leaf subsamples on PARP were examined under light microscopy after 7 to 10 days. *Phytophthora* isolates were identified to species. All materials, including leaf rinse water, moisture chambers, and PARP plates, were sterilized prior to disposal.

#### Results

Sixty-seven grower nurseries were visually surveyed for *P. ramorum*. A total of 2,254 samples were collected from the 67 nurseries, for an average of 34 samples per nursery.

The SOD *Phytophthora* was not recovered from any of the samples submitted. However, other *Phytophthora* species with similar life habitats were found on samples from 30 of the 67 nurseries (Table 1). Multiple *Phytophthora* species were recovered from five of the 30 nurseries. Of the other *Phytophthora* species, *P. syringae*, *P. cactorum*, and *P. citricola* were recovered the most often. All of these pathogens can cause foliar blight and/or dieback symptoms similar to those caused by *P. ramorum*.

Based upon this survey, the Oregon rhododendron grower nurseries are apparently free of *P. ramorum*.

Table 1. *Phytophthora* species recovered from *Rhododendron* spp. samples taken from Oregon grower nurseries in 2001.

Phytophthora Species	# Nurseries Found	Symptoms
P. cactorum	11	Dieback, root/stem/seedling rot
P. cambivora	2	Blight
P. cinnamomi	1	Root/stem rot
P. citricola	9	Bud/leaf/twig blight, root rot
P. hevea	4	Dieback
P. nicotianae	1	Dieback
P. syringae	10	Leaf spot, stem/branch canker,
		dieback

## Quarantine alert for plant importers; Japanese beetle

By Dennis Magnello

Currently, 35 entire states in the continental USA, the District of Columbia, and Canadian provinces of Ontario and Quebec are under quarantine for the highly destructive pest *Popillia japonica*, commonly known as Japanese beetle. This applies to all states east of, and including, Colorado and New Mexico, except for Florida, Louisiana, North Dakota and South Dakota.

To familiarize yourself with this quarantine, you may obtain a copy of Oregon's Amended Quarantine Against Japanese Beetle (OAR 603-52-127) by calling the Oregon Department of Agriculture Plant Division at 503-986-4644. If you already have a copy of the quarantine regulations, you may wish to obtain a new one since some chages were made to the quarantine in October, 2000. Keep in mind that not all protocols in the U.S. Domestic Japanese Beetle Harmonization Plan are acceptable for Oregon.

The following is a summary of Oregon's Quarantine Against Japanese Beetle and applies to shipments from all areas under quarantine:

- Soil and soil attached to plants is prohibited.
- B & B and field-potted material is prohibited.
- Grass sod is prohibited.
- All shipments of plants with roots must be certified by a state agricultural official at origin, and must conform to one of the following options:
  - 1. The plants must be bareroot with no clumps of soil or growing media larger than 1/2 inch diameter.
  - Container grown plants must be grown in sterile, soilless media and certified media and certified as...
    - a. produced in an approved Japanese beetle free greenhouse/screenhouse, or
    - b. produced during a pestfree window (the entire plant production cycle and shipment must occur between October and May), or
    - c. having received an Application of an Approved Regulatory Treatment. Treatments include drenches or media incorporation of approved pesticides in containers of one gallon or smaller only. Media incorporation of approved pesticides for ornamental grasses or sedges. Dip treatments are not approved.

 Plants produced in sterile soilless media may also be certified under a Detection Survey for Origin Certification plan. Under this plan, plant material may be certified from pre-approved, non-infested counties in areas under quarantine.

Advance notification of Japanese beetle-regulated commodity shipments into Oregon is required. The certifying official shall notify the Oregon Department of Agriculture (ODA) by mail, fax, or email. The shipper shall notify the receiver to hold regulated commodities for inspection by the ODA. The receiver shall then notify the ODA of the arrival of such material and hold the material for inspection.

As a plant importer, it is your responsibility to ensure that plant material brought into Oregon from areas under quarantine meets all of Oregon's quarantine requirements. If the plant shipment does not meet these requirements, or is improperly certified, it will be subject to a notice of rejection/violation and may be returned to the state of origin or destroyed. When placing an order for plant material from any area under quarantine, providing the seller with a copy of Oregon's quarantine regulations can save the costs of destruction, or return of the material.

Summaries of other Oregon and Federal plant quarantines, as well as plant quarantines of other states, were printed in the March 2001 edition of the ODA Nursery News. Copies of these summaries are also available from the ODA Plant Division, 503-986-4644.

Working together to keep Japanese beetle, and other destructive pests, out of Oregon should be a priority for all of us.



### What to look for now

#### **Spring (March-May)**

Insects	Life Stage	Host	Symptoms
Adelgid	Crawlers	White pine, Douglas-fir, hemlock	White woolly mass or cottony tufts on trunk, stem or needles
Leaf Miner	Larvae	Birch, holly, Laburnum	Pale blotches on leaves
Cooley Spruce Gall Adelgid	Adults	Spruce	Galls on spruce
Spruce Aphid	Adults, nymphs	Spruce	Needle drop, sooty mold
Borers	Adults, larvae	Conifers, Prunus	Tree dieback, pitch tubes, gallery formation
Sequoia Pitch Moth	Larvae	Pine	Dead branches, pitch exudate
Honeylocust Pod Gall Midge	Adults, larvae in galls	s Honeylocust	Leaflet galls, premature leaf drop
Thrips	Adults, nymphs	Flowering potted plants	TSWV, flower feeding
Tussock Moth	Hairy caterpillars	True firs, spruce, Douglas-fir	Feeding damage on leaves or needles
Spittlebugs	Nymphs	Herbaceous plants	Spittle mass

Diseases Symptoms Rust Hawthorn, rose, amelanchier, hollyhock, pear Small orange pustules on leaves Phytophthora Rhododendron, fir, etc Root dieback, discoloration, flagging Leaf spots Photinia, roses, hawthorn Dark circular spots on leaves Leaf Gall Azalea Thickened, fleshy leaves Azalea Petal Blight Azalea Black sclerotia on petals, holes

#### **Summer (June-August)**

Insects	Life Stage	Host	Symptoms
Scale insects	Adults, crawlers	Pine, juniper, yew, etc.	Honeydew, sooty mold, yellowing of foliage
White Pine Weevil	Larvae	Colorado and Norway spruce	Distorted or dead leaders and terminal shoots
Root Weevil	Adults	Rhododendron, spruce, etc	Leaf notching
Spider mites	Adults	Arborvitae, roses, etc	Stippling, webbing
Leafrollers	Larvae	Deciduous trees and shrubs	Leaf rolling, frass, webbing, defoliation
Pear slugs	Larvae	Pear, cherry, hawthorn	Skeletonized leaves
Slugs	Eggs, adults	Soil, potted plants	Feeding damage on leaves
Eriophyid mites	Adults	Pine	Needle distortion, rosetting
Diseases	Host	Sympto	oms

 Diseases
 Host
 Symptoms

 Anthracnose
 Dogwood, maple, sycamore
 Large brown blotches on leaves, defoliation

 Virus
 Roses
 Yellow blotching or venation of leaves

 Verticillium wilt
 Maple, etc
 Wilting of leaves on one side of tree, green streaks in the sapwood

 Western Gall Rust
 Shore pine
 Galls on branches and trunk

 Powdery Mildew
 Rhododendron, roses, grapes, etc
 White mycelia on leaves,

## Certificate reminder

Many of the shipping certificates that we issue for movement of quarantined plant material into California, and other states, have a specific expiration date. Please remember to examine your certificates closely to make sure that they have a current date. Many of the rejections issued to Oregon's nursery stock are due to expired certificates. By reviewing these certificates prior to shipping, you may save yourself time and money.



## Oregon's grape quarantine

Oregon's Grape Quarantine (OAR 603-052-0051), which requires all rooted grape plants entering Oregon to be certified as being free from fanleaf, leafroll viruses and grape phylloxera, is currently under review. Public testimony is being scheduled for industry input into revising the quarantine to better serve industry needs. For more information on this quarantine and hearing schedules, contact the ODA Plant Division (503-986-4644).

## Oregon adopts new blueberry shipping regulations

Elena Victory, Horticulturist Gene Milbrath, Plant Pathologist

A new strain of blueberry scorch virus (BISV) has been detected in British Columbia and has quickly spread throughout blueberry production areas of that province. This strain of BISV poses a serious threat to Oregon's blueberry industry. At the request of both the nursery and blueberry industries, the Oregon Department of Agriculture held hearings to establish a control area to prevent the introduction of BISV-infected nursery stock into Oregon.

The new control area was approved and the new administrative rule establishing the control area is in effect.

#### **Profile**

The enemy is known under two aliases—the West Coast strain and the East Coast strain, also known as sheep pen hill disease. The West Coast strain was first seen in blueberry fields near Puyallup, WA in 1980 and since has been observed in western Oregon and Washington. The West Coast strain is symptomless in 'Bluecrop' and 'Duke' and several other varieties commonly grown in the Pacific Northwest. This strain of BISV is very difficult to transmit by aphids and therefore the spread in the field is nonexistent. The West Coast strain of BISV has a very limited distribution in Oregon. By contrast, sheep pen hill strain of BISV is potentially much more serious because it has the capability of being transmitted by a powerful ally - the blueberry aphid. This particular strain of BISV is an interesting adversary in that it can potentially infect all blueberry cultivars and shows symptoms in all plants except the 'Jersey' variety. Keep in mind that aphids can spread the virus from plants that appear symptomless.

#### **Control Tactics**

Though it sounds like a no-win situation, the good news is that the East Coast strain is *not* established in Oregon and Washington and it won't become a problem if the requirements of the control order are followed. The first line of defense has been to establish the control area covering the entire state of Oregon. Anyone importing blueberry plants to be grown or sold in Oregon should be aware that all shipments from other states or countries need to certified that one of the following conditions has been met:

- the plants originate in an area free of sheep pen hill disease:
- the blueberry plants have been tested and inspected through a recognized federal, state, or provincial virus-testing program;
- the plants are free of virus based on lab tests;
- the plants have been micropropagated (tissue cultured) from plants that tested negative for viruses; and

 fresh fruits for processing are free of leaves and debris before shipping.

To further prevent the spread of Blueberry Scorch Virus, keep the following tactics in mind:

- purchase plants produced from virus-free stock when establishing a new planting or replanting;
- · rogue out any plants that show symptoms; and
- monitor aphid populations and use sound IPM practices for their control.

More information, including electronic images of symptoms of BISV, can be found on the ODA Plant Division web site at oda.or.state.us/Plant/

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# California pine shipping restrictions eased

The California Department of Food and Agriculture recently issued a master permit to the ODA that allows the shipment of Austrian (*Pinus nigra*), red (*P. resinosa*) and Scotch (*P. sylvestris*) pine seedlings originating in Oregon counties infested with cereal leaf beetle. Previously no Austrian, red or Scotch pine of any age or size class from infested counties was allowed into California without a fumigation treatment.

### In order to qualify for shipment:

- All Austrian, red and Scotch pine in the shipment must be produced in Oregon and shall not be commingled in the shipment with like pines from other origins.
- Only seedlings less than three years in age and less than 30 inches in height are eligible. Grafted pines are not eligible.
- All Austrian, red and Scotch pine in the shipment must be identified and labeled as being seedling pines less than three years in age and 30 inches in height on shipping permits and any boxes or packages.
- The shipper is required to keep records of each type of Austrian, red and Scotch pine shipped to each receiver in California.
- A certificate issued by the Oregon Department of Agriculture must accompany each shipment.
- No treatment is necessary.

Counties in Oregon currently infested with cereal leaf beetle include Baker, Benton, Clackamas, Columbia, Lane, Malheur, Marion, Multnomah, Polk, Umatilla, Union, Wallowa, Washington and Yamhill.

## Are you doing slug and snail control?

By Susan Schouten and Jan Hedberg

Sounds pretty basic, but maybe so basic it tends to be overlooked or not taken too seriously. Several nurseries in the Willamette Valley have recently been found to have at least minor infestations of European brown garden snail (EBGS). A nursery found to be infested with EBGS will be placed under an administrative directive. This means they may find themselves restricted in their shipping, will require additional inspections by ODA, and will need to do a certain number of fairly expensive control treatments. Civil penalties may also apply to nurseries that fail to comply with EBGS quarantines.

So what is the big deal about this snail? EBGS is an introduced pest. It is not the native snail that we sometimes see in the forest or mountains. This is a temperate snail that prefers warm, moist conditions often found in greenhouses, although there are some populations in several areas of Western Oregon. They feed on woody plants, ground covers and even trees. We have found them feeding on pachysandra, hosta, camellia, deciduous trees, pine, calla lily, jade plant and other succulents. It has also been reported on boxwood, ivy, rose, hibiscus, magnolia, peach and hydrangea. Brown garden snails eat large, ragged holes in leaves and may totally consume seedlings. Low-growing plants generally suffer the most damage, but this snail does climb trees and damage has been reported in some orchard trees.

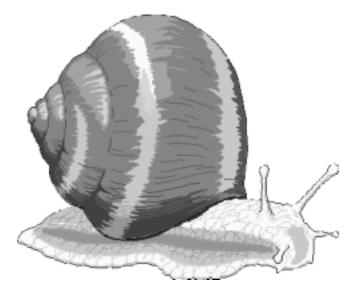
The adult snail shell has four to five whorls and is 28 to 32 mm in diameter. The shell is large, globose, rather thin, and has fine wrinkles on the surface. It is light brown with chestnut brown spiral bands that are interrupted by yellow flecks or streaks. Young brown garden snails are similar to adults, but smaller. Eggs are white, spherical, and about 5 mm in diameter. Eggs are laid in a nest 2.5 to 4 cm deep in the soil. Each snail lays an average of 85 eggs. Eggs hatch in two to four weeks, depending on the soil temperature. During warm, damp weather ovipositions may be as frequent as once a month. Peak activity period is February to October. Each adult snail can lay an average of 430 eggs during the warm season, but in a greenhouse they can be active year round.

The states of Alabama, Arkansas, Florida, Mississippi, North Carolina, Tennessee, and Virginia all require that all plant material be accompanied by a certificate stating that the shipment is from a nursery routinely inspected and found free of European brown garden snail. If a nursery has been found to be infested with EBGS, certificates will NOT be issued without inspection of each and every load going to the above states.

If a snail problem is noted, a treatment program must be started immediately. Contact your ODA Horticulturist. We will help you set up a program of scouting, collecting, and treatment so that there will be as little impact on your business as possible. If a problem is found during a sales season or during a shipping season, significant impact is possible. We strive to help with these problems before they get to that point. The cleanliness of the plants and the growing grounds is very important. Weeds, trash, old lumber and plastic provide great cover for these pests and any controls will be less effective if the snails have a ready hideout.

The Oregon Department of Agriculture regulates the movement of all plants with roots, whether in soil or growing medium, from the states of Arizona, California, Louisiana, New Mexico, Texas, Utah, and Washington, to help prevent the introduction of this pest into our state. All plant materials from these states must be inspected prior to shipment and found free from the snail. Each shipment from these states must be accompanied by a certificate issued by the state of origin. A copy of this certificate must be sent to the Plant Division, Oregon Department of Agriculture, 635 Capitol Street NE, Salem, OR, 97301-2532.

In addition to inspecting material from out of state, care should be taken when purchasing plant material locally. Snails can be moved around from one nursery to another within Oregon if the plants are not inspected when picked up or delivered.



## New inspector

Elena Victory, one of our newest state inspectors, started in January of this year. She moved here with her husband and three children from St. Louis, Missouri where she worked as an Extension Horticulture Specialist for the University of Missouri-Columbia.



Elena's background in horticulture is quite diverse. She holds a BS in botany, a master's in Plant Pathology, and a PhD in Horticulture. The master's and PhD were obtained at WSU-Pullman. Beside her love for diseases and insect pests, she also collects antiques, loves plants & animals, and collects dinosaur claws and teeth.

## English ivy and entire Federal Noxious Weed List now under quarantine in Oregon

Susan Schouten, Horticulturist
In 2001, *Hedera helix* or English ivy was placed on the Oregon Noxious Weed List. This species has now been placed on the Noxious Weed Quarantine List. **This means it is now against Oregon law to import, transport, purchase, sell, or propagate English ivy in the state of Oregon.** Named horticultural varieties of ivy, however, are not included in this quarantine. All named horticultural varieties of ivy should be labeled with the correct cultivar name. Any ivy plants labeled only *Hedera helix* may be subject to destruction under the quarantine.

In addition, all plants currently listed on the Federal Noxious Weed List are also now included under Oregon's Noxious Weed Quarantine. There are just under 100 species of plants on this list, including *Imperata cylindrica* and several species of *Salvinia*. *Imperata cylindrica* cv. 'Red Baron' is not under quarantine, however, since it has not shown the tendency toward invasiveness the species has.

If you have questions regarding this quarantine, talk to your horticulturist or call the Oregon Department of Agriculture at 503-986-4644. The Oregon Noxious Weed List/Quarantine is available on the ODA web site: <oda.state.or.us>.

# Reminder of pesticide cancellations

By Dennis Magnello

On August 23, 2000, the Oregon Department of Agriculture canceled, effective immediately on that date, the use of a group of pesticide products whose active ingredients, known as "PBTs" (persistent, bioaccumulative, and toxic pollutants), may pose significant risks to human health and to the environment. Previously, the production and distribution of these ingredients were canceled by the U.S. Environmental Protection Agency (EPA) although the use of existing stocks of some of these materials was allowed, under certain conditions, by the EPA.

The following pesticide active ingredients, designated as PBTs, may no longer be used in Oregon under any conditions:

- Aldrin
- Chlordane
- Dichlorodiphenyl trichloroethane (DDT)
- Dieldrin
- Hexachlorobenzene
- Mercury-based pesticides including, but not limited to, mercurous chloride and mercuric chloride
- Mirex
- Toxaphene
- Heptachlor
- 2, 4, 5-Trichlorophenol (2, 4, 5-T)

If you have supplies of any of these materials, call the Department of Environmental Quality (DEQ) at 503-378-8240 for information about disposing of the materials.

## Oregon and federal plant quarantines summary regulating shipment into and within Oregon

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Plant material	Areas under quarantine	Quarantine	Provisions
Plants in growing media, sod, any other potential articles.	AZ, CA, HI, NM, TX, UT, WA. Also, snail culture/shipping prohibited within OR.	Brown garden snail & other exotic phytophagous snails.	Certificate of freedom from snails.* Articles free of growing media & snails excepted from certification.
Many host & ornamental plants (see quarantine listing), grape (vitis) plants.	AL, AR, CA, FL, GA, LA, MS, MO, NC, SC, TX; Mexico. Oregon: any infested site.	Glassy-winged sharp- shooter (a leafhopper). Pierce's disease.	Treatment/certificate of freedom from leafhopper for <u>all</u> plants & grapes tested Pierce's-free.
Plants & plant parts including logs, wood chips, & pulpwood.	CT, DE, DC, IN, KY, ME, MD, MA, MI, MN, NC, NH, NJ, OH, PA, RI, TN, VT, VA, WI, WV.	Gypsy moth (F).	Plant material certified free from Gypsy moth.*
Plants in growing media, sod, soil, hay, straw.	AL, AR, FL, GA, LA, MS, NC, OK, SC, TN, TX.	Imported fire ant (F).	Certificate of freedom from imported fire ant.*
Plants in growing media, sod, bulbs, rhizomes, crowns, all plant parts, soil, humus, compost, manure.	AL, AR, CO, CT, DE, GA, IL, IN, IA KS, KY, ME, MD, MA, MI, MN, MS, MO, NE, NH, NM, NJ, NY, NC, OH, OK, PA, RI, SC, TN, TX, VT, VA, WV, WI, DC; ON & PQ, Canada.	Japanese beetle.	Plants in soil or growing media must be certified fumigated or otherwise treated.* Washed bare root plants, bulbs, etc. excepted from certification.
Allium spp: onion, garlic, leek, chives, shallots; all ornamental varieties.	All of U.S.; all of Oregon except three counties (Crook, Deschutes, and Jefferson).	Allium disease control area order.	Sets, seedlings produced within the three counties or from certification program. True seed exempt.
Apple, crabapple trees & parts.	Oregon, Washington.	Apple ermine moth.	Articles prohibited movement unless accompanied by certificate.
Blueberry plants, blueberry fruit.	All of U.S. east of and including ND, SD, NE, KS, OK, TX.	Blueberry maggot.	Plants certified washed bareroot; fruit certified cold storage treated.
Blueberry plants.	All of U.S. except Oregon.	Blueberry scorch virus.	Official certification of freedom from Blueberry scorch.*
Crataegus, Cydonia, Malus, Prunus, Pyrus.	All of U.S. east of & including ND, SD, NE, KS, OK, TX; UT, part. Canada east of and including Manitoba.	Plum curculio.	All fruit & growing media from drip line of fruiting plants listed. Certificate required.*
Crataegus, Cydonia, Malus, Prunus Pyracantha, Pyrus, Sorbus.	Washington; British Columbia.	Cherry bark tortrix moth.	Articles prohibited movement unless accompanied by certificates.
Chestnut, chinquapin, all parts, nuts in shell. (Note: horse chestnut not included).	All of U.S.	Chestnut blight, large & small chestnut weevils, Oriental chestnut gall wasp.	Material prohibited from states east of and including CO, MT, NM, WY. States west of above: material admitted with certification.
Flowering annual/per- ennials/vegetable, field crops (see quarantine).	All of U.S. except: AK, AZ, CA, HI, ID, NV, NM, UT, & WA.	European corn borer.	Certification required.

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Plant material	Areas under quarantine	Quarantine	Provisions
Elm, zelkova & planera: All parts, including wood with bark, except seed.	All U.S. except AK, AZ, FL, HI, LA, NV, NM, UT, WA. Oregon: Union & Malheur Counties, Portland.	Dutch elm disease, elm yellows phytoplasm.	Quarantine areas: material prohibited unless ODA exempted. Other states: material certified.
Filbert: all corylus species, varieties & parts; nuts exempt.	All U.S. east of & including MT, WY, CO, NM, WA; parts of Oregon, Canada east of BC.	Eastern filbert blight disease.	Exterior quarantine areas prohibited. Oregon: no retail & landscape sales.
Grape plants (vitis spp.), all parts except fruit.	All of U.S.	Grape quarantine: grape phylloxera insect, grapevine fanleaf virus, grapevine leafroll virus.	Cuttings & plants in nonsoil, sterile media: cert.* Vitis labrusca Cuttings exempt on virus cert.
Hop plants & all parts, except dried cones.	All of U.S. except Idaho & Washington.	Powdery mildew of hops.	Certification from ID & WA. Other states prohibited.
Kudzu plants, parts & seeds.	All of U.S.	Kudzu.	Prohibited.
Oak, chestnut, chinquapin, tanbark oak: all parts, leaf-mold. Seed exempt.	All of U.S.	Oak wilt disease.	Certificate affirming origin state & plants both free from oak wilt disease.
Oak, rhododendron, azalea & many other hosts.	All of California, Oregon sites.	Sudden oak death disease.	Certificate (see quarantine).
All pine plants, parts with terminal buds or shoots; except cut, non-prop. Items between 10/20 and 12/31.	CT, DE, IL, IN, IA, ME, MD, MA, MI, MO, NH, NJ, NY, OH, PA, RI, WA, WV, WI.	European pine shoot moth.	No pine from quarantined areas unless certified fumigated. Pine from all other areas must have origin certificate.
Pine - all species, all parts, cut trees, branches, bark, logs.	Individual counties in IL, IN, MD, MI, OH, PA, NY, WV.	Pine shoot beetle (F).	USDA certification required.
All prunus: almond, apricot, cherry, nectarine, peach, plum, and prune.	See quarantines.	Peach diseases: peach yellows MLO; peach mosaic virus, peach rosette MLO.	Refer to quarantine text for details.
Purple loosestrife: all plants, plant parts and seeds.	All of U.S.	Purple loosestrife.	Prohibited.

<sup>\*</sup> Shipper must notify Oregon Dept of Agriculture of shipment; Oregon receiver must hold shipment for Department inspection. For this and other information contact: Oregon Dept of Agriculture, Plant Division, 503-986-4644, fax 503-986-4786. Mail: 635 Capitol St. NE Salem, OR, 97301-2532. <oda.state.or.us>

F=Federal Quarantine.

OREGON LABELING & CERTIFICATION LAW: ALL NURSERY STOCK & OTHR PLANT MATERIAL SHIPPED INTO OR WITHIN OREGON MUST BE ACCOMPANIED BY A NURSERY STOCK CERTIFICATE AND/OR THE REQUIRED PERMITS OR TAGS OF THE STATE OF ORIGIN, AND BE FREE FROM INJURIOUS PESTS, DISEASES, AND NOXIOUS WEEDS. EACH UNIT (CONTAINER, BUNDLE, CARGO BOX, ETC.) MUST SHOW THAT IT CONTAINS NURSERY STOCK, SEEDLINGS, OTHER PLANT MATERIAL, OR SEEDS, AND MUST HAVE CONSPICUOUSLY MARKED THE NAME AND ADDRESS OF THE SHIPPER AND CONSIGNEE, AND WHERE THE PRODUCT WAS GROWN.

# Summary of state and federal destination requirements for plant shipments from Oregon Department of Agriculture

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Plant & parts	Destination	Regulation	Requirements
All plants	All states and Oregon.	Nursery certification.	Shipping certificate.
All plants	Wyoming.	Wyoming license.	Contact WY Department of Agriculture.
All plants	All states and Oregon.	Noxious weeds.	Plants free from weeds.
— Broom plants (cytisus)	Washington.	Noxious weeds.	C. scoparius cultivars prohibited.
All plants	AL, AR, FL, MS, NC, TN, VA, WV.	Brown garden snail.	Certificate.
Misc. broadleaf plants	Arizona.	Whiteflies.	See below*
Misc. tropical plants*	California.	Burrowing nematode.	Certificate.
Apple (bareroot exempt)	Calif., counties (see list).*	Apple maggot.	Certificate.
Apple, hawthorn, pear	AZ, ID, WA.	Apple maggot.	No fruit on trees.
Apple	All states and within Oregon.	Apple ermine moth.	Certificate.
Barberry, mahoberberis, Oregon grape	See protected state's listing below.***	Black stem wheat rust disease.	Federal certificate.
Camellia	Tennessee, Texas.	Camellia flower blight.	Certificate.
Cherry (bare-root OK)	California.	Cherry fruit fly.	No fruit, soil certificate.
Chestnut, chinquapin; oak, tanbark oak	California.	Chestnut bark disease; oak wilt disease.	Certificate, oak acorns exempt.
Dogwood	Florida.	Anthracnose disease.	Florida permit.
Elm, planera, zelkova	Nevada.	Dutch elm disease.	Plants prohibited.
Filbert (nuts exempt)	Oregon.	Eastern filbert blight.	County restrictions.****
Grape plants	CA, ID, NY, WA.	Pests & virus diseases.	Certificate.
Grasses, sod, straw, hay straw packing prohibited	California.	Cereal leaf beetle.	Certificate.

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Plant & parts	Destination	Regulation	Requirements
Hemlock	ME, MI, NH, VT.	Hemlock woolly adelgid.	Certificate.
Mint	ID, MN, MT, NV, UT, WY.	Mint wilt (verticillium).	Certificate.
Oriental pear	New York.	Pear rootstock & seed.	Prohibited.
Persimmon (diospyros)	California.	Persimmon root borer.	Prohibited.
Pine, all	CA, HI, MT, NV.	European pine shoot moth.	Certificate.
— Austrian, Resinosa, Scotch	California.	Cereal leaf beetle.	Certificate.
Ribes (all species)	MA, ME, MT, NC, NH, OH, RI, WV.	White pine blister rust.	Destination state permit.
Rose	Indiana, New Jersey.	Rose virus.	Certificate.
Solanaceous plants (eggplant, pepper, potato, tomato)	California.	Colorado potato beetle.	Certificate.
Walnut plants (nuts okay)	Arizona, California.	Brooming disease.	Certificate.
Walnut, hickory, pecan	New Mexico.	Nut tree pests.	Certificate.

<sup>\*</sup> For information contact: Oregon Department of Agriculture, Plant Division. 503-986-4644, FAX: 503-986-4786. Mailing address: 635 Capitol Street NE, Salem, Oregon 97301-2532. <oda.state.or.us>

The above summary was extracted from ANLA publication A-2-40330, "Federal and State Quarantine Summaries". Available from ANLA, 1250 I Street NW, Suite 500, Washington, DC, 20005; telephone: 202-789-2900, fax: 202-789-1893.

<sup>\*\*</sup> Calif. Counties: Contra Costa, El Dorado, Fresno, Kern, Kings, Madera, Merced, Monterey, San Benito, San Joaquin, San Luis Obispo, Santa Barbara, Santa Cruz, Stanislaus, Tulare, Ventura counties regulate apple/crabapple unless bareroot and free of fruit.

<sup>\*\*\*</sup> Protected States: IL, IN, IA, KS, MI, MN, MO, MT, NE, ND, OH, PA, SD, WV, WI, WY and WA.

<sup>\*\*\*\*</sup> Filbert: Retail & landscape sales prohibited within Oregon to protect nut industry. Other sales, movement, & production within the state require compliance agreement with ODA. Out of state sales okay.

Oregon Department of Agriculture 635 Capitol Street NE Salem, Oregon 97301-2532

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### To weed or not to weed

by Jan Hedberg

I have just returned from the annual meeting of the Horticultural Inspectors Society (Western Chapter) meeting which was held in Sacramento, California this year. This meeting provides field inspection staff the opportunity to get together to talk about common problems and concerns. There is usually a pretty heavy emphasis on learning new skills and techniques. This year we had the grand tour of the CDFA Plant Clinic and the Foundation Plant Materials Service (FPMS) facility at University of California, Davis. Both were very impressive facilities staffed by highly train professionals.

Whenever it was learned that I was from Oregon, the same questions came up. "What are you going to do about Sod (sudden oak death)?" "Why are you being so hardnosed about Japanese beetle?" and "Why do your nurseries keep sending us quack grass?" I had good and ready answers for the first two, but that third one...

Oregon nursery stock is considered to be some of the best quality stock in the country. Buyers from all over the world consider Oregon stock to be a good value. Why is it then that some growers are willing to risk all of that by shipping nursery stock with pest, diseases and weeds included?

Quack grass (*Agropyron repens*) is an aggressive perennial grass reproducing from seed, or spreading by a shallow mass of long, slender, branching rhizomes. The ODA and the CDFA designate it as a "B" rated weed. This means that it is a weed of economic importance and should be controlled intensively on a case by case basis. It is a weed that will cause shipments to be rejected. Even if just suspected to be infested, the shipment will be held. Your customer can not use the stock until it is released and that is not going to make repeat buyer.

Control of this weed before shipping is very important. Because of the ability of broken rhizome segments to grow and produce new plants, it is extremely difficult to control mechanically. The Pacific Northwest Weed Control Handbook lists several chemical controls but timing and persistence is important. As with all pesticides, read and follow the label instructions carefully.

The ODA Nursery Inspection Program takes a great deal of effort in assisting the Oregon nursery industry to maintain a good reputation for pest and disease free nursery stock. We become very concerned when problems like this come up in conversations with representatives from other state departments of agriculture.

I encourage you to be diligent in maintaining pest-free nursery stock and to always ship your customers the very best product that you are able to produce. Look at it as a winning solution all the way around.