Oregon State University Extension Service

Tillamook County Tiller

HORTICULTURAL NEWSLETTER FOR TILLAMOOK COUNTY

SUMMER 2011

Spotted Wing Drosophila

Oregon gardeners can reduce the spread of the invasive spotted wing drosphila with the help of a new Oregon State University publication.

Spotted wing drosophila (*Drosophila suzukii*; SWD) is a new, invasive pest that attacks stone fruits and berries. This pest is native to Japan, where the first reports of this "vinegar fly" date to 1916, and has been established in Hawaii since the early 1980s, although no noticeable damage has been reported there. On the mainland United States, SWD was first discovered in the fall of 2008, maturing on raspberry and strawberry fruits in California. In 2009, SWD was reported in Oregon, Washington, Florida, and British Columbia, Canada. In 2010, SWD flies were caught in monitoring traps in Michigan, Utah, North Carolina, South Carolina, and Louisiana. In 2011, SWD was reported for the first time in Baja, Mexico.

In Oregon, SWD has been confirmed in 17 counties (including Lincoln County). These counties are home to several commercial fruit producers as well as many home gardeners who tend backyard berries and fruits. Given the rapid spread of SWD in Oregon and across the United States, it is reasonable to suspect that SWD is widespread, well established, and likely present in additional counties and states.

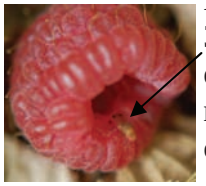

Photo by Amanda Ohrn, © Oregon State University.

Because this relatively small fly (2 to 3 mm in body length) infests a variety of fruits, it could have a considerable negative effect on Oregon's commercial fruit industry. Although commercial monitoring and management tools are being developed, gardeners also have an important role to play in protecting Oregon's fruit producers.

Sources: Amy J. Dreves & Gail Langellotto-Rhodaback

Two key characteristics distinguish SWD from other vinegar flies:

- Adult male flies have a black spot near the leading edge of each wing tip.
- Females have a prominent, serrated, sawlike ovipositor on their hind end that is used to insert eggs into ripe fruit.

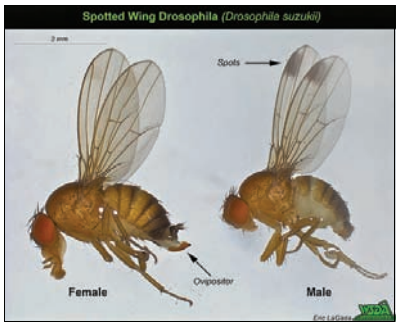

Photo: By Erica LaGasa, Washington State Dept. of Ag.

Only males have wing spots (which may be dark or faded), and only females have an ovipositor. Males also have two sets of black combs, which appear as bands on their front legs. Using a magnifying glass, small hand lens, or head-mounted magnifier can make it easier to see these key characteristics.

If you grow tree fruits (e.g., cherries, mulberries, and peaches) or berries (e.g., strawberries, raspberries, blackberries, and blueberries) in a home or community garden, you can reduce the effect of SWD on your own fruits and berries as well as help protect Oregon's farmers. SWD flies prefer hosts that have soft, thin skins. Susceptible fruit appear to be most vulnerable when ripe or slightly overripe.

OSU Extension publication, EM 9026, Protecting Garden Fruits from Spotted Wing Drosphila, shows how to recognize infected fruit and monitor adults and larvae. A combination of cultural, physical, biological and chemical methods can be used to control SWD and this publication tells how to use them with fewer negative effects.

The publication is online at http://bit.ly/fEDSuB . For help in recognizing damage, see online publication EM 9021, available at http://bit.ly/dFwHds .

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President's Corner

Tillamook County
Master Gardener Association

The Tillamook County Master Gardeners™ will again be holding their annual garden tour and plant sale. Thankfully, we had the foresight to change our June date to July 23rd. We are hoping that spring (or perhaps even summer) will arrive prior to that date. There will be six gardens in the Tillamook/Netarts area on the self-guided tour. In addition, the Learning Garden at the County Fairgrounds will be open for viewing and will offer refreshments. Master Gardeners will be available at all the gardens to answer questions.

There will be a plant sale that day on the grounds of the Tillamook County Pioneer Museum. Plant nurseries, garden art vendors, and the Master Gardeners will have plants and garden art for sale. Hours for the Plant Sale are 9 am – 3 pm. The gardens will be open for the tour from noon until 5 pm. Passports for the event are $15 per person and can be purchased at the Tillamook County Extension Service. Passports will also be sold at the Tillamook County Museum the day of the event. The passports contain directions to all of the gardens and non-mistakable orange and black signs will be posted to guide drivers to the gardens. We hope that you will join us. This is a great opportunity to get ideas for your own garden and also to help us in our scholarship efforts.

The profits from the garden tour go to support college scholarships in horticulture and related areas. This is our fifth tour and at this point we have been able to give $10,000 in scholarship funds to worthy college students from Tillamook.

I would also like to take this opportunity to invite any of you interested in learning a little more about gardening to join us at the Oregon Master Gardener Association Mini College in Newport, OR this year. Mini College is not just for master gardeners but is open to all who would like to attend. I've gone for 2 years and have had a great time. I've attended classes on gardening related issues such as genetically modified crops, worm bins, growing vegetables in the front lawn. I also took classes on nutrition – canning and dehydrating foods. The classes run from July 13th (leadership classes) through July 16th. Classes on the 16th are primarily hands- on workshops and tours in the Newport area. You may sign up for the entire time or just go for one day. To see the classes offered and registration fees, go to http://www.oregonmastergardeners.org/MiniCollege2011.htm. There will also be a hard copy available at the Tillamook County Extension Service. You may register on-line or via US mail. TCMGA is offering a bus trip for members and any in the community who only want to attend for one day (most likely July 14th). Please call the OSU Extension Service if you would like to go or e-mail me, jean.scholtz@mindspring.com.

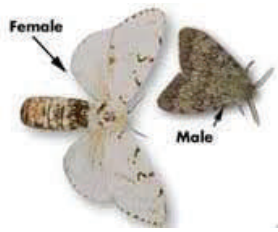
Don't forget that Master Gardeners are available to answer plant and insect questions Mondays, Wednesdays and Thursday from 12:30 PM to 4:30 PM at the office at the OSU Extension Service. We will also be at the Tillamook Farmer's Market every other week and once a month at the Manzanita Farmer's Market. We are also at the Learning Garden on Friday mornings – but feel free to visit the Learning Garden anytime the Fairgrounds is open during the week.

Jean Scholtz

TCMGA President 2011

MOST (Un)WANTED Invasive Pests

The Oregon Department of Agriculture is on the lookout for invasive pests – and you can help. Keep your eyes open for some of these "invaders" and if you see an insect that you haven't seen before, bring it to the OSU Extension Office for identification. Invasive pests harm Oregon's natural resources, agriculture and human health. Here are the "Top 10" – if you see any of these, report them immediately:



Gypsy Moth

Lymanthria dispar

Very dangerous; likes to hitch-hike on cars to Oregon from Eastern North America; eats forests; occasionally seen in Oregon

Japanese Beetle

Popilia japonica

Very dangerous, uses planes and trucks to come to Oregon (from Japan); eats lawns, grass and 300 more plant species; occasionally seen in Oregon

Emerald Ash Borer

Agrilus planipennis

Very dangerous; sneaks in on wood packing materials and firewood from Asia; east Ash trees; Not yet seen in Oregon

Asian Longhorned Beetle

Anaoplophora glabripennis

Very dangerous; sneaks in on wood packing material and firewood from Asia; kills many different trees; Not yet seen/ Oregon

Asian Ambrosia Beetle

Xylosandrus crassiusculus

Very dangerous, uses railrood ties to travel to Oregon from Asia; Eats many different trees, including cherries; Reported in The Dalles, Oregon.

European Wood Wasp

Sirex noctilio

Very dangerous; Travels in solid wood packing and firewood from Eurasia; loves pine trees; Not yet seen in Oregon

Light Brown Apple Moth

Epiphyas postvittana

Very dangerous; Hides in fruit and trees from Australia; Eats more than 300 different trees and crops; Reported in California

Rosy Gypsy Moth

Lymantra Mathura

Very dangerous; Uses boats and containers to travel to Oregon from Far East Russia; Eats many different trees; Not yet seen in Oregon

Imported Fire Ant

Solenopsis invicta

ARMED and very dangerous; hitchhikes to Oregon from South America; Attacks humans and other animals; Rare appearances in Oregon

Brown Marmorated Stink Bug

Halyomorpha halys

Chemical weapons; hitchhikes on ornamental plants from Asia; Eats many ornamental and fruit plants; invades homes; In Portland and Salem, and Tillamook County

Contact the Tillamook County Extension Service for positive identification if you encounter one of these invasive pests.

Source: Oregon Department of Agriculture

Native Groundcovers for Home Landscapes

Groundcovers that spread across open areas and subdue weeds are even more effective if they are native to the area. Those that grow naturally west of the Cascade Mountains work great in local home landscapes.

Groundcovers are well known as weed suppressors, said Linda McMahan, native plant specialist with the Oregon State University Extension Service. But they also help the soil retain water and protect against soil compaction by keeping foot traffic away.

"As long as you locate them in your garden according to their taste for sun or shade, you shouldn't have to pamper them," she said. "And since native plants have co-evolved with deer and other wildlife, they are less likely to be wiped out by a marauding neighborhood doe."

Here are several suggestions for northwest gardeners looking for natives to plant.

- For sunny areas, try coastal strawberry (*Fragaria chilioensis*), which has dark-green leathery leaves with white flowers in the spring and tiny fruit in the fall. Use F. virginiana, a Willamette Valley native, for sun and part sun. F. vesca is shade-loving and also good for partial shade.


Bleeding Heart

- Western bleeding heart (*Dicentra formosa*) likes shade, dies back to the ground in the winter and by mid-spring grows about 18 inches with hanging clusters of pink flowers.

- Wood sorrel (*Oxalis oregana*) spreads by rhizomes and grows to about 10 inches high. It has light-green, three-lobed foliage and white-to-pink flowers in the spring. It grows well in shade and in colder areas dies back in the winter. If it doesn't, you may want to mow it to force new growth. It spreads fast and once established is very difficult to stop.

- Kinnikinick (*Arctostaphylos uva-ursi*), a low-growing favorite evergreen, has tiny glossy leaves and reddish woody stems. Most of the kinnikinick on the market is labeled Massachusetts," and is not native here. The northwest native kinnikinick can sometimes be found at a native plant nursery.

- Another shade-loving native is the inside-out flower (*Vancouveria hexandra*). About a foot high, it has small light-green leaflets and looks similar to ivy. It turns a beautiful yellow in late November and December and re-emerges the next year. Although native to coastal forests, it's also partially drought-resistant. It spreads slowly and its roots form a dense mat.


Vancouveria hexandra

- Another, taller groundcover is a form of Oregon grape called the long-leaf Oregon grape (*Berberis nervosa*). It grows several feet tall but can be sheared back every three to five years for an even stand. It forms spikes of bright yellow flowers in the spring followed by dark blue berries in summer. Birds love the fruit.

It is best to plant natives in the spring or fall after summer's heat has subsided. Additional irrigation may be needed until the groundcover becomes established.

Source: Linda McMahan

Three Requirements for Clematis

Clematis vines have three main requirements to thrive – sunlight on their stems and leaves; cool and moist but not wet roots; and support for climbing.

"They need a little special handling at the start, but once established they grow and flower year after year," said Ross Penhallegon, horticulturist with the Oregon State University Extension Service.

To provide ample sunlight, plant the vine where it will get at least six hours of daylight. Filtered shade during the hottest part of the day (July–September) will help keep dark-colored blooms from fading. For a cool root zone, use mulch or organic compost, or plant low-growing shrubs or perennials that will shade the base of the vine. For support use a fence, trellis, tall shrub or another vine, such as climbing rose or wisteria, for support.

Although clematis vines are native to Europe, Asia and North America, more than 200 varieties are available to Oregon gardeners.

The diversity is stunning. Both evergreen and deciduous, some have large purple, white or pink blossoms, others are small, creamy and fragrant. Others have yellow or cerulean blue bell shaped flowers. Some bloom once in the summer, others in the spring and fall, or only in the fall.


Clematis Armandi

Deciduous clematis is hardy in all Oregon climates. Evergreen varieties, such as sweet smelling, spring blooming ***Clematis armandii***, are more sensitive to the cold and perform best in western valleys and the coast. Oregon usually gets a couple of weeks of very cold weather, especially in December or January.

Clematis roots need plenty of room: Dig a large planting hole, two feet deep and nearly as wide. If the soil is very heavy or has lots of clay, add fine bark, manure, compost and/or peat moss. The more organic matter, the better. Add lime if the soil is acidic.


Clematis - Crystal Dawn

If your garden tends toward clay, rough up the sides of the planting hole to prevent 'glazing,' which can keep the roots from growing beyond the smooth sides of the planting hole into the surrounding soil. The roughing up can also keep water from pooling in the planting hole during the wet season.

Set the plant in the hole with the crown two to three inches below the soil surface. Stake the vine until it has grown enough to reach its permanent support. A new plant should be well-watered, but not overfed. Once established, it will respond well to rose or tomato food, or any fertilizer in the range of 5-10-5 or 5-10-10 or good compost or chicken manure.

As clematis like to keep its feet cool, insulate the root zone of your clematis with a thick mulch of straw, leaves or bark. Or plant a low-growing plant or a rock on the south side of your clematis to help keep the root area shaded.

Pinch out the tips of new shoots once or twice during the first growing season to encourage branching near the base of the vine.

Most clematis will perform better with an annual pruning. Those that bloom during summer on new wood need heavy pruning in winter or early spring, or they will look thin and stringy. The kinds that bloom in the spring on last year's wood can do without pruning, but are better if cut back lightly after they have finished flowering in the later spring or summer.

If given a good start, and a little maintenance, your clematis can live for a long time.

Source: Ross Penhallegon

Fend Off Deer - Herbs to the Rescue

Many of the plants that enhance the flavor of our foods also leave a rich aroma as we brush against them in the garden, cut a few for soup or dry them in the fall. Although aromatic and pleasant to us, many herbs have the opposite effect on deer and other animals that find them unpalatable. For that reason, herbs are some of the best plants to fend off garden nibblers.

Many herbs originated in the Mediterranean or other dry-summer regions of the world and are familiar to us for culinary reasons. The same odors that enhance a stew often will dissuade deer. Sage, for example, is known botanically as *Salvia officinalis*, and many colorful varieties are available in addition to the standard sage-green.

The same can be said for rosemary (*Rosmarinus officinalis*), oregano (*Origanum*), mint (*Mentha*), thyme, including creeping thyme (*Thymus* species and varieties) and dill (*Anethumus graveolens*). Other attractive and traditional aromatic herbs that usually repel deer are lavender of all kinds (*Lavandula*), catnip (*Nepeta*), germander (*Teucreum*) and lavender cotton (*Santolina*).

For shrubs, try aromatic ones like sagebrush (*Artemesia*), Pacific wax myrtle (*Myrica californica*) or fragrant sumac (*Rhus aromatic*). Dwarf or prostrate conifers often work well, are all aromatic and include junipers, cedars and mugo pines (*Pinus mugo*).

A word of caution: even the toughest of deer-resistant plants might not always be good deterrents. Deer in one area, even a neighborhood, may learn to tolerate some plants while deer in other areas may choose to avoid them.

Although it's not fool-proof, you can experiment with other strong-smelling plants to see which ones work in your area. McMahan advises checking the USDA growing zones before you plant, as various areas of the Pacific Northwest have conditions that may not be good for all the plants listed here. Oregon has six of the 11 plant hardiness zones in the United States.

Source: Linda McMahan

Add Organic Matter

Adding organic matter is the best way to improve nearly all kinds of soils. If you're unsure if your soil needs amendments, take note if it dries and cracks in summer, drains slowly or is difficult to dig whether wet or dry. Do your rhododendrons and other shrubs wilt in hot weather, even with added water?

Adding organic materials improves the ability of sandy soils to hold nutrients and water. For clay soil, organic additions improve drainage and aeration and help the soil dry out and warm up more quickly in the spring.

Good organic amendments for garden soils include wood by-products such as sawdust and bark mulch, peat moss, rotted manure, grass or wheat straw and compost. Inorganic amendments include pumice, perlite, vermiculite and sand.

Any composted material that has been reduced to humus is a good soil amendment. However, the breakdown of high-carbon organic matter in cattle and horse manure can take years. To speed the process, mix additional nitrogen into your garden – at least six pounds of ammonium nitrate or 10 pounds of ammonium sulfate per inch of organic matter, applied over a 1,000-square-foot area.

Peat moss, with its high humus content, is the ideal amendment for raised beds or small gardens because it is nearly weed-free. However, it is expensive to use in large gardens. Inorganic amendments such as perlite, sand and vermiculite function primarily as wedges that separate soil particles, increasing soil porosity and aeration.

Thoroughly rototill any amendment into garden soil – when dry – to prevent layering. Rototilling organic amendments into gardens in the fall gives soil microorganisms an early start on converting organic matter to humus. Another rototilling in spring will thoroughly mix in the amendments.

Source: Gail Langellotto-Rhodaback

Moss in Your Lawn?

Does your lawn have a poor diet? Your lawn most likely lacks fertilizer. Moss tends to grow where grass stands are thin and malnourished. Properly timed applications of nitrogen will increase the turf's density, vigor and competitiveness. Fall and spring are the best times to apply it.

Does your lawn get enough sun? Grasses grow poorly in dense shade. In wet, shady sites, roughstalk bluegrass and bentgrass persist better than other grasses. Or consider removing shaded mossy lawn altogether and planting shade-loving, native perennials and shrubs.

Is your lawn in a naturally soggy area? Moss thrives in damp wet soils, which often are caused by poor drainage or excessive irrigation. Poor drainage sometimes can be improved by changing grading, aerating lawns, removing thatch, or installing subsurface drain lines to lower the water table. In fall or early spring moss growth is vigorous.

Is your lawn "injured"? Baseball games, bikes, dogs and crane fly larvae can physically injure lawns and contribute to moss encroachment.

Are you stingy with the water in the summer? Just like too much water, too little water can encourage moss. Lawns that are not irrigated turn brown and thin out during summer. When fall rains return, moss may grow in faster than the grass.

Is dethatching a good idea? All in all, the best way to discourage moss in lawns is to encourage good growing conditions for your grass. You may want to dethatch your lawn between April and early June with a mechanical dethatcher, available at rental outlets. Dethatching will remove about 75 percent of the moss.

Do you need to seed or fertilize? After dethatching, seed thin areas, and fertilize the entire lawn at a rate of one to two pounds of nitrogen per 1,000 square feet to stimulate growth of grass, preferably between April and early June. Follow up in the fall with more fertilizer to reduce the problem for the following spring.

What are the chemical methods to control moss? Iron compounds are highly effective and work quickly to stimulate a "green-up" of turf. Complete fertilizers with iron remove moss while stimulating grass growth. A drawback to iron is that it stains concrete and many other surfaces; it must be applied carefully. Follow label instructions.

The key to effective control with iron compounds is thorough coverage of moss foliage. Liquid materials are very effective and give almost instant results. Smaller particle-sized fertilizer-plus-iron products are more effective than larger-sized granular products because they provide better coverage of the moss.

In older lawns that have heavy, established moss problems, you must be more aggressive. Moss doesn't decompose quickly like treated weeds do. Moss seldom dies completely. Treated moss is merely in a dehydrated state. If any green moss still exists two to four weeks after the first treatment, a second application will be required.

An alternative product is "cryptocidal," a moss-killing soap. It kills on contact and tends to bleach moss to a whitish yellow, rather than the dark brown color of moss treated with iron. The soaps are safe on sidewalks and other structures. Follow instructions on the label.

Source: Rob Golembiewski

Oregon State University Publications are available at: http://extension.oregonstate.edu/catalog/
If you do not have internet, you may request a copy of most of the publications cited in this newsletter from the OSU Extension Service at 2204 4th Street, Tillamook, OR 97141. Phone: 503 842-3433

Plant Cole Crops in July for Fall-Winter Harvest

Plant Brussels sprouts, broccoli, cabbage and cauliflower starts and kale seed ***by the end of July***, to reap the bounty through the fall, winter and early spring if you live in the milder areas of the state. The coast is usually warm enough for year-round cole crops, unless we have one of our cold winters.

The bottom line for coles is that temperatures should rarely dip below 12 to 15 degrees. Broccoli generally cannot tolerate temperatures much below the mid-20s. Choosing the right varieties is important, as well as timing of planting. Most cole crops, except kale, are subject to rot in extra wet, rainy winters.

If you plant cole crops in June or July, they will mature from late September through March, depending on the crop, variety, and if there are no hard freezes.

Broccoli can be directly seeded into garden soil. Sow seeds about a half-inch deep and thin so mature broccoli plants are 10 to 15 inches apart. If you transplant seedlings, expect to harvest mature broccoli a week or two earlier than with direct seeding. To harvest, cut heads before they flower. Good broccoli varieties to plant in early summer for fall and winter harvest in Oregon include: Packman, Shogun, Green Valiant, Southern Comet and Minaret F1, a Romanesco type with unusual spiraled heads.

Brussels sprouts are extremely cold hardy. Plant seeds or starts like broccoli, then thin plants to 24 inches apart when mature. Pick when the buds are firm, starting at the bottom of the plant first. Brussels sprouts may become sweeter after a couple of frosts. Recommended varieties include Craton, Lunet, Fortress and Oliver.

Larger, slower-growing varieties of cabbage are best to plant for fall and winter harvest. Sow and grow cabbage like broccoli. Thin to 15 to 24 inches apart. Harvest when heads are well rounded and firm. Recommended cabbage varieties for June planting include Excel, Meteor, Red Rodan, Danish Ballhead, Green Winter, Chieftain Savoy, January King, Rio Verde and Savoy King.

Both Brussels sprouts and cabbage have a tendency to bolt in the late winter. And the outer leaves may suffer rot. Just peel them off and enjoy the interior if this happens.

Cauliflower needs slightly acidic, humus-rich soil. Before planting cauliflower, add organic matter such as compost if you have heavy clay soil. Cauliflower is a little more cold tolerant than broccoli, as it has outer leaves that protect the head from freezing. As with all cole crops, cauliflower needs a complete fertilizer for rapid growth and good heads. Thin plants to mature about 24 inches apart. Recommended varieties of cauliflower for summer-planting include Armado April, Maya and Inca for over-wintering and for late summer and fall harvest grow White Rock, Candied Charm and Snow Crown.

For the surest bet plant kale, the most cold-hearty cole crop of the whole lot.

Source: Jim Meyers

Over Tilling Can Compact Soil

Tilling the garden helps to mix organic matter into garden soil and control weeds that compete for moisture and nutrients. Frequent tilling may do more harm than good. Too much tilling can destroy the structure of soil and eventually may leave you with a garden that is better suited to making bricks than growing vegetables.

Till garden soil only when it will accomplish a useful purpose, such as turning under organic matter, controlling weeds, breaking crusted soil or loosening a small area for planting seeds.

Never till soil when it is wet. Doing so will leave you with cloddy, compacted soil. To test soil moisture, take a handful of soil and squeeze it. If it stays in a mud ball, it's too wet to till. If it is powdery and clumped, it is too dry. If it crumbles freely, it is just right.

Source: Gail Langellotto-Rhodaback

So Many Cabbages . . . .

Classified by their optimal time of planting and maturity, cabbages include early, mid-season or late-season types.

- Early cabbages grow fast, mature early and are smaller than later season varieties. Plant early varieties from seed in the late winter to spring. Start transplants six weeks before planting outside or seed directly outdoors when soil temperature exceeds 50 degrees.

- Mid-season cabbages are larger and later to mature and must be well established before summer heat sets in. Plant these later than early varieties - mid-spring.
- Late types, also called overwintering or storage varieties, should be planted from late spring through mid-summer and will head up in late fall and early winter-to-spring for harvest in the late fall, winter and spring.
- Chinese cabbage, including bok choy and Napa, bolts with excessive exposure to cool weather in early spring and lengthening days, and is best planted in early summer for fall harvest. Bok choy is an open Chinese cabbage with white or green celery-like stalks and dark, shiny leaves. Savoy cabbage is stronger tasting, has a looser head than most green cabbages and has wrinkly leaves with ruffled edges.

Cabbage of all kinds thrives in sunny, well-drained, loam soil heavily amended with organic matter with adequate and persistent moisture through the growing season. Keep soil pH above 6.8. To avoid club root and other damaging fungal disease do not grow members of the cabbage family in the same place in the garden year after year.

You can start cabbage from seed or purchase transplants. Select transplants with stem diameters smaller than a pencil to reduce the risk of bolting, or setting flowers, rather than a head. Set transplants outside during the day for a week before transplanting to harden or acclimatize them to outdoor conditions.

Space larger varieties about 18–24 inches apart for optimal growth. Smaller, early varieties can be planted closer together, about 15–18 inches apart. Hot caps or row covers help early cabbages thrive. When your cabbage forms heads, be careful not to over-water after a dry spell, as the heads may split.

The OSU Extension Service recommends the following varieties that have proven themselves in Oregon.

- ***Early:*** Parel, Primax, Farao, Tendersweet, Gonzales, Surprise.
- ***Main season***: Golden Acre, Bravo, Charmant, Cambria, Invento.
- ***Late fall, winter***: Danish Ballhead, Storage Hybrid #4, Blue Thunder.
- ***Red:*** Ruby Perfection, Red Acre.
- ***Savoy:*** Melissa, Savoy Express, Savoy Ace, Perfection, Famosa.
- ***Chinese:*** Michihili, Monument, China Express, Pac choi — Mei Qing Choy, Joi Choi.

Source: Annie Chozinski

Slug Control

Some non-chemical suggestions: Irrigate in the morning, rather than in the evening, to reduce favorable conditions for the snails and slugs while they are out at night. Trap snails and slugs under boards, where they can be collected each morning in a bucket of soapy water. Drown snails and slugs in (cheap) beer. Cut a hole in a coffee can or plastic yogurt container with a plastic snap-on lid about a half to a third of the way up. Bury the container to the level of the hole. Pour in about two inches of beer or yeasty water. Cover to reduce evaporation and keep out pets. Check and remove slugs daily and refill with solution.

Blockade your raised bed frames with copper stripping, sold at lawn and garden stores. Take care not to trap slugs inside your garden plot.

Eliminate yard debris. Mulches usually provide natural places for slugs and snails to hide.

Source: Robin Rosetta

by Evelynn VonFeldt OSU Master Gardener

The Weed Patch

Scotch Broom

Scotch Broom *Cytisus scoparius* is one of four brooms (Scotch, French, Spanish and Portuguese) brought to the Pacific Northwest by European settlers. In researching this weed I came upon two stories: It was introduced to California in the late 1800's to hold mine tailings in place or the one I feel is most believable Scotch broom "was introduced to Vancouver Island in 1850 by Captain Walter Coquhoun Grant (1822-1861), himself a recent immigrant from Scotland, from some seeds hand picked up in the Sandwich Islands (Hawaii) from the British consul, Mr. Wylie. Of the seeds he planted in Sooke, three germinated, and descendents of these three plants have subsequently colonized most of southern Vancouver Island." Whichever is true Tillamook County is right in the middle of either direction! I remember my Mother-in-Law telling of their move to Oregon from Kansas in the 1950's, and seeing the "beautiful" yellow blooms on the hillsides.

Scotch broom may be "beautiful" from a distance, but there are a lot of problems associated with it as it is considered *toxic* to wildlife, domestic animals and humans. As an invasive weed it quickly grows into dense stands, choking out native species. This can also lead to a fire hazard. Scotch Broom is deciduous, growing to 9 ft. tall, with 3 leaflets, alternately arranged on the stems. The bright-yellow pea-like flowers are sometimes tinged with purple. The fruits or pods are black and flattened that when mature split in half, catapulting the seeds away from the "mother" plant. These seeds can sit dormant for 40 years and still be viable. One good thing that the brooms do as members of the pea-family is fix nitrogen, which is good for any soil.

OK, so how best to manage them? Biological: several insects will damage the seeds, but none are an effective control and none are available as yet to home owners or small landholders. Mechanical controls suggest **not** disturbing the soil as seeds will be encouraged to germinate. Best to lop plant to within 3 inches of the surface during our driest season July- early October (if done during wet seasons, it will just encourage re-growth.) Chemical control includes glyphosate, applied when plants are actively growing in spring (this will also kill grasses and other vegetation so use caution), or Triclopr + 2,4-D.

Use pesticides safely! Wear protective clothing and safety devices as recommended on the label. Bathe or shower after each use. Read the pesticide label- even if you've used the pesticide before. Be cautious when applying pesticides.

Sources:

Taylor, Ronald J.: *Northwest Weeds the Ugly and Beautiful Villains of Fields, Gardens and Roadsides*

Pojar, Jim and Andy McKinnon: *Plants of the Pacific Northwest Coast*

EC 1598 - Invasive Weeds in Forest Land -- Brooms

Extension Services of OSU, WSU, and U of Idaho: *2011 PNW Weed Management Handbook*

Garden hints from your OSU Extension Agent

JUNE

Maintenance and Clean Up
• Prune lilacs, forsythia, rhododendrons, and azaleas after blooming.
• Fertilize vegetable garden 1 month after plants emerge by side dressing.
• Harvest thinnings from new plantings of lettuce, onion, and chard.
• Pick ripe strawberries regularly to avoid fruit-rotting diseases.
• Use organic mulches to conserve soil moisture in ornamental beds.
• After normal fruit drop of apples, pears and peaches in June, consider thinning the remainder to produce a larger crop of fruit.
• Make sure raised beds receive enough water for plants to avoid drought stress.
• (Mid-June): Apply 1 lb. nitrogen per 1,000 sq.ft. to lawns to keep green.

Planting/Propagation
• Plant dahlias and gladioli.

Pest Monitoring and Management
• First week: spray for codling moth in apple and pear trees, as necessary. Continue use of pheromone traps for insect pest detection.
• Monitor azaleas, primroses and other broadleaf ornamentals for adult root weevils. Look for fresh evidence of feeding (notching at leaf edges
• Control aphids on vegetables as needed by hosing off with water or by using insecticidal soap or a registered insecticide.
• Watch for 12-spotted beetles on beans and lettuce and cabbage worms or flea beetles in cole crops. Remove the pests by hand or treat with registered pesticides.
• Spray peas as first pods form, if necessary, to control weevils.
• Birch trees dripping a sticky fluid from their leaves means that aphids are present. Control as needed.
• Last week: second spray for codling moth in apple and pear trees.

JULY

Maintenance and Clean Up
• Mound soil around base of potatoes.
• Hanging baskets need careful attention to watering and feeding during extended periods of hot weather.
• Weed and fertilize rhubarb and asparagus beds. Rotted cow manure works well as fertilizer. Water deeply to develop crowns for next year.
• Stake tall-growing flowering plants such as delphinium, hollyhocks, and lupine. Stake tomatoes, as necessary.

Planting/Propagation
• Plant beets, bush beans, carrots, cauliflower, broccoli, lettuce, kale, and peas for fall and winter crops.
• Dig spring bulbs when tops have died down; divide, store or replant.
• First planting of Chinese cabbage, kohlrabi, and rutabagas.

Pest Monitoring and Management
• Control hollyhock rust by sanitation, picking affected leaves, or spraying with a registered fungicide.
• Watch for cutworm damage in garden. Use barriers, remove by hand, or spray with *Bt-k* according to label directions.
• Late this month, begin to monitor for early and late blight on tomatoes.
• Place pheromone traps to catch adult apple maggot flies.
• July 17-23: third spray for codling moth in apple and pear trees, as necessary.
• Cover blueberry bushes with netting to keep birds from eating all the crop.
• Monitor camellias, holly, maple trees for scale insects. Treat
• Monitor rhododendrons for adult root weevils.
• Check leafy vegetables for caterpillars. Pick off caterpillars as they appear. Use *Bt-k*, if necessary.
• Remove cankered limbs from fruit and nut trees for control of apple anthracnose and bacterial canker

AUGUST

Maintenance and Clean Up
• Fertilize cucumbers, summer squash, and broccoli to maintain production .
• Clean and fertilize strawberry beds.
• Camellias need deep watering to develop flower buds for next spring.
• Prune raspberries, boysenberries, and other caneberries after harvest. Check raspberries for holes made by crown borers, near the soil line, at base of plant. Remove infested wood before adults emerge (approximately mid-August).
• Prune out dead fruiting canes in trailing blackberry and train new primocanes prior to end of month.

Planting/Propagation
• Plant winter kale, Brussels sprouts, turnips, parsnips, parsley, and Chinese cabbage.
• Mid-summer planting of peas (enation -virus-resistant varieties), plant fall crops of cabbage, cauliflower, broccoli.
• Plant spinach.

Pest Monitoring and Management
• Check apple maggot traps; spray tree if needed.
• Control yellowjackets and wasps with traps and lures as necessary.
• Check for root weevils in ornamental shrubs and flowers; codling moth and spider mite in apple trees; scale insects in camellias, holly, maples.
• For mite control on ornamentals and most vegetables, hose off foliage, spray with approved miticide if necessary.
• Remove cankered limbs from fruit and nut. Sterilize tools before each new cut.
• Spray potatoes and tomatoes for early and late blight.

Planning
• Dampwood termites begin flying late this month. Make sure your home is free of wet wood or places where wood and soil are in contact.
• Establish a new lawn Aug, - Sept.

Oregon State University Extension Service encourages sustainable gardening practices. Always identify and monitor problems before acting. First consider cultural controls; then physical, biological, and chemical controls (which include insecticidal soaps, horticultural oils, botanical insecticides, organic and synthetic pesticides). Always consider the least toxic approach first.

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Coming Events

June 11 & June 18 - MG Clinic at Farmers' Market
June 24 - Farmers Market - Manzanita
July 2 & 17 - MG Clinic at Tillamook Farmers' Market

July 13 - 16 - 28th Annual Mini College for Gardeners

July 23rd - 2011 TCMGA Spade & Wade Garden Tour
July 29 - Farmers Market - Manzanita

Aug. 6 & 20 - MG Clinic at Tillamook Farmers' Market
August 19 - Farmers Market - Manzanita

Sept. 3 & 17 - MG Clinic at Tillamook Farmers' Market
September 23 - Farmers Market - Manzanita

3rd Wed. of the month Bonsai Club - Tillamook PUD
Meeting Room 9:30 am -11:30 am

Master Gardener Volunteers
Available to answer your Gardening Questions
Mondays and Thursdays - 12:30 to 4:30 pm
At the OSU Extension Service
2204 4th St., Tillamook

OSU Extension Service Summer Canning Class Schedule

Classes will be held on Thursdays

Time: 6 - 9 pm

Class Date	Topic
June 30	**Fruits, Pie Fillings, Jams & Jellies**
July 21	**Fish, Meat, & Vegetables**
August 25	**Pickles, Salsa, & Tomatoes**

Cost: $12 per class (or $15 on day of class)
Payment and Pre-Registration is required

Register at OSU Extension
2204 4th Street
Tillamook, Oregon 97141
(503) 842-3433

Tillamook County Master Gardener Association

Passports
$15

Saturday, July 23rd
Noon to 5 PM

Passports are on sale now!
(Available at OSU Extension Service until July 1st)

Don't miss the Plant Sale with Guest Vendors
10 AM to 3 PM ***at the Pioneer Museum***
Passports available at the Museum on Tour Day!