OOKING AHEAD NAY

WSU COWLITZ COUNTY MASTER GARDENER PLANT AND INSECT CLINIC FOR GARDEN QUESTIONS 360-577-3014 ext8

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WHAT'S IN THIS ISSUE

Start Here: OSU-Garden Tasks for May

- <u>Perennial Flowers</u>fertilizing, dividing, supporting, planting, bulb care
- <u>Shrubs</u>- camellia, photinia, currant, azalea, what to prune this month, rhododendron, rose
- <u>Fruits</u>-codling moth, brown rot, shothole fungus, thinning fruit, grape erineum mite, apple/pear scab
- <u>Weed of the month</u>creeping buttercup

- <u>Vegetable Gardening</u> planning, preparation, and planting on time
- <u>Garden Pests</u>—and what to do about them
- <u>Beneficial Insects</u>—your best defense against the bad guys! Get to know them; how to attract them
- <u>Lawn</u>-tips to keep your lawn healthy
- <u>Vertebrate pests</u>—moles, mice, voles, etc.
- <u>Resources</u>
- Diagnostic Resources

PERENNIAL PLANTS-GREETING YOU AGAIN EACH YEAR

- Fertilizing—Add a small amount of slow release organic fertilizer—better to apply too little than too much!
- Divide perennials—when they are 2-4 inches tall.

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- Exceptions: divide oriental poppies, bearded iris, true lilies after blooming. Divide peonies in the fall
- Set up supports for floppy plants now-E.g., daisies, penstemons, dahlias, peonies
- **Plant chrysanthemums** now for fall blooming. Pinch back foliage until July to encourage bushiness and lots of blooms.
- Plant gladiolus corms- wait until the soil has warmed (55 degrees) and make consecutive plantings to keep them flowering for longer <u>https://plants.ces.ncsu.edu/plants/gladiolus/</u>
- Plant dahlia tubers in late May (when soil is 60 degrees, danger of frost has passed) <u>https://catalog.extension.oregonstate.edu/fs95/html</u>

PERENNIAL PLANTS- TULIPS, DAFFODILS, HYACINTHS

- Fertilize—five tablespoons of 10-10-10 soluble fertilizer (or equivalent bulb fertilizer) per ten square foot area.
- Leaves DON'T cut the leaves off! They are feeding the bulb for next year's blooms. Cut down when yellow. Do not braid! https://web.extension.illinois.edu/bulbs/planting.cfm



PRUNE SPRING-FLOWERING SHRUBS NOT ALL SHRUBS WILL NEED PRUNING, BUT IF YOU'RE GOING TO PRUNE, TO IT BY THE **END OF JUNE AT THE LATEST!**

Akebia	Azalea	Weigela	ChoisyaMexican Orange	Daphne	Deutzia
Elaeagnus- Russian Olive	Silverberry	Escallonia	Euphorbia- Spurge	Forsythia	Helianthemum- Sunrose
Hibiscus	Hydrangea	Jasminum-Jasmine	Kerria	Kolkwitzia Beauty bush	Lonicera japonica- Honeysuckle
Magnolia	Mahonia- Oregon Grape	Passiflora- Passionflower	Philadelphus-Mock Orange	Pieris	Rhododendron
Ribes-Currant	Rosemary	Schizophragma- Climbing Hydrangea	Syringa-Lilac	Viburnum-has specific pruning <u>requirements</u>	Wisteria
Portland Nurse	ry Pruning Calon	dar https://portla	ndnurserv.com/d	loce/troos/Prunin	a Calendar ndf

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Formand Nursery Fruning Calendar https://pormandnursery.com/docs/trees/Fruning_Calendar.pdf

SHRUBS

Camellia watch for <u>Cottony Camellia</u>
 <u>Scale</u>

Photinia—trim back mid-May to refresh red foliage

Currant: Watch for Imported Currant
 Worms



Table of Contents "Cottony camellia" scale *Pulvinaria floccifera* Westwood © <u>Ken Gray Insect Image Collection</u>



Photinia

SHRUBS: AZALEAS & RHODODENDRONS

• Culture and Care:

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https://catalog.extension.oregonstate.edu/fs12/html

- Fertilize, if <u>soil test</u> indicates need, just after flowering with fertilizer formulated for acidloving plants
- Mulch to control weeds and conserve moisture.
- Prune off diseased and dead branches.
- <u>Dead head (remove) spent flowers after</u> blooming



Spent flower removal. Photo by Steve Henning

SHRUBS: AZALEAS & RHODODENDRONS

- Azaleas are prone to a lot of different problems. Consult WSU's Identifying, Treating, and Avoiding Azalea and Rhododendron Problems: https://pubs.extension.wsu.edu/identifyingtreating-and-avoiding-azalea-and-rhododendron-problems-replaces-eb1229-physical FREE-to download- click "Download Now"
- <u>Root weevil</u>



Caption: Adult root weevil damage Photo by: E.P. Breakey Azalea/Rhododendron Lace Bug



Azalea Lace Bug damage http://oregonstate.edu/dept/nurspest/Azalea_lacebug.pdf

SHRUBS: AZALEAS & RHODODENDRONS

- <u>Marginal Leaf Necrosis</u>
- Physiological Leaf Spot
- <u>Sunscald</u>



Caption: Rhododendron marginal leaf necrosis Photo by: R.S. Byther



Caption: Sunburn on rhododendron Photo by: R.S. Byther



Caption: Sunburn on rhododendron Photo by: R.S. Byther



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ption: Rhododendron physiological leaf spot pto by: R.S. Byther

ROSES-PROBLEMS



Caption: Rose black spot on leaves Photo by: R.S. Byther



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Caption: Powdery mildew on rose Photo by: R.S. Byther



Caption: Aphid colony Photo by: R.S. Byther



Caption: Rust on rose Photo by: R.S. Byther

Black Spot Powdery Mildew Aphids Rust Botrytis bud and twig blight



Growing Roses in Washington State:

A Seasonal Calendar

http://pubs.cahnrs.wsu.edu/publications/pubs/fs164e/

Botrytis bud and twig blight http://entoweb.okstate.edu/ddd/diseases/rosebotrytis.htm

FRUIT TREES—SPRING TASKS

- Paint trunks of young trees with water-based exterior white latex paint (50/50 mix with water) (especially near the ground) to prevent sunburn
- To get larger, better fruit, prevent limb breakage, and to keep your tree bearing fruit every year: Thin fruit on peaches and plums this month, when fruits are marble-size:

http://figs4fun.com/Links/FigLink777.pdf pg



Before thinning

After thinning

A peach branch before (top) and after (bottom) hand hinning fruit. https://extension.umaine.edu/fruit/growingfruit-trees-in-maine/fruit-thinning/

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COMMON PROBLEMS OF FRUITS

• <u>Hortsense--</u>Great reference—be sure to check this out!! You can solve many problems with these:

http://hortsense.cahnrs.wsu.edu/Search/MainMenuWithFactSheet.aspx?Categor yld=3

- Cherry, Plum, and Peach problems
 - Shothole fungus
 - Brown Rot





Caption: Coryneum blight symptoms on leaves and fruit Photo by: R.S. Byther

Shothole Coryneum Blight fungus

Caption: Brown rot blossom infection Photo by: R.S. Byther



FRUITS: APPLES CODLING MOTH



Codling Moth



To prevent codling moth damage **it's time to start treatment NOW**: Apply about 10 days after full petal fall (all petals are off) or 17 to 21 days after full bloom. (If you didn't have a problem last year, monitor activity with a pheromone lure to head off a problem this year.)

- Several choices-Spinosad ingredient is one organic option—see
 <u>Hortsense</u> article
- Product reapplications **following label directions** are necessary throughout late spring and summer.
- To minimize risk to bees, apply in the evening after bees have stopped foraging for the day.

GRAPE ERINEUM MITE

- Caused by a tiny worm-like mite
- Upper leaf surface becomes blistered from mites eating the leaf, and blisters on the lower leaf surface turn white, yellow, or brown.
- Sprays aren't needed. Dormant-season oils and wettable sulfur applications used for other pests and sulfur applications for powdery mildew usually control this pest
- Does no lasting damage on established vines
- More info:

http://hortsense.cahnrs.wsu.edu/Public/FactsheetWeb.asp x?ProblemId=753



Erineum mite damage on home garden grape leaves: "Blisters" on the top; corresponding concave areas on reverse filled white fuzzy material (enlarged leaf hairs). (J.R. Natter; 2016-04)



https://agrobaseapp.com/newzealand/disease/grape-erineummites

APPLE AND PEAR SCAB

- Apply fungicides when leaves are separating, just exposing bud cluster.
- Repeat at 7-day intervals for 3 or more applications until weather dries.
- When in blossom, wait until 3/4 of petals have fallen before applying
- For more information:

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http://hortsense.cahnrs.wsu.edu/Search/MainMenuWithFactSheet.aspx?Categ oryId=3&PlantDefId=59&ProblemId=15



Figure 1. Early apple scab lesion development on leaves.



Figure 2. Characteristic lesions of apple scab on mature leaves.

https://www.extension.purdue.edu/extmedia/BP/BP-1-W.pdf

WEEDS-KNOW YOUR ENEMY!

- This is one of the best weed ID guides around for common weeds we see in the PNW: portlandoregon.gov/bes/article/471991 And another
- https://s3.wp.wsu.edu/uploads/sites/2054/2014/04/Invasive -Plant-Treatment-Guide-US-Forest-Service.pdf
- When you identify your weed, or just to look at common PNW weeds, checkout Hortsense to find out how to manage it.

http://hortsense.cahnrs.wsu.edu/Search/MainMenuWithFa ctSheet.aspx?CategoryId=6

 Cowlitz County Noxious Weed list for 2020. Noxious weeds are harmful to the environment or animals, and are difficult to control, and can have economic impact. co.cowlitz.wa.us/DocumentCenter/View/19664/2020-Contents **Cowlitz-Noxious-Weed-List**

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WEED OF THE MONTH: Creeping Buttercup (Ranunculus repens)

Managing Buttercup:

https://www.kingcounty.gov/services/environ ment/animals-and-plants/noxiousweeds/weed-identification/creepingbuttercup.aspx

GARDEN PLANNING

Planning is one of the most important parts in starting and managing your garden. There are so many factors to be taken into considerations such as:

Types of plants.	Temperature of air and soil.
Container gardening.	Fencing
Tilling or not.	Composting.
What and when to plant.	Greenhouses.
Planting times.	Raised beds, no raised beds.
How much to plant.	Plants effecting other plants.
Supporting plants.	Mulching.
Tools needed.	Temperature/Micro-Climates
	Types of plants. Container gardening. Tilling or not. What and when to plant. Planting times. How much to plant. Supporting plants. Tools needed.

And the list can go on and on:

Here are some great links to help you with this major phase of gardening:

- https://s3.wp.wsu.edu/uploads/sites/2073/2014/03/020714.pdf •
- http://www.mgfkc.org/education/growinggroceries/planning-design ٠

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https://morningchores.com/wp-content/uploads/2018/02/gp



https://www.almanac.com/sites/default/files/styles/primary mage in article/public/image nodes/perennial-vegetablegarden-plan-2x.jpg?itok=mGVq8ofH

GARDEN PREPARATION





To Till or Not To Till: You can find just as much information that recommends to till as you can not to till. **The choice is yours!**

Tilling the garden performs a number of necessary functions. It mixes organic matter and fertilizer into garden soil and temporarily loosens the soil and helps control weeds that compete with crops for moisture and nutrients.

Frequent tilling, however, may do more harm than good. Too much tilling tends to destroy the structural qualities of soil and eventually may leave you with soil that is better suited to making bricks than garden produce.

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



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Here are great hyperlinks to help you decide what is best for

you:

- https://extension.unl.edu/statewide/cass/Smart%20Gardening%20Converting%20to%20No-Till%20for%20Home%20Gardeners%20Sept%202018.pdf
- <u>https://s3.wp.wsu.edu/uploads/sites/2073/2014/03/110912.pdf</u>
- <u>https://wellfieldgardens.org/2019/01/11/high-till-low-till-no-till-until/?gclid=CjwKCAjwvtX0BRAFEiwAGWJyZLDjWLPZNeAK1qRWSXprmgah5Cmrr6UOr52yh-diGkUy2fsCKYNICBoChyAQAvD_BwE</u>
- <u>https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/em9027.pdf</u>

PLANTING ON TIME

The following **Cool Season Crops** should already be planted:

Hardy Vegetables – asparagus, broccoli, brussels sprouts, cabbage, collards, onions, rutabaga (can be started indoors and transplanted) while kale, kohlrabi, leek, peas, radishes, spinach, turnips (can be direct sown).

Semi-Hardy Vegetables – artichoke, cauliflower, celery (can be started indoors and transplanted) while arugula, Asian greens, beets, carrots, endive, lettuce, potatoes, salsify, swiss chard (can be direct sown).

The following **Warm Season Vegetables** will be ready to plant in the ground after the last frost day (many in our area suggest first week of June to be safe!):

Cantaloupe, cucumber, pumpkin, tomato, pepper, sweet potato, squash, sweet corn, lima beans, watermelon, eggplant, snap bean.

Here are some great hyperlinks that will give you specifics on fertilizing, soil temperatures, spacing, thinning, transplanting and etc.:

https://territorialseed.com/blogs/spring-growing-guides

https://s3.wp.wsu.edu/uploads/sites/2071/2014/04/Home-Vegetable-Gardening-in-WA-EM057E.pdf

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WHAT'S BUGGING YOUR GARDEN?

- WSU's list of common offenders—and what to do about them!
- http://hortsense.cahnrs.wsu.edu/Search/MainMenuWithFactShe et.aspx?CategoryId=5

TOXIC OPTIONS! SIMPLE, HOLISTIC, COMMON

GARDEN PESTS & DISEASES

Asparagus *Guide	<u>Lettuce</u>
<u>Bean</u>	<u>Onions, Garlic</u>
Beet, Chard	<u>Pea</u>
Broccoli, Cole crops	Pepper, Eggplant
<u>Cantaloupe, Melons</u>	<u>Potato</u>
<u>Carrot</u>	Radish *Problem solving
<u>Corn</u>	<u>Spinach</u>
<u>Cucumber, Pumpkin,</u> Sauash	<u>Tomato</u>
A A A A A A A A A A A A A A A A A A A	Turnip, Rutabaga



Cabbage Worm https://ag.umass.edu/vegetable/fact-sheets/caterpillarsin-brassica-crops



Spider Mites https://extension.umn.edu/yard-and-garden-insects/spider-mites



Western Spotted Cucumber Beetle **PNW Handbooks**



APHIDS https://extension.umn.edu/yard-and-garden-insects/aphids#garden-aphids-316410



Leaf miner damage-spinach, chard https://anevidencebasedgardener.wordpr ess.com/2011/06/16/leafminers-attack/

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MEET THE GOOD GUYS! NATURAL ENEMIES OF GARDEN PESTS

http://ipm.ucanr.edu/FAQ/naturalenemies-poster.pdf

Predators hunt, attack, and kill their prey. Encourage these natural enemies by avoiding pesticides that kill them; choosing plants that provide them pollen, nectar, and shelter; and keeping ants out of pest infested plants. Common predators that eat garden pests are pictured below.





Convergent lady beetles prefer to eat aphids but sometimes eat whiteflies and other soft-bodied insects. Shown here are the adult (left), larva (center), and cluster of eggs (right).



Green lacewing adults eat nectar and pollen. Some species also eat insects.



Green lacewing larvae feed on mites, eggs, and small insects, especially aphids.



Green lacewing eggs are laid on slender stalks in groups (as shown here) or individually.



Predaceous ground beetle adults stalk soil-dwelling insects, such as cutworms and root maggots.



Predaceous ground beetle larvae live on soil and in litter, feeding on almost any invertebrate.



Assassin bugs attack almost any insect.

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Pirate bugs attack mites and any tiny insect, especially thrips.



Damsel bugs are predaceous on a wide variety of small insects.



Soldier beetle adults eat mostly aphids; their larvae are soil-dwelling.



Spiders, including this crab spider, attack all types of insects.

MEET THE GOOD GUYS! NATURAL ENEMIES OF GARDEN PESTS

http://ipm.ucanr.edu/FAQ/naturalenemies-poster.pdf



Syrphid fly (flower fly, hover fly) adults eat pollen and nectar.



 Syrphid fly larvae eat mostly aphids but also soft-bodied insects.



Sixspotted thrips attack mostly mites.



Western predatory mites attack pest mites.



Adults of predatory wasps, such as this paper wasp, prey on caterpillars and other insects.

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Praying mantids don't control pests, because they eat both beneficials and pests.

Parasites live and feed in or on a larger animal (host). Nearly all insect pests have at least one parasite that attacks them. Insects that parasitize other invertebrates (sometimes called parasitoids) are parasitic only in their immature stages and kill their host just as they reach maturity. Most insect parasites are hostspecific wasps or flies, and many are so small that often you won't see them. An adult parasite can lay eggs in hundreds of host individuals with a resulting quick reduction in pest

numbers.



Some parasites attack insect eggs, such as the *Trissolcus* species wasp.



The blackish scale insects have wasp larvae developing within.



Caterpillar parasites include the *Hyposoter exiguae* wasp.



Parasitized aphids die and turn into crusty "mummies" that can be black or beige. The hole in the mummy at left indicates a parasite has emerged. The aphid in the middle is healthy.



Aphid parasite life cycle: The adult lays an egg in an aphid. The egg hatches into a larva that feeds inside. After killing the aphid, the wasp larva pupates then emerges as a wasp.

PLANT AN INSECTARY GARDEN! SEEDS—WHERE TO GET

- Separate seed packs—Many seed-sellers
- Here are a couple of mixes we've found:
 - "Beneficial Insectary Mix"-www.outsidepride.com
 - "Beneficial Insect Attractant Mix" www.johnnyseeds.com







Here are a few terrific **free** publications you can download that will help you to get to know who lives in your garden! Search Google for the following:

- I.) OSU: What to plant! Encouraging Beneficial Insects in your Garden PNW550
- 2.) OSU: <u>Common Natural Enemies of Crop and Garden Pests in the PNW</u> EC 1613-E
- 3.) WSU: <u>Beneficial Insects, Spiders, and Other Mini-creatures in your Garden-how to get them to</u> <u>STAY!</u> EM067E

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 REMEMBER: AVOID USING PESTICIDES, or "Spot-spray" ONLY severely affected plants—Pesticides kill beneficial insects, too!

LAWNS

Lawn care is a classic love/hate scenario. We love it in the spring and fall and hate it in the hot dry summers.

Lawns will seasonally ebb and flow in how they look and perform because of our climate and species selection.

We can help them last and persist through tough times by:

- -Properly fertilizing at the right times
- Encouraging growth when it is most needed
- Managing weeds

Table of Contents -Reseeding at choice times to rejuvenate the lawn



https://www.psu.edu/dept/agsciences/agsci/elearni ng/Ocourse-samples/STMA/Ln_4a/images/L4a_





LAWN

Mowing frequency should match rate of growth. Do not remove more than 1/3 of the leaf blade in a single mowing and keep your mower blades sharp.

Aerating helps rejuvenate lawns and loosen soil to promote root growth, not to mention removing thatch annually will increase soil oxygen, water penetration and encourages grass root growth.

Biggest problems with lawns are moss due to heavily shaded areas, moles (covered under vertebrate pests), crane fly and army cutworm covered in the links below.

https://pubs.extension.wsu.edu/home-lawns

https://extension.oregonstate.edu/sites/default/files/documents/12281/lawncare.pdf https://extension.wsu.edu/benton-franklin/gardening/lawns/

MOSS—LAWN

A rolling stone gathers no moss!

Moss in lawns is a common problem in the Pacific Northwest and generally results from low soil fertility, high soil acidity, heavy shade, improper watering practices, diseased grass, poorly drained soil, compacted soil, or any combination of these. Permanent moss control depends on eliminating conditions which favor moss growth.



Here are some great informational links on controlling lawn

moss.

- <u>https://s3.wp.wsu.edu/uploads/sites/2071/2013/12/Moss-in-Lawns-and-Gardens.pdf</u>
- <u>http://hortsense.cahnrs.wsu.edu/Search/MainMenuWithFactSheet.aspx?CategoryId=4</u>
 <u>&ProblemId=659</u>
 - https://catalog.extension.oregonstate.edu/em9175/html

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MOSS—ROOF

A rolling stone gathers no moss!



Unfortunately, another big concern and a lot of questions get asked regarding moss on roofs. Below are links from some roof professionals on handling this problem.

Here are some great informational links on controlling roof moss.

- <u>https://www.asphaltroofing.org/algae-moss-prevention-cleaning-asphalt-roofing-systems/</u>
- <u>https://www.roofpedia.com/removing-moss-on-roofs/</u>



VERTEBRATE PESTS

In the Pacific Northwest there are numerous vertebrate pests that a gardener has to be aware of and plan to deter:

Birds, chipmunks, deer, elk, nutria, opossums, mice, moles, raccoons, rabbits, skunks, voles.

Great links to assist in controlling vertebrate pests:

- <u>https://wdfw.wa.gov/species-habitats/living/species-facts</u>
- https://extension.wsu.edu/snohomish/garden/gardening-resources/vertebrate-management-links/
- <u>http://pubs.cahnrs.wsu.edu/publications/pubs/fs094e/</u>
- <u>http://hortsense.cahnrs.wsu.edu/Search/MainMenuWithFactSheet.aspx?CategoryId=16&ProblemId=60</u>
 <u>52</u>
- <u>https://extension.wsu.edu/snohomish/garden/gardening-resources/principles-of-vertebrate-pest-management/</u>



Jim Cummins













U.S. Geological Survey

Vertebrate Pests:

• <u>https://wdfw.wa.gov/species-habitats/living/species-facts</u>

Planning:

- <u>https://s3.wp.wsu.edu/uploads/sites/2073/2014/03/020714.pdf</u>
- <u>http://www.mgfkc.org/education/growinggroceries/planning-design</u>

To Till or Not To Till: The choice is yours!

- <u>https://s3.wp.wsu.edu/uploads/sites/2073/2014/03/110912.pdf</u>
- <u>https://wellfieldgardens.org/2019/01/11/high-till-low-till-no-till-until/?gclid=CjwKCAjwvtX0BRAFEiwAGWJyZLDjWLPZNeAK1qRWSXprmgah5</u>
 <u>Cmrr6UOr52yh-diGkUy2fsCKYNICBoChyAQAvD_BwE</u>

When to Plant:

- <u>https://territorialseed.com/blogs/spring-growing-guides</u>
- <u>https://s3.wp.wsu.edu/uploads/sites/2071/2014/04/Home-Vegetable-Gardening-in-</u>
 <u>VVA-EM057E.pdf</u>



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MAY ADDITIONAL RESOURCES

- Many of the topics covered, especially pruning and pest monitoring, in the last couple months are also relevant in March:
 - Looking Ahead: January
 - Looking Ahead: February
 - Looking Ahead: March
 - Looking Ahead: April

- Home Vegetable Gardening in Washington WSU EM057E
- <u>https://pubs.extension.wsu.edu/home-vegetable-gardening-in-washington-home-garden-series</u> (click on DOWNLOAD NOW)

YOU'RE NOT ALONE

- WSU Hortsense (E.g., search Google (e.g. for "WSU Hortsense apple") That's the easiest way. You can also go to the site: <u>http://hortsense.cahnrs.wsu.edu/Home/HortsenseHome.aspx</u>
 Always search for the singular, not the plural. "Apple" will get results, "Apples" will not.
- PNW Handbooks (E.g., search for "PNW Handbooks apple") <u>https://pnwhandbooks.org/plantdisease/host-and-disease-descriptions</u> Always search for the singular, not the plural. "Apple" will get results, "Apples" will not. This site also has information for registered pesticide applicators. Only follow chemical advice for "Homeowners."
- And of course, you can get in touch with us at the Plant and Insect Clinic!
 - Call: 360-577-3014 Ext. 8
 - Email: <u>cowlitzmastergardener@gmail.com</u>
 - Submit photos and problem on our website: <u>https://www.cowlitzcomg.com/plant-and-insect-</u> <u>clinic</u>
 - PM us on our Facebook page: Cowlitz Master Gardeners



DIAGNOSTIC RESOURCES

- Hortsense: <u>http://hortsense.cahn</u> <u>rs.wsu.edu/Home/HortsenseHome</u> <u>.aspx</u>
- Pestsense: <u>http://pestsense.cahnr</u> <u>s.wsu.edu/Home/PestsenseHome.a</u> <u>spx</u>
- PNW Handbooks:

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- Insect Management <u>https://pnwhandbook</u> s.org/insect
- <u>Plant Disease Management</u> <u>Handbook: https://pnwhandbooks.</u> <u>org/plantdisease</u>

- Weed Management
 Handbook: <u>https://pnwhandbooks.org/</u> weed
- WSU Plant & Pest Diagnositc e-Network: <u>http://www.dddi.org/wsu</u>
- WSU Plant Pest Diagnostic Clinics:
- <u>CAHNRS Plant Pest Diagnostic Clinic</u>, <u>Pullman</u>
- <u>WSU Puyallup Plant & Insect</u> <u>Diagnostic Laboratory</u>

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