

Newsletter

Updates

2020 WSU PESTICIDE EDUCATION 2021 RECERTIFICATION & PRE-LICENSE

Recertification Webinars

DATES

11/17/20 or 1/21/21
12/01/20 or 1/28/21
12/3/20 or 2/11/21
12/8/20 or 2/18/21
12/10/20 or 3/04/21

TOPICS

Integrated Weed Management
Washington Pesticide Laws
Pesticides and the Environment
Integrated Pest Management
Invasive Pests

Register for one or more webinars. Registration fee is \$30 per 3-hour webinar.

Each webinar offers three recertification credits. A total of 15 credits are available in 2020 and in 2021. Visit [Recertification](#) to register, print a brochure, and see topic descriptions.

For WSU to monitor and verify participant attendance, each person must have a Zoom account that identifies their first and last name.

Self-paced, anytime Internet Courses are also available and provide one credit per course. Visit [Internet Recertification Courses](#).

STRIPE RUST UPDATE

The **Summary of Yield Losses by Stripe Rust and increases by Fungicide Application on Winter and Spring Wheat Varieties in 2020** document is available to view at: <https://s3.wp.wsu.edu/uploads/sites/2070/2020/10/Summary-of-Yield-Losses-on-Winter-and-Spring-Wheat-Varieties-2020.pdf>.

2019 SEES DIP IN REVENUES FOR WASHINGTON CROPS, WITH ONIONS JOINING THE TOP 10

Adapted from Hector Castro, WSDA

Washington's agricultural production dipped slightly in 2019 to \$9.49 billion, down 2 percent from the previous year, according to **the annual value of Washington agriculture production report** from the U.S. Department of Agriculture, National Agriculture Statistics Service (USDA-NASS).



Announcements

NOVEMBER



3-6 2020 Washington Weed and Invasive Species Conference—Virtual, 9 a.m. and 12 p.m. This **free** event will allow those interested to accrue up to 12 Pesticide and Structural Pest Inspector recertification credits. Only 1000 spots available, don't hesitate to register today! Register at: <https://www.weedconference.org/info/register.html>.

15 4-H Achievement Night, virtual at 6 p.m. Celebrate the achievements of 4-Her's through the past year. Join at: <https://wsu.zoom.us/j/98929672549?pwd=c3dYUjQ5ZGIjWWErTTZsYU9ldFZGUT09>



The WSU Walla Walla County Extension Office is currently closed to the public due to the COVID-19 virus. Appointments can be made prior to visiting our office. We appreciate your patience while we work through the current restrictions. You can contact us at 509-524-2685 or email becki.green@wsu.edu.

The Meat Processing Infrastructure and Capacity Relief Grant is available to help small-scale meat producers and processors cover costs of improving infrastructure and operating capacity in response to the coronavirus pandemic. WSDA is accepting grant applications for expenses up to \$150,000. The relief grants can be used for expenses incurred from March 1, 2020 to December 30, 2020. Producers and processors with 250 or fewer employees may apply. Washington State has allocated \$5 million dollars in COVID-19 CARES Act relief funds for this project. **Applications are due November 16, 2020.**

For more information on how to apply visit the WSDA website at: <https://agr.wa.gov/services/grant-opportunities/meat-processor-grant-en>.

No data is yet available on how production has fared during 2020 and the financial impact of the coronavirus pandemic. All figures in this week's report are for 2019. Also, USDA-NASS does not include data on marijuana production, as it is not a federally recognized agriculture crop.

The 2019 Washington State Top Ten list of agriculture commodities

Apples -- \$1.95 billion
Milk -- \$1.28 billion
Potatoes -- \$934 million
Wheat, all -- \$792.5 million
Cattle and Calves -- \$698.7 million
Hops -- \$475.6 million
Hay, all -- \$468 million
Cherries, sweet -- \$393.5 million
Grapes, all -- \$308 million
Onions, all -- \$180.5 million



Several crops that did not make the top 10 list still had good years in 2019. These included blueberries, which reached a record high value of \$153 million in 2019, a 10 percent increase from the previous year, barley, with a 39 percent increase in value of \$29.9 million in 2019, and canola which, at \$22.3 million, saw a fourth consecutive year of increasing values.

The USDA-NASS report also lists commodities that Washington leads the nation in growing, including hops, spearmint oil, apples, sweet cherries, pears and cultivated blueberries. Visit www.nass.usda.gov for more agriculture statistics.

Livestock

DO YOU HAVE LOUSY ANIMALS?

Animal Agriculture, WSU

As we enter the colder, darker, damper time of year, we will be revisited by a pest from the past: lice. An annual problem, lice can affect animal health and farm profitability. Here is a short primer on this parasite.

Species Specificity

Lice are generally quite species specific (Table 1). This means poultry lice won't spread to cattle or people and vice versa. Sheep and goats can share some lice species, however. The table lists primary locations of particular lice on their host, but keep in mind that when lice numbers are very high, they may be found anywhere on the body.

Life Cycle

The entire life cycle of most lice species takes about a month and occurs on the host. Adults and nymphs that fall off the host do not survive beyond a few days. Adults feed for about a month, then lay eggs ("nits") and die. Nits are attached tightly to hair shafts. Eggs

hatch in one to three weeks and the resultant nymphs metamorphose into adults. Adult biting lice and nymphs eat dead skin cells, hair and other debris found on skin; adult sucking lice and nymphs penetrate skin and consume blood.

Table 1. Animal hosts and their lice species

Animal host	Biting lice		Sucking lice	
	Species	Location	Species	Location
Cattle	cattle biting louse	head, ears, neck, topline, brisket	longnosed cattle louse	head, ears, neck, topline, brisket
			little blue cattle louse	
			shortnosed cattle louse	
Goats	goat biting lice (3 species)	base of tail, between legs, head, neck, topline	goat sucking lice	neck, underline, udder
Equines	horse biting louse	at roots of forelock and mane, base of tail, hairs above hoof	horse sucking louse	side of neck, flanks, base of tail
Sheep	sheep biting louse	all over body	sheep foot louse	on foot
			face and body louse	hairy parts of skin
			African blue louse	on flanks
Swine			hog louse	in or behind ears, in neck folds, inside legs, inner flanks, under scurf of skin

Sources: Merck Veterinary Manual 2010 online and www.pested.msu.edu.

Signs of Infestation

Most experienced livestock owners are well acquainted with the signs of lice infestation: rough coat, hair loss, scratching, irritated skin, secondary skin wounds and infections, weight loss and general restlessness. Occasionally, afflicted animals develop problematic hairballs from licking themselves excessively and ingesting hair. Heavy infestations of sucking lice can result in clinical anemia and even death, especially in young animals. Lice can sometimes transmit disease-causing agents, such as rickettsia. They can also debilitate animals enough to predispose them to secondary problems such as pneumonia.

Transmission

If lice don't live off the host very well and they aren't a problem in summer, why are they a problem every winter? Some "carrier" animals may harbor small populations of lice year-round. When it gets to be a louse's favorite time of year (dark, cold and damp), animals are usually in close contact to stay warm, making it easy for lice to move between animals. Carriers give managers another reason to closely inspect any new animals brought into a herd; consider lice treatment as something to add to your quarantine procedure.

Diagnosis

Examine livestock for lice regularly starting in early fall. To find the more common but less pathogenic biting lice, part the animal's hair on its neck and back and look for very small moving grayish or brownish insects. The dash in Figure 1 is about the same size as an actual louse; it is very small (~2-3 mm) but still visible to the naked eye. A magnifying glass or zoom lens (macro function) on a digital camera (Figure 2) makes diagnosis even easier. Sucking lice are generally larger and darker than biting lice. Depending on the host



Figure 1. Approximate actual size of an adult louse.



Figure 2. Goat sucking lice seen with a macro function on a digital camera.

4-H News



The Walla Walla County 4-H program hosted a Virtual Showcase for local 4-H members in the absence of the Walla Walla Fair and Frontier Days. The Virtual Showcase allowed the 4-H members to upload photos and videos of the projects they have been working on through the past year.

Projects were judged using the Danish Judging System and used to qualify projects for the Washington State Fair.

The annual 4-H Achievement Night has gone virtual! Join us on November 15th at 6 p.m. to celebrate the accomplishments of our 4-H members through this challenging year. <https://wsu.zoom.us/j/98929672549?pwd=c3dYUjQ5ZGljWWErTTZsYU9ldFZGUT09>.



It will be difficult to fully mulch this many leaves and not cause problems to the turf before going into winter. Collect them and compost off-site.

and lice species, they may also be found on an animal's muzzle, feet, legs, udder and groin areas. When in doubt, use sticky tape to capture a specimen and take it to your veterinarian for identification.

Treatment and Control

There are two important things to keep in mind regarding treatment:

1. All livestock on an affected premise should be treated at the same
2. Most de-lousing treatments do not kill lice

Lice treatments come in many forms including sprays, pour-ons, dust bags, back rubbers, drenches, dipping vats and even injections for some lice species. For examples of treatments for different animal hosts visit: <http://s3.wp.wsu.edu/uploads/sites/2049/2016/04/table-2.jpg>. Your veterinarian may recommend extra-label use of other medications if a valid veterinary-client-patient relationship exists and proper record keeping is conducted. For all products, be sure to follow label instructions.

Theoretically, treating all livestock at the same time and re-treating two to three weeks later and moving to a clean environment should break the lice cycle. However, an infestation can persist if dusting powder is used and lice on an animal's underbelly escape treatment or if nits on shed hair are transported to a new site via clothing, wind, equipment etc.

An early or mid-winter series of two treatments should be conducted when routine monitoring reveals three or more lice per square inch of skin. Lice populations will naturally decline when environmental temperatures are consistently over 60°F. Excellent nutritional programs have been shown to make livestock more resilient to lice infestations.

Use pesticides with care. Apply them only to plants, animals, or sites listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

Home & Garden

SHOULD I MULCH? OR BAG MY LEAVES THIS FALL?

Adapted from Jon Trappe, University of Minnesota Extension

Many homeowners wonder if they should be collecting and removing tree leaves from their lawns prior to mowing, or if the tree leaves can be mulched (mown) into the lawn. Like many recommendations for lawn management decisions, this one can also be answered with the phrase, "it depends."

How to decide

A number of factors will determine whether you should be mulching your tree leaves or collecting them, including:

- What amount of leaves are present before and after mowing?
- How long after being mulched will the leaves be on the grass?
- What are the air and soil temperatures in the next few weeks?

When it makes sense...free fertilizer!

In general, the preferred choice would be to mulch the tree leaves when you mow the grass.

Most deciduous tree leaves are around 2 percent nitrogen, which is the most important nutrient for plants. So, by mulching your tree leaves into your lawn, you are essentially getting a free fertilizer application of nitrogen. There is even one report of maple leaves reducing dandelion numbers in lawns the following spring after leaf mulching. Truly, some leaf litter can be good for a lawn.

Successfully mulching leaves into a lawn canopy requires more frequent mowing in the fall and possibly several passes with the mower to mulch the leaves sufficiently. Specialized mulching mowers are available, and these mower types will also be beneficial year-round to mulch grass leaves into the canopy. Chopping leaves into small pieces is important.

When lots of leaves on the grass are NOT a good idea...

Don't leave excessive leaf litter left on a lawn when and if:

- It shades out the turf at one of the most critical times of the year that the grass plants are storing carbohydrates before the winter.
- It increases the incidence of snow mold diseases, resulting in dead patches of turf or a thinned canopy during spring green-up.
- It slows the spring green-up by reducing soil temperatures in the spring, by acting as a mulch layer on the soil surface.
- It provides a more suitable environment for burrowing pests like voles.

So how do you know if you have excessive tree leaves?

The best way is to try mowing a pass or two and mulching the leaves. Make sure that no more than 20 percent of the turf is covered by tree leaves after being mulched.

What leaves make the best mulch?

Some tree leaf species are more easily mulched than others. Ash and maple tend to be more difficult to mulch than oak leaves, for example. Also, wet leaves will be more difficult to mulch than leaves that are dry, so if possible, avoid mulching leaves until they have dried. Generally speaking, the finer the leaves are chopped up the better, as they will be broken down more quickly by weather and soil microbes. Depending on the amount of trees in your area, you may need to mow more frequently than what the turf needs if your objective is to mulch the leaves.

Food Safety

CANNING IN WINTER CAN BE A BLAST

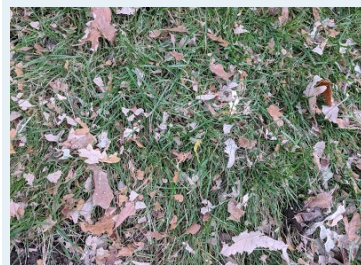
Adapted from April Reese Sorrow and Elizabeth L. Address, Ph.D.,
National Center for Home Food Preservation

The spring and summer months allow a wealth of fresh canning possibilities. Tomatoes, corn and green beans from gardens can keep you canning or freezing until you wear out. But by winter, you may be ready to try some different types of preserves.

Elizabeth Address is the Director of the Center for Home Food Preservation, which is hosted by the College of Family and Consumer Sciences at the University of Georgia. She said recipes available from the Center using juice concentrates and canned vegetables enable canners to preserve in winter.



This amount of leaves could be mulched without leaving too much litter on the turf and soil surface.



The leaves have been mulched but there may be too much litter left on the surface. Mow more often to chop up the leaves or collect the remaining leaves that fall.



MG PLANT CLINICS

Master Gardeners are available for plant issues and identification through our virtual clinic. Visit our website at: <https://extension.wsu.edu/wallawalla/gardening/> to find the clinic forms. Email the form along with photos to: becki.green@wsu.edu.



National Rural Health Day on 11/19: The third Thursday of November is National Rural Health Day. National Rural Health Day is an opportunity to "Celebrate the Power of Rural" by honoring the selfless, community-minded, "can do" spirit that prevails in rural America, gives us a chance to bring to light the unique healthcare challenges that rural citizens face, and showcase the efforts of rural healthcare providers, State Offices of Rural Health and other rural stakeholders to address those challenges. More information found here: <https://www.powerofrural.org/>.

POSTMASTER send address changes to:
WSU EXTENSION
328 WEST POPLAR
WALLA WALLA, WA 99362

WSU EXTENSION NEWSLETTER
PUBLISHED 4-6 TIMES ANNUALLY
VOLUME 2020 NO. 6
WSU EXTENSION
WALLA WALLA COUNTY
328 WEST POPLAR
WALLA WALLA, WA 99362

THANK YOU!

Walla Walla County
**CATTLEMEN'S
ASSOCIATION**

For providing postage for
this newsletter!

"There are recipes perfect for people yearning to can in the winter," Andress said. "You don't always have to can with fresh fruits and vegetables. Some of those preserves also make nice holiday gifts."

Orange Jelly from Frozen Juice

This recipe calls for frozen concentrated juice and powdered pectin and creates a delightful, flavorful orange jelly for toast or biscuits on dreary winter mornings or late afternoons.

You'll need for five to six half-pint jars:



Cornell Cooperative Extension, Franklin County

- 12 oz. concentrated orange juice, thawed
- 2½ cups water
- 4½ cups sugar
- 1 box powdered regular pectin

Begin by sterilizing your canning jars. To sterilize jars, boil empty, washed and rinsed jars for 10 minutes in water. The easiest way to do this is to stand empty jars upright on a rack in a boiling water canner filled with clean water. Keep jars hot until they are filled.

Measure sugar and set aside. Mix juice and water in a saucepan and stir in powdered pectin. Bring to a full boil over high heat, stirring constantly. Once boiling, stir in all sugar. Stir and bring to a full boil that cannot be stirred down. Boil hard for one minute, stirring constantly.

Remove from heat; skim off foam quickly. Pour hot jelly immediately into hot, sterile jars, leaving ¼-inch headspace. Wipe rims of jars with a dampened clean paper towel; adjust two-piece metal canning lids. Process in a boiling water canner for 5 minutes (10 minutes if 1,000-6,000 ft altitude; 15 minutes if over 6,000 ft). Allow jelly to cool, undisturbed, for 12 to 24 hours and check seals. You can remove screw bands after the food has cooled if the lids are sealed.

Canning can be a fun and delicious activity to add flavor and spice to the winter months. For more winter recipes, specific process times for your altitude or tips on year-round preservation visit the Center for Home Food Preservation Web site at: [Http://www.homefoodpreservation.com](http://www.homefoodpreservation.com).

WASHINGTON STATE UNIVERSITY
WALLA WALLA COUNTY EXTENSION

Celebrating 100 Years of Extending
Knowledge and Changing Lives.

Debbie M. Williams

Debbie M. Williams
County Extension Director