WASHINGTON STATE UNIVERSITY
WALLA WALLA COUNTY EXTENSION
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Newsletter

January 2020

Announcements

JANUARY

7-8 Cropping Systems Conference, Three Rivers Convention Center, Kennewick, WA. Integration of dryland and irrigated direct seed cropping systems. For information visit: http://www.directseed.org/events/annual-conference/.

14 Cereal Grain Seminar, Walla Walla Airport Conference Room. Registration begins at 8:30 a.m.–2:30 p.m. Offering 3-5 WSDA pesticide credits (pending) and 3-5 ODA (pending) credits. **Lunch is included. Register at the WSU Extension office by Wednesday, January 8th or go to** https://www.brownpapertickets.com/event/4466613 to register online. Fee of $25 includes lunch. For more information, call Becki at 509-524-2685.

15-16 Hay Expo, Three Rivers Convention Center, Kennewick, WA. For anyone who grows hay for a living or would like to know more about hay production. To register, visit http://www.wa-hay.org/ or call 509-585-5460.

21-23 WA/OR Potato Conference 2020, Kennewick, WA, Three Rivers Convention Center. Includes a Spanish language program with pesticide credits. For more information or to register, call 509-766-7123 or visit www.potatoconference.com .

24 Family Foresters Workshop, Coeur d'Alene, ID, 8:30 a.m.—5 p.m. A forum for foresters and other natural resource professionals who work with family forest owners. Visit: https://marketplace.uidaho.edu/C20272_ustores/web/product_detail.jsp?PRODUCTID=3359&SINGLESTORE=true.

25 Women In Ag, 314 W. Main, Walla Walla, 8:30 a.m.—3:30 p.m. Conference that empowers women in agriculture to achieve goals and manage risk. This years theme is "Healthy Farms". Registration is available online at: www.womeninag.wsu.edu.

30-31 Pre-License Pesticide & Recertification Training, Yakima Convention Center, 8:00 a.m. - 4:30 p.m. Visit http://pep.wsu.edu.

FEBRUARY

12-13 Recertification Pesticide Credits (6/day) & Pre-License Pesticide Training, Three Rivers Convention Center, 8:00 a.m.- 4:30 p.m. You must pre-register at least 7 days prior for the courses at pep.wsu.edu. For directions and training agendas, visit pep.wsu.edu; for registration questions call 509-335-2830 or email pest@wsu.edu; license information available at WSDA 877-301-4555.

26-March 1 Northwest Flower & Garden Show, Seattle, Washington State Convention Center, 7th & Pike. See designer gardens and attend free hands-on demonstrations and seminars. Visit www.gardenshow.com or call 253-756-2121.

21 Soil Health Workshop, Courtyard Marriott, Pullman, WA. The workshop will feature local experts presenting current research on soil health for Eastern WA, and a panel on cover cropping. The workshop is eligible for 7 CCA credits and includes lunch. Visit: https://farmersnetwork.wsu.edu/extension-education/workshops/.

30 WSU Oilseed Production Workshop, 700 Port Dr, Clarkston, WA. One-day workshop includes region-specific topics. Registration is available at http://css.wsu.edu/ and includes lunch and refreshments. To learn more, send an email to ksowers@wsu.edu.

27– March 1 Sewing & Stitchery Expo, Puyallup Fair & Events Center. Over 100 daily seminars, classes, and booths with over 400 exhibitors. Visit: www.sewexpo.com.

THANK YOU!

Walla Walla County Cattlemen's Association

for providing postage for this newsletter!

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Updates

2020 CENSUS: YOU MATTER. GET COUNTED!

Every ten years, the United States conducts its Census with one big task in mind: to count every resident. Some members of our community may feel nervous about giving information about themselves and their families to the government. However, there are several key reasons to participate that benefit our community, which is why the Blue Mountain Complete Count Committee is encouraging people to complete the 2020 Census.

Federal funds get distributed based on the information collected by the Census, funds that support agriculture, education, roads, human services, hospitals and more. Businesses and nonprofits also use census data to decide where to target growth, create jobs, and offer services. In addition, local governments like Columbia, Garfield, and Walla Walla Counties use the data for planning and safety. Residents can also use the data to support our community through neighborhood projects. Lastly, policymakers use the data to set legislative districts that determine how all of us are represented in Olympia and Washington, DC.

On or between	You'll Receive:
March 12-20th	Invitation to respond online to the 2020 census.
March 16-24th	Reminder Letter.
If you Haven't Responded Yet:	
March 26th- April 3rd	Reminder postcard.
April 8th- 16th	Reminder letter & paper questionnaire.
April 20th- 27th	FINAL reminder postcard before follow up will be done in person.

For more information please contact Juan Sanchez at juans@bmacww.org or http://bmccc2020.org/.

PARAQUAT DICHLORIDE TRAINING FOR CERTIFIED APPLICATORS

As required by EPA's Paraquat Dichloride Human Health Mitigation Decision and amended paraquat dichloride (a.k.a. paraquat) product labels, certified applicators must successfully complete an EPA-approved training program before mixing, loading, and/or applying paraquat. The training provides important information about paraquat's toxicity, new label requirements and restrictions, and the consequences of misuse.

The EPA-approved training module can be accessed at: https://campus.extension.org/enrol/index.php?id=1660. This training was developed by paraquat manufacturers as part of EPA's 2016 risk mitigation requirements and has been approved by EPA.

Who is required to take this training?
Any person who intends to use paraquat must be a certified applicator and is required to take the training. "Use" includes pre-application activities involving mixing and loading the pesticide; applying the pesticide; and other pesticide-related activities, including, but not limited to, transporting or storing opened pesticide containers, cleaning equipment, and disposing of excess pesticides, spray mix, equipment wash waters, pesticide containers, and other paraquat-containing materials.

THE VOLUNTARY STEWARDSHIP PROGRAM (VSP): CONSERVATION ON THE FARM

Walla Walla County has a plan to protect the critical areas on agriculture lands. It's called the Walla Walla VSP Work Plan and is an alternative to regulation under the Critical Areas Ordinance (CAO) through voluntary protection of critical areas.

VSP applies to all agricultural activities, even kids raising a few steers to sell at the fair. If agriculture activities take place on your land, you can participate in the VSP program. Critical areas include places that flood during high flows, areas that are prone to erosion, and wildlife habitat, so almost every landowner in the county is eligible.

The process is simple. Contact the Walla Walla County Conservation District (WWCCD) and arrange to complete a VSP Farm Plan. This is a summary of current agriculture activities and conservation practices. Trained district staff can help identify new conservation practices and may find funding to help start these additional practices. There is currently funding available to complete small projects. This voluntary participation helps to tally the conservation work being done and document that critical areas are being protected and even enhanced.

The Voluntary Stewardship Program requires reporting county total numbers, like all acres of habitat protected- not ownership or specific location. Much depends on folks stepping forward and participating. Doing so will help our county meet the VSP goals of protecting and enhancing critical areas while maintaining sustainable agriculture. *You can* call the Conservation District *at 509-956-3777 or check* the website*, wwccd.net* for more information about *VSP*.

Family Living

NEW LABEL DENOTING BIOENGINEERED INGREDIENTS WILL SOON APPEAR ON FOOD ITEMS IN 2020

Adapted from Ronald Goldy, MSU Extension

Photo 1 Label required by Jan. 1, 2022, on food products containing bioengineered products and byproducts. Photo by USDA.

Starting in 2020, consumers will start to see labels for genetically modified foods on store shelves.

In this day of ready-to-eat, highly processed food, it is understandable that consumers want to know what is in their food. Food labels require manufacturers to list ingredients (in order of volume, highest to lowest), nutrition, use by date and other aspects. A new label to appear over the next couple of years is the bioengineered label (Photo 1). The law implementing this labeling begins Jan. 1, 2020 and is fully mandated by Jan. 1, 2022. Any product containing genetically modified organism (GMO) products or byproducts must display a label indicating that fact. After Jan. 1, 2022, if the product does not contain this label, it has no GMO ingredients.

This new label will be the most reliable way for consumers to differentiate foods containing GMOs from those that do not. Meanwhile, GMO food labelling can be confusing and misleading.

The following is a list of GMO items currently approved in 2019 for commercial production and sale in the United States:

- AquAdvantage Salmon
- Arctic Apple
- Canola
- Corn
- Cotton
- Eggplant (BARI Bt Begun varieties)
- Papaya (ringspot virus-resistant varieties)
- Pineapple (pink flesh varieties)
- Potato
- Soybean
- Squash (summer)
- Sugarbeet

More items are under development and testing, but not yet approved and released for commercial use. This does not mean all members in that category are genetically modified or bioengineered. In fact, most eggplant, potatoes and summer squash are not bioengineered, but the average consumer does not know that, and bioengineered items cannot be identified based on their appearance. The new bioengineered label should help clear up some confusion.

What consumers most often see now is the Non-GMO Project label (Photo 2). Participating companies pay an annual fee to be part of the program, plus an additional fee for each item that will display the label. This is an optional verification program. The Non-GMO Project currently claims to have [3,000 participating brands and is displayed on over 50,000 items].

Photo 2 Non-GMO Project label. Photo by Environmental Illness Network, CC BY-NC-ND

An aspect of the Non-GMO Project label that can be confusing is that companies can put the label on whatever they want, even if the product could not possibly contain GMO ingredients. Look again at Photo 2 and think about where you have seen this label. You can find it on products where there currently are no GMO members, such as orange juice, cranberries, mandarins or vanilla extract (Photo 3). You may also see it on products that will never contain GMOs, such as salt (Photo 4). Salt only contains minerals; there is no DNA to modify.

Photo 3 Common food items containing the Non-GMO Project label that currently have no GMO members. Photo by Ron Goldy, MSU Extension

Why is this label on non-GMO products? It is all about marketing. When people are at the grocery store comparing two products, the additional label is another way to stand out and convince people to put their product in the cart. It may also cause consumers to think items not displaying the label are really GMOs. Therefore, the label can be used more

as a marketing tool and not a means of conveying useful information. The new bioengineered label will remove that confusion.

Photo 4 Non-GMO label on salt. Photo by Ron Goldy, MSU

Consumers no doubt will be seeing a growing number of items with the bioengineered label since bioengineered techniques may be a necessary tool in solving future problems. This is an immediate concern for the citrus industry. A disease called citrus greening is currently devastating citrus worldwide and immunity has not been found within any citrus, and therefore may come from another plant species with the trait introduced to citrus using bioengineered techniques.

Also, there are two diseases currently attacking bananas, one a bacterium and the other a fungus. There is no known tolerance to the fungus, so breeders may have to resort to bioengineered techniques. However, the bacterium has been controlled by inserting a gene from pepper through the bioengineered process.

Do not quickly dismiss bioengineered techniques since they may be the only way to save or improve important segments of the agricultural industry.

The phasing in of the new U.S. Department of Agriculture (USDA) bioengineered label has the goal of clearing up confusion on GMOs. Whether it achieves that goal depends on consumers making themselves familiar with what that label means. This knowledge will help them make better decisions, ease shopping stress, and allow them to focus on dietary choices that most improve their health.

Farming

BEE EFFICIENCY BOOSTS DIVERSIFIED FARMING

By Scott Weybright, WSU CAHNRS

The more diverse a farm's plant population, the more beneficial it is for bee pollinators, and the more efficiently those pollinators work.

Those are the conclusions in a new paper published in the journal Ecology Letters by former Washington State University graduate student Elias Bloom.

Bloom and his co-authors, WSU entomology professors Tobin Northfield and David Crowder, looked at pollinator and plant populations on small farms (under 30 acres) and urban gardens in western Washington.

"Growing a wide variety of plants boosted the number of bee visits," said Bloom, now a post-doctoral research associate in Michigan State University's entomology department. "People want a silver bullet crop that they can plant that will bring in more pollinators, but that idea just wasn't supported by our data. Having a variety, especially if they're rare in a region, is the best way to increase pollinators."


Elias Bloom, PhD in entomology.

These rare plants, which could be anything that isn't grown by other nearby farms, complement more traditional crops because they may flower at different times of year, or have beneficial traits that help pollinators vary their nutritional intake, he said.

Increasing that diversity also boosts pollinator efficiency by upping the number of visits a bee makes to crops at that farm.

"That means farmers can increase bee visits to their farm without adding more bees," said Bloom, who earned his Ph.D. from WSU in entomology in 2019. "And we showed it works for both honey bees and wild pollinators. If a farmer is thinking about buying more bees, planting more diverse crops could be an alternative."

A third finding of the paper is that giving bees a diversity of resources, like nesting habitat and flowers, in landscapes around a farm can also increase pollinator visits to a farm.

Bloom and his colleagues worked closely with 36 farms and urban gardens to look at the variety of plants each produces, and to measure pollinator visits. Among their partners were Hmong gardeners, originally from Southeast Asia, who now farm in the Seattle area.

"They brought a few plants with them when they immigrated here that you won't find in other gardens," Bloom said. "But they also grow staples found on most farms and gardens nearby, like tomatoes, peppers, or squash. Our research shows that this experimentation to introduce rare plant species may drive plant-pollinator interactions."

That doesn't mean farmers have to seek out rare produce from Asia or Africa, it just means they should consider a wider variety of plants from different plant families.

"You ideally want plants that flower at different times and with different flowers shapes and dimensions,"

Bloom said. “Some flowers are very small and shallow, which is great for small wild bees. Taking those things into consideration helps boost pollinator visits to your farm or garden.”

Bloom’s research was part of his Ph.D. dissertation and was funded in part by the National Science Foundation, the USDA, Western Sustainable Agriculture Research and Education, and others.

Food Safety

GET IT STRAIGHT – IT’S SAFER TO SEPARATE
Adapted from Partnership for Food Safety Education

Separate Raw Meat, Poultry, Seafood and Eggs from Other Foods

Harmful bacteria from raw meat, poultry, seafood and eggs can spread to other foods if they are not separated properly. This is especially risky when bacteria are spread to foods that are eaten raw, such as fresh fruits and vegetables. **Separate** and prevent cross-contamination by taking these steps:

In the Grocery Store

• Separate raw meat, poultry, seafood and eggs from other foods in your **shopping cart**. Place these products in **separate plastic bags** to prevent juices from getting on other foods.

• If you use reusable grocery bags, wash them frequently in the washing machine.

At Home

• Separate raw meat, poultry, seafood and eggs from other foods in the **refrigerator**. Place them in **containers or sealed plastic bags on the bottom shelf** of the refrigerator.

• If you are not planning to use these foods within a few days, freeze them.

Be a ProducePro

• Keep fresh fruits and vegetables separate from raw meat, poultry, seafood and eggs. For more information on safely handling produce, check out our **ProducePro fact sheet** at fightbac.org.

Use separate cutting boards:

• One for fresh produce
• Another one for raw meat, poultry and seafood

Use separate plates and utensils:

• For cooked foods
• For raw foods

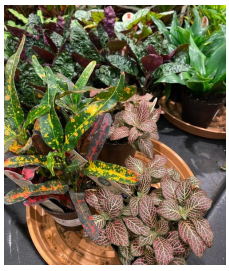
Never place cooked food back on a plate that previously held raw meat, poultry, seafood or eggs. **Wash the plate with hot water and soap** before using with other foods.

Safely Marinate

Sauce that is used to marinate raw meat, poultry or seafood should not be used on cooked food unless it is boiled first to destroy any harmful bacteria.

Home & Garden

WHY IS MY INDOOR PLANT UNHAPPY?
Adapted from Lori Imboden and Barslund Judd, Michigan State University Extension



Consider the growth conditions of your indoor plants when investigating plant problems.

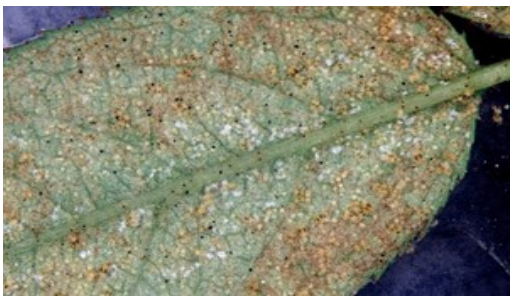
Indoor plants make great roommates. They brighten the mood in any room, keep quiet hours and don’t leave dirty dishes in the sink. They cannot, however, tell us when something is wrong. Diagnosing plant problems can require a bit of detective work. Like a detective, you will need to gather information. Do you know what type of plant you have? Different plants have different light, water and nutrient requirements. If you know the identity of your plant, you can provide the best possible growth conditions and learn what is a normal appearance. Some indoor plants change with the seasons or have flower structures that appear alarming when they first begin to emerge.

If you are confident that changes you observe are not normal, examine your plant care conditions. Overwatering a plant can be as harmful as underwatering. Research the moisture preference of your plant and water based on the wetness of the potting media rather than the calendar. Excessively wet or waterlogged potting media can lead to root

Tip burn is a frequent problem for indoor plants. Photo by Lori Imboden, MSU

rots, wilting and overall collapse of the plant, which mimics symptoms of underwatering.

Water needs may change with the season, even for an indoor plant. Tip burn is a frequent problem that can be caused by inconsistent watering, salt build-up from excess fertilizer, salts in hard water or fluoride. Additionally, review recent changes to your plant care routine. Have you applied pesticides? Have you moved the plant or exposed it to temperature changes? A sudden increase or decrease in light conditions can stress a plant. If you move a plant to conditions with increased light, slowly acclimate over several days thereby reducing the likelihood of shock to high light conditions.



Spider mites are found on the underside of leaves and may produce webbing on the plant. Photo by W. Cranshaw,

If your investigation reveals that your indoor plant is in the optimal growing conditions and there have been no recent changes, you may consider the possibility of a pest insect or disease influencing the decline of the plant's overall health. New plants, or plants that have been outdoors for the summer and moved indoors, can introduce insect pests. Inspect new plants or plants brought indoors for any insects or damage. Mealybugs, spider mites, aphids and soft scale are small but visible upon careful inspection under or on top of leaves, stems or growing points. Quarantine new indoor plants for at least two weeks and inspect again for insects or damage before adding them to your existing plant collection.

Fungus gnats are ubiquitous pests that lay eggs in wet potting media. Larvae chew on the plant roots and the flying adults are household pests.

Mealybugs have a cottony appearance. Photo by Kansas Department of Agriculture, Bugwood.org.

Maintaining proper potting media moisture is key to preventing fungus gnats.

Should your pest problem require the use of a pesticide, choose one registered for indoor use and always confirm the presence of the insect or disease you plan to treat. The pesticide label will indicate if it can be used on this particular plant and if it is effective for the insect pest. If an insect problem is severe and threatens other plants in your collection, you may need to discard the infested plant.

Keep in mind that once you have investigated and solved your plant problem, the damage caused to a leaf will remain visible until that leaf has been shed.

4-H

ACHIEVEMENT NIGHT

On November 17, 4-H youth and adult volunteers were honored at the 2019 annual 4-H Achievement Night. Approximately 185 awards were presented to 4-H members, clubs, and volunteers in recognition of their 4-H accomplishments during the past year.

Ruth Ladderud received recognition as the Outstanding 4-H Volunteer Leader of the Year for over 17 years of exceptional leadership and service to the young people of the Walla Walla County 4-H program. Ruth is greatly appreciated for her dedicated service to 4-H as a volunteer.

Sarah Bergman received the Inspirational Leader of the Year award and has been a 4-H leader for 11 years.

Nelson Irrigation received the 4-H Appreciation Award for their continuing support of the 4-H program and its members.

Two outstanding 4-H Members from Walla Walla County were selected in each age division based on the quality and growth of their 4-H project, leadership skills, and their active involvement in the county 4-H program. The junior division outstanding members were Piper Holderman and Bly Sprague; the intermediate division recipients were Kaily Thorton and Gabriel Watson; and the senior division winners were Bethany and Nathanael Bennett.

WASHINGTON STATE UNIVERSITY
WALLA WALLA COUNTY EXTENSION

Celebrating 100 Years of Extending Knowledge and Changing Lives.

Debbie M. Williams
County Extension Director

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