



CEREAL Newsletter

Vol. MMXI No. 1

www.cerealcentral.com

March 2011

March mayhem: Spring weed control options

One can't be sure if spring is going to arrive this year, yet April is right around the corner. April 1st marks a cutoff date for growers and applicators for applications of some herbicides especially in Milton-Freewater and the adjacent Walla Walla Valley areas.

Grapes continue to be the most sensitive crop found in the area, yet all crops including wheat can be susceptible to off target movement of herbicides. Herbicide drift can injure foliage, shoots, flowers and fruits. If injury is severe enough, or occurs repeatedly, it can cause reduced yield, poor fruit quality, and occasionally, vine death in grapes and similar problems in other sensitive crops.

For downy brome control in wheat, Powerflex and Olympus Flex are good choices, but some changes are in the works that growers should be aware of. Dow, the manufacturer of Powerflex, has submitted a proposal to EPA to increase plant back restrictions. One change that would affect local pulse growers is increasing the plant back interval to 10 months for peas, chickpeas and lentils. The restrictions are further qualified by the following parameters-if the soil pH is uniformly 6.0 or greater AND total rainfall (including irrigation) during the interval is greater than 16 inches. Yet, if the soil pH is less than 6.0 OR total rainfall (including irrigation) is less than 16 inches then the rotation interval is 18 months. These additional restrictions have not yet been approved, but it is anticipated that they will be adopted and added to the label soon.

Dan Ball, OSU Weed Scientist, recommends a full 3.5 oz rate for a spring application of Powerflex. It has good crop safety, and while he has noted some yellowing with Powerflex under cool application conditions but he hasn't seen this yellowing to affect yield.

Table 1. Alternative herbicides for wheat less likely to injure grapes.

Axial	Hoelon	Olympus
Buctril	Huskie	Olympus Flex
Discover	Linex	Paramount
diuron (Karmex)	Maverick	PowerFlex
Everest	metribuzin (Sencor)	Puma

If broadleaf weeds are a problem in the field, Huskie is a new broad spectrum herbicide, without the volatility issues of growth regulator herbicides such as 2,4-D and dicamba. Research has shown it to be effective against prickly lettuce and kochia, plus many others. Huskie should be ground applied at the 11 – 15 oz rate with a spray volume of 10 or more gallons per acre. Other herbicides are also available and a partial list can be seen in Table 1. If 2,4-D is used, the less volatile amine salt formulation is recommended.

Always take the necessary precautions to insure that drift does not occur, and follow label statements regarding environmental conditions at the time of application.

Wheathead Armyworm Trapping Starts in April

This year our wheathead armyworm trapping program will start the first week of April. This early start will allow us to gain additional information about the adults flights - the number of adults flying and where the largest populations might happen later in the season.

Our trapping effort will continue in 25 locations covering much of the area from

Holdman to Duroc and from Midway to South Juniper. We have selected locations where WHAW has been found over the last four years.

!! WANTED !!

If you find wheathead armyworms in your field, please call so that we can come and collect samples!

LIVE SAMPLES WANTED!

GRANTS AVAILABLE

The Oregon Watershed Enhancement Board (OWEB) is accepting grant proposals for on-the-ground restoration projects that approach natural resources management from a whole-watershed perspective until April 18, 2011. Example projects include: streambank plantings, off-stream livestock watering facilities or fencing stream areas to restore riparian function, weed control, native plant reseeding, restoring or enhancing natural wetlands, improving fish habitat, culvert removal or replacement. Contact the Umatilla County Soil & Water Conservation District at 541-276-8131 for additional information.



Aphid Sampling and Testing – This Spring - HELP NEEDED!!!

This spring, OSU Extension will be re-evaluating the status of aphids in wheat looking at the potential for aphids to vector virus or inject toxins into wheat. Our focus will be on cherry-oat aphid, corn leaf aphid, English grain aphid, greenbug and the Russian wheat aphid in both the irrigated and dryland wheat in the Columbia Plateau region.



Bird cherry-oat aphid

Photo – OK State

Field conditions last fall have created a critical need to sample this spring in March, April and May for aphids in order to assess viruses and toxins levels in aphids and in the current crop. We need your help locating and collecting samples from across the area over the spring season. We are offering limited supplies for Oregon growers to collect aphids in wheat fields. You will receive 20 vials, a sample brush, and a laminated white paper to use for your collection efforts if you contact us. Call Mary Corp (541)278-5403 or email mary.corp@oregonstate.edu to get connected with this research project.

How to collect aphids- the “plastic method”

Simply, placed a white laminated paper below the stems of a plant; shake stems for 3-5 seconds to allow aphids to drop into the white paper. With the aid of the brush, pick up the aphids carefully and placed them in the vial. The vial should contain alcohol (85-95%). Unfortunately, we won't be able to send you alcohol since there are shipping restrictions for liquids. Use one vial per field. Make sure to LABEL your vial with the following information:

1. Collector name (your name)
2. GPS coordinate (if information is available)
3. Sampling date



Send samples to Silvia Rondon, HAREC, 2121 South First Street, Hermiston, OR 97838.

Stripe Rust - It Could Be a Wild Ride!

-By Mary Corp and Chris Mundt

Stripe rust in wheat became active much earlier this year than last year in the Pacific Northwest and may not have slept at all. Don Wysocki, OSU, and Jim Towne, PGG, found sporulating rust pustules in a wheat field near Pendleton in northeastern Oregon during the 1st week of February this year. Mike Flowers, OSU, discovered stripe rust in the Willamette Valley in late January and, by mid-February, stripe rust was easily found there.

Given the high level of stripe rust last year, and early seeding last fall combined with fall rains, these sightings are not a big surprise. Now much depends on the wheat variety that you planted and how cool and wet our spring weather turns out to be. The Pendleton National Weather Service is forecasting below average temperatures over the next three months and seems to be undecided on what our rainfall amounts will be due to no strong indication one way or another by their models.

Resistance to stripe rust in our winter wheat varieties is dependent mainly on High Temperature Adult Plant Resistance (HTAP). HTAP turns on when temperatures warm up in the spring and also when plants go into the reproductive phase. More resistance genes equals higher levels of resistance and also allows the resistance to turn on earlier and at lower temperatures.

Most winter wheat varieties have at least some level of HTAP and efforts are underway to increase these levels in both winter and spring wheat varieties. Last year, we saw definite separations between varieties due the high

level of pressure over a long period of time. The following notes are provided by Chris Mundt, OSU pathologist:

- Tubbs 06 – low levels of HTAP
- Goetze
 - * major gene resistance broke in 2010
 - * fairly susceptible in early growth stages
 - * good level of HTAP
- Stephens – high level of HTAP
- Madsen, ORCF101, ORCF102
 - * So far – so good
 - * Major gene resistance is unknown



Photo Courtesy of Xianming Chen, USDA-ARS

Scouting fields for stripe rust will be beneficial as there is a high likelihood of significant rust problems this year. There will be differences based on varieties. Keep an eye on temperatures and our long-term forecasts. Scout fields as often as possible.

If fungicides are applied, **timing is critical**. Generally, a single application at flag leaf emergence will be highly effective. Make the decision to treat just prior to flag leaf emergence based on:

- Presence of rust in field or region
- Weather
- Variety

- Yield potential

In fields of higher yield potential, tank mixing a fungicide with a spring herbicide application (if not yet applied) is justified if rust is already present in that field. Rust is relatively easy to control early in the season, and the least expensive, registered fungicide should be effective. Fields should still be scouted prior to flag leaf emergence, and sprayed again if necessary.

Common Timing Errors

Some common timing errors should be avoided when applying fungicides. Last year, we all tended to think that HTAP resistance was going to save us, and so we waited, and waited... and then finally decided to spray, but then the application possibly had limited effectiveness because it was too late.

Applications need to be applied before rust is well established. When one visually sees 5% rust, one might already have 30% or more present that is not visible yet. Also it is hard to protect again a large number of spores in the crop. Applications during late growth stages (past flowering) usually do not increase yield regardless of rust levels.

There are numerous fungicide products available: triazoles (examples – Bumper, Caramba, Folicur, Proline, PropiMax, Prosaro, and Tilt), strobilurins (examples – Headline, and Quadris), combinations of triazoles and strobilurin (examples – Stratego, Quilt, Quilt Xcel, and Twinline). Be sure and follow the label for rates, timing and pre-harvest interval restrictions.

OSU/Umatilla County Extension Service
2411 NW Carden, Umatilla Hall, PO Box 100
Pendleton, OR 97801

Address Service Requested

NON PROFIT
U.S. Postage
PAID
Pendleton, Oregon
Permit # 28

CALENDAR

March, April, May, June

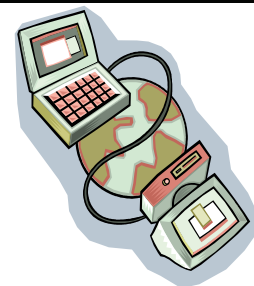
- Mar. 14- **CRP Sign-up** <http://www.fsa.usda.gov.crp>
Apr. 15 **Contact:** FSA 541-278-8049
- June 14 **Pendleton Field Day**
Location: CBARC
Pendleton, OR
Contact: CBARC 541-278-4186
- June 15 **Moro Field Day**
Location: Sherman Experiment Station
Pendleton, OR
Contact: Sherman Co. Ext. 541-565-3230
- June 22 **Potato Field Day**
Location: OSU HAREC
Hermiston, OR
Contact: Annette Teraberry 541-567-8321

Visit us online at:

www.cerealcentral.com

<http://osucerealcentral.blogspot.com/>

<http://www.youtube.com/user/oregonstateextension>



Oregon State University Extension Service offers education programs, activities, and materials *without regard to race, color, religion, sex, sexual orientation, national origin, age, marital status, disability, and disabled veteran or Vietnam-era veteran status* as required by Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. Oregon State University Extension Service is an Equal Opportunity Employer.

OSU
Oregon State
UNIVERSITY