Wisconsin Crop Manager

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Wisconsin Winter Wheat Disease Update – April 21, 2017

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The Wisconsin Field Crops Pathology crew has continued to scout wheat in various locations around the state of Wisconsin. Wheat in the southern part of the state is near or at jointing. Wheat in the central zone is also near jointing.

We have now confirmed stripe rust in a production winter wheat field near Arlington Wisconsin (April 20, 2017). The variety is Pro Seed 420 which is known to be susceptible to stripe rust. We suspect that stripe rust has overwintered in this location, in addition to the Sharon Wisconsin location that we reported several weeks ago.

We have also received a report of stripe rust from Kenosha Co.

In all cases where stripe rust has been found, it is at low incidence and severity. However, the weather is becoming conducive for the stripe rust pathogen, so these areas of active rust should be monitored closely so that an informed management decision can be made. Many are considering a tank-mix of fungicide with their herbicide application. However, be aware that this application will only be effective for 2-3 weeks at most. We have found that when it comes to application of fungicide for stripe rust control, applications that coincide with the introduction of stripe rust that also protect the flag leaf, are most beneficial on winter wheat in Wisconsin. This has been investigated and reported by our laboratory and presented at the Wisconsin Agribusiness Classics. You can find that report here.

At this point in the season, growers and consultants should continue to scout carefully for stripe rust. Also, consider the susceptibility rating of your wheat varieties. In fields where stripe rust is active and you have a susceptible variety, careful monitoring will be required and earlier spraying necessary. In fields with no confirmed rust and resistant varieties, continued monitoring of the situation will be necessary. Fungicide

Above: Two Small Stripe rust pustules on a winter wheat leaf.

application should be saved until as close to flag leaf emergence as you feel comfortable waiting. You can find efficacy ratings of various fungicide products against stripe rust here.

Get out and scout, scout scout!!

Consider cover crop plans for summer and fall when selecting crop herbicides this spring

Kevin Shelley and Dan Smith, UWEX Nutrient and Pest Management Program

If a cover crop will be planted later this cropping season, consider the rotational restrictions for any herbicides used in the field this spring, or the past few seasons. This is especially important if the cover crop might be used as a forage crop. A crop is classified as a cover crop when no biomass is harvested. A cover crop becomes a forage crop when its biomass is harvested for feed.

As part of its EPA registration, each herbicide product's label provides directions for use on labeled (allowed) crops. It will also provide information on crop rotation intervals. A crop rotation interval is the amount of time required after application of the herbicide product before another (non-labeled) crop can be legally planted. The rotation interval is established for two reasons: To ensure that herbicide residues in the soil will not affect establishment of the following crop, and; To ensure the safety of a subsequent feed or food crop from accumulating herbicide compounds at un-safe levels in plant tissues.

Most corn, soybean and cereal grain herbicides do not have rotational intervals for non-harvested cover crops. If the crop to be used as a cover crop has a rotational interval listed on the herbicide's label, this interval provides a guide as to the likelihood of successful establishment. But, if not intended for harvest, the time interval is not a legal requirement. If a farmer's or agronomist's experience suggests the cover crop will grow, or if the farmer is willing to assume the risk, a decision to plant prior to the expiration of the interval may be made. If, however, the cover crop is used as a forage, the rotation interval becomes a legal requirement for feed and food safety. If the specific crop is not listed on the herbicide label as an allowed crop, nor is among those with established rotation intervals, the maximum rotation interval must be used when planting for forage.

Many dairy farms in Wisconsin are planting a winter cereal grain, such as rye or triticale, following harvest of corn as silage. If planted early enough in the fall, this overwintering "cover crop" helps prevent soil erosion and nutrient losses from runoff and leaching on corn silage fields. Winter rye or triticale also provides the option of harvesting as a forage crop the following spring, usually about the third to fourth week in May in most of WI.

A farmer has multiple herbicide options for silage corn weed control, however their rotational interval restrictions are drastically different. For example, the label for one popular pre-emergence corn herbicide, in the rotational crops section, states that barley, oats, rye or wheat may be planted 4 1/2 months after application. Therefore, if planning to plant rye after corn silage by September 25, an application of this herbicide would need to made by May 13. It also states, "for all crops not listed, wait at least 12 months following the last application." Triticale is not specifically listed. So, if this herbicide was used for this year's corn silage crop, triticale planted this fall could not, technically, be used as forage crop next spring. Other corn herbicides have rotation intervals ranging from 0 to 18 months for cereal grain crops (grain or forage) and up to 26 months for other species.

Similarly, most herbicides labeled for use in wheat or other small grains will have rotation interval restrictions ranging from 0 to 18 months for crops that might be planted for forage (harvested or grazed) following small grain harvest. For current year information on rotation interval requirements for specific herbicides, consult the product's EPA registered label. A good source for specimen pesticide product labels is the Crop Data Management System's website at http://www.cdms.net/Label-Database.

Options for Alfalfa Removal in Spring

Mark Renz Extension Weed Scientist, University of Wisconsin-Madison

While removal of old stands is recommended with fall applications, many fields are now slated for removal due to winter-kill and changes in cropping plans for the field. This can be challenging, but options exist. Below I discuss management options for common scenarios this spring. If using herbicides, remember to read the label of the products used, as plant-back restrictions can vary between products.

SPRING REMOVAL AS ALFALFA GREENS-UP

Alfalfa can be removed with herbicides and/or aggressive tillage. While tillage can result in > 80% mortality,

tillage implement, operation of equipment as well and environmental conditions can dramatically affect control. Spraying an herbicide prior to tillage is usually conducted as this combination greatly improves chances of alfalfa mortality. For no-till fields, spring herbicide application can provide good to great removal depending on the year. In years with little regrowth and stressed plants alfalfa plants often resprout and require control in the planted crop. Most labels recommend at least four inches of regrowth to maximize control. While many herbicides are available to remove alfalfa, the most popular active ingredients include glyphosate, 2,4-D, and/or dicamba. While glyphosate has no plant-back restrictions for other crops, 2,4-D and dicamba do. **The restriction varies depending on the crop, rate, and product so read the label carefull**y. In a typical year the restriction for 2,4-D (7-14 days for corn) and dicamba (0-30 days for corn) can be met easily prior to planting corn.

SPRING REMOVAL DURING/AFTER ALFALFA HARVEST

Producers are sometimes interested in harvesting the first crop of alfalfa before terminating the stand. The best option for this scenario is to apply glyphosate 36 hours or longer before harvesting. Up to 1.5 lbs ae/A is registered for this type of application. This will allow for hay harvest, and improve effectiveness of removal due to the delayed application timing and larger sized alfalfa. I am not aware of any other herbicides that can be used in this fashion. Another option would be to harvest the hay, let the alfalfa regrow then apply an herbicide to eliminate the stand. This option, while effective would result in at least 2 weeks of additional time before planting to allow harvest and regrowth. Plant-back restrictions would then also need to be followed for the products selected.

CONTROL OF VOLUNTEER ALFALFA IN OTHER CROPS

While the goal is to kill plants with the removal treatments, some alfalfa plants can survive and will need to be managed in the following crop, especially in spring removal. For Roundup-Ready crops, glyphosate is the logical choice and is effective, unless removing Roundup-Ready alfalfa. Other products that are effective in corn include products that contain dicamba or clopyralid. I am not aware of effective non-glyphosate options in soybeans. Make applications in a timely fashion, as I expect significant yield loss could be seen from volunteer alfalfa in fields.

Videos: Spring time disease scouting for alfalfa and winter wheat

Here are links to two short videos from Damon Smith, Extension Field Crops Pathologist, Department of Plant Pathology, University of Wisconsin-Madison.

Damon Smith also has a website here >>> http://fyi.uwex.edu/fieldcroppathology/

Variable Rate Seeding Prescription Maps for Soybean

Shawn P. Conley, Soybean and Wheat Extension Specialist

Looks like many of us will be sitting around for the next 7 to 10 days twiddling our thumbs watching it rain. If you get bored and look to try writing a few variable rate seeding prescription maps for soybean check out http://www.coolbean.info or click our publication entitled: What data layers are important for variable rate soybean seeding prescriptions? to get a few ideas.

UW-Madison/Extension Plant Disease Diagnostic Clinic (PDDC) Update

Brian Hudelson, Sean Toporek, Jake Kurczewski and Ann Joy

The PDDC receives samples of many plant and soil samples from around the state. The following diseases/disorders have been identified at the PDDC from April 15, 2017 through April 21, 2017.

Plant/Sample Type, Disease/Disorder*, Pathogen,* County

Fruit Crops
Cherry ('Montmorency'), White Rot, *Irpex Lacteus*, Sauk

For additional information on plant diseases and their control, visit the PDDC website at pddc.wisc.edu.
Follow the clinic on Facebook and Twitter @UWPDDC.

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