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Now is the Time to Control Winter Annual Weed Hosts of Soybean Cyst Nematode

Even though harvest has been delayed by the early part of October being wetter than normal, and now the forecast looks like significant rain today as I write this on Tuesday morning, now is the time to be thinking about weed control in some if not all fields. I have seen some of these winter annuals, like Poison Hemlock, already getting some size to it. This is an article written by OSU Extension Specialist Kent Harrison and Anne Dorrance concerning soybean fields and the problems with winter annuals. However, you could use this information for other places, like pastures, your garden, or other places where winter annuals are a problem. You will need to adjust some on the amount of spray for a garden, but all in all, you are trying to control the same weeds, so it is just a mathematical adjustment.

There are several weeds that fall into this list of winter annuals including dandelion, henbit, the mustards, purple deadnettle, chickweed and others. While you are in the mood to control weeds in the fall, the control of Canada thistle is also recommended in the fall. I have also seen some poison hemlock in the normal areas. I am not sure what the forecasted cooler temperatures might do to this problem weed, but it is getting out of control in some pastures, road ways, and especially around streams, so while you are at, if you see it, you might spray it, too. Here is the article on winter annuals.

Winter annuals are a specialized group of weeds that emerge from September through November in Ohio. Winter annuals go dormant during the coldest periods of winter (soil temperatures below 40 degrees), then resume rapid growth and produce seeds in the spring as temperatures increase. Some of the most common winter annuals in Ohio serve as alternate hosts of soybean cyst nematode (SCN) and can result in increased SCN egg numbers in soil if the weeds are not eliminated soon after they germinate in the fall. The most prevalent winter annual weed of Ohio and Indiana no-tillage crop fields is purple deadnettle, which unfortunately is also one of the strongest known hosts of SCN.

OSU research conducted over a five-year period indicated that SCN egg populations in soil increased three- to five fold in no-tillage soybean plots containing purple deadnettle compared to weed-free soybean plots. Purple deadnettle that emerged in October produced the highest levels of SCN reproduction. Other recent studies conducted in Ohio and Indiana have shown conclusively that SCN can infect purple deadnettle roots in the fall and can produce at least one new generation of eggs before soil temperatures drop below the 50 degree threshold for SCN development. In fields where SCN is present, it is essential that purple deadnettle be controlled within four weeks after it emerges, since SCN females can infect the weed's roots and produce a new batch of eggs within four to five weeks. If purple deadnettle and other winter annual weed hosts are killed before SCN completes its lifecycle, the female nematodes are also killed and the SCN egg population in soil will not increase before the spring planting season.

Seedlings of purple deadnettle and other weeds that host SCN can be viewed at <http://agcrops.osu.edu/weeds/WinterAnnualSCNHosts.htm>. To control most winter annual weeds, apply Roundup Ultra at 1.0 pint per acre or Touchdown at 0.75 pint per acre plus 2,4-D ester at 1.0 pint per acre. Add Ammonium Sulfate (AMS) at 17 pounds per 100 gallon of water and Surfactant at 0.25 percent if using Touchdown. Apply when daytime temperatures are above 50 degrees and night temperatures are expected to remain above 40 degrees during the week of application.

GAP for Tobacco Growers

Just a reminder that I will offer a GAP training in the event someone might have missed the earlier trainings. GAP (Good Agricultural Practices) in this case is for Tobacco Producers. Go to <http://gapconnections.com> prior to the meeting and enter your information. The meeting is at the Adams Co. Extension Office on November 6 at 6:30 p.m.

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