Spring Burndown Applications To Weeds And Cover Crops

This spring so far has been cold and wet with short spurts of warm sunny days in-between. This weather cycle for the most part kept producers out of field and allowed the winter annual weeds to flourish the past couple of weeks. As we look ahead to the next couple of weeks in hope of getting out to the fields to do spring no-till burndown applications, there are a couple of things to keep in mind.

Winter annual weeds

The warm periods of weather, particularly the last two weeks, along with the ample soil moisture have been beneficial for winter annual weed growth and early emerging summer annuals. A few winter annual weeds that we have noticed are chickweed, purple deadnettle, and henbit that are for the most part already flowering in much of the state.

Producers will need to make winter annual burndown applications quickly, once conditions allow them to get into fields. These weeds, specifically chickweed, can create mats that slow soil drying and delay planting. Although these annuals may already be flowing and nearing the end of their life cycle a timely burndown application will speed up the desiccation processes for quicker soil drying and timely planting.

Marestail

This weed has no doubt been the biggest weed problem in Indiana the last couple of years and this spring is setting up to give it an advantage again. Any fall emerging marestail that survived the winter or was not controlled by a fall herbicide application has likely already begun to bolt and will be difficult to control if not treated soon. The spring emerging cohorts of marestail have likely started to emerge and will be very quickly gaining size if producers are kept out of fields by continued wet conditions.

Producers need to be aware of the size of marestail populations in fields and plan burndown treatments accordingly. The majority of marestail populations are glyphosate-resistant and must be controlled with other herbicides. Producers need to be aware of appropriate tank mixes and rates to control larger marestail populations that are glyphosate resistant.

For a more details of marestail control, specifically in no-till soybean, refer to our recently updated “Control of Marestail in No-till Soybean” publication (http://agcrops.osu.edu/specialists/weeds/marestail/marestailfact09_000.pdf)
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Cover Crops

The state of Indiana, according to personnel with NRCS, had an approx. 1 million acres of cover crops planted this last fall. Some of the cover crop species are designed to be winter killed, although several will need to be terminated prior to corn or soybean planting.

Producers who seeded cover crops need to be aware of the proper timing, herbicides, and rates for termination applications for each specific cover crop species. Many of the cover crops are relatively easily controlled with 0.75 lb ae/A of glyphosate in early spring prior to corn or soybean planting.

The one cover crop that poses a larger challenge is annual ryegrass. When allowed to grow extensively in the spring annual ryegrass can be very difficult to terminate with herbicides and can become a weed itself. Producers need to make applications prior to annual ryegrass reaching 6 inches to ensure a successful termination. Much like marestail, the combination of the warm spells and wet soils keeping producers out of the field can lead to annual ryegrass cover crops growing beyond manageable heights.

Regardless of the size of the annual ryegrass there are a couple of keys that producers need to keep in mind when making their termination applications. Glyphosate is the most commonly used herbicide to terminate annual ryegrass and must be applied at 1.5 lb ea/A (2 quarts of a 3lb ae/gal glyphosate product) to ensure complete termination. Application of glyphosate also need to be applied when the annual ryegrass is actively growing or during a period in which nighttime low temperatures are greater than 45 F.

It would also be a good idea to scout fields that have cover crops and see if marestail is present as well. If it is present do not rely just on glyphosate to terminate the cover crop. You will need to add sharpen, 2,4-D, or dicamba to glyphosate to control the marestail.

For more information on cover crop termination refer to our “Terminating Cover Crops: Successful Termination of Cover Crops with Herbicides” publication (http://www.extension.purdue.edu/extmedia/ws/ws-50-w.pdf)

Application

The increase in acres infested with glyphosate resistant weeds means many producers are making burndown applications with other herbicides and/or tank mixes. Some of the popular tank mixes contain contact herbicides like gramoxone and sharpen. When applying a contact herbicide, producers need to keep in mind that complete spray coverage is essential. To ensure complete coverage producers need to use carrier volumes of at least 15 to 20 gallons per acre (GPA). The use of proper adjuvants and spray nozzle tips as listed by the product label will also ensure optimal coverage and efficacy.

The slight delay in the planting season has likely given some of our winter annuals and early emerging summer annuals a head start this year, but with the proper herbicides, rates, and application methods producers will be able to get their no-till fields cleaned off and ready for a successful growing season.