Staying on Top of Weeds in 2019

Robert G. Hartzler
Iowa State University, hartzler@iastate.edu

Meaghan J. B. Anderson
Iowa State University, mjanders@iastate.edu

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Abstract
While good progress has been made toward getting crops in the ground, the adverse early spring conditions are likely to complicate weed management throughout the 2019 growing season. The most important step in minimizing problems is to scout fields regularly to identify problems quickly and allow timely adjustments to management.

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While good progress has been made toward getting crops in the ground, the adverse early spring conditions are likely to complicate weed management throughout the 2019 growing season. The most important step in minimizing problems is to scout fields regularly to identify problems quickly and allow timely adjustments to management.

Performance of preemergence (PRE) programs

Products used in fields planted in a ‘timely fashion’ are likely to have shortened residual activity due to abundant rain, therefore increasing the importance of timely
postemergence (POST) applications. A different issue will be encountered in fields that were planted in the last week or two. These fields were planted during peak periods of weed emergence, and many areas have gone more than a week without rain to activate PREs. Many of these fields will require a POST treatment several weeks earlier than normal.

**Crop development**

A full crop canopy is a critical component of successful weed management. While last week’s growing degree days helped move corn forward, the slow development throughout May, along with early degradation of the PRE products, will make achieving full season control more difficult this year than most.

Delayed soybean planting is also likely to complicate weed management. Many fields were planted under less than ideal conditions that may result in uneven stands, creating gaps in the canopy. Soybean planted in 30-inch rows may not form a full canopy, further favoring the survival of late-emerging weeds. The delayed or hindered crop canopy development will make timely application of an effective POST program more important than in most years.

The application window for many products will be reduced due to the crop advancing through growth stages more quickly than with normal planting dates. Flower development in soybean will still occur in the latter part of June for most fields, even many late-planted ones. Dicamba products registered for Xtend soybean varieties must be applied prior to R1 stage soybean (before first flowers). Liberty (Liberty Link) has the same restriction (up to R1), whereas glyphosate (Roundup Ready) or 2,4-D (Enlist) can be applied through the R2 stage.

**Performance of POST programs**

While we have reduced our reliance on POST products due to widespread herbicide resistance, POST products will be more important this year due to the environmental factors influencing PRE herbicides. The best way to reduce risks is to scout fields earlier than would be typical, spray when weeds are smaller than label limits, and include a residual herbicide with the POST program to extend control later into the season. Waiting until weeds reach the maximum controllable size to begin applications and failing to include a residual herbicide will result in a greater risk of control failures, more weed survival and seed production, and greater opportunity for new resistance issues.

**Herbicide carryover**
The potential for herbicides to affect rotation crops or cover crops is affected by many factors. While herbicide half-life and rainfall throughout the growing season are the most important factors, application date also plays a role. Delayed application results in the herbicide being applied closer to the establishment of the following crop, and in some cases might lead to problems. Check rotational restrictions on products to ensure they won’t affect plans for rotational crops this fall or next spring. Herbicides that late applications can increase carryover risk include fomesafen, imazethapyr, and chlorimuron.

Summary

The impact of this spring’s cool and wet weather on weed control is not over. Weed management programs in many fields will need to be adjusted from what was planned in order to avoid costly control failures. Early scouting of fields is essential to determine how well PRE programs are working and allow timely adjustments to the POST program. Please reach out to your local ISU Extension and Outreach Field Agronomist if you have questions about managing weeds this year.

Category: Weeds

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Corn

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Authors:
Bob Hartzler  Professor of Agronomy

Dr. Bob Hartzler is a professor of agronomy and an extension weed specialist. He conducts research on weed biology and how it impacts the efficacy of weed management programs in corn and soybean. Dr. Hartzler also teaches undergraduate classes in weed science and weed identification...

Meaghan Anderson  Field Agronomist in Central Iowa

Meaghan Anderson is a field agronomist in central Iowa and an extension field specialist at Iowa State University Extension and Outreach. Educational programming is available for farmers, agribusinesses, pesticide applicators, certified crop advisors, and other individuals interested in...