

As we move into the middle part of the summer, we want to take this opportunity to raise awareness of a few things to be on the lookout for as you assess weed control in corn and soybean fields.

Marestail. We have a number of field experiments at SEPAC (near Butlerville, IN) in Jennings county. At this site we observed very little emergence of marestail during the fall of 2003. However, we observed marestail emerging as early as mid-march 2004 and as late as the last week in June. It appears as though this weed is behaving primarily as a summer annual in SE Indiana this year. It is highly likely that it will emerge or has emerged after postemergence glyphosate treatments are made to Roundup Ready soybeans. So, it will be easy to confuse the late emerging plants with those that did survive a glyphosate treatment are truly resistant to glyphosate. In every field we have found glyphosate resistant marestail, we are able to find live plants interspersed with dead or damaged plants. The fact that marestail emerges over such a long time will make it difficult to confirm resistance in the field unless individual plants are marked before spraying them. If you are interested in determining if you have a resistant population, mark a few plants with flags or tape, spray them with a small field or pump up sprayer, and record the number of live and dead plants at 10 to 20 days after application. Marestail resistant to glyphosate is fairly common in SE Indiana (see this article for more details

<http://www.btny.purdue.edu/weedscience/2004/articles/updatemarestail04.pdf>), but found much less frequently in other areas of Indiana.

Another observation this year on marestail is that north of I-70, it tended to behave more like a true winter annual, with most plants emerging in the fall and very little spring emergence.



Marestail/horseweed in a field of soybeans.





Young chickweed.

Chickweed. Our field and written surveys conducted this past winter and spring have indicated that common chickweed is one of the most problematic winter annual weeds Indiana producers and crop advisors are currently trying to manage. In large plot field studies near West Lafayette in Tippecanoe County, we have observed quite a bit of chickweed that emerges in the spring and also as late as the last week of June. It was more commonly found in corn plots that received reduced rates of soil residual herbicides (particularly atrazine) and areas where our recent heavy rains diluted soil applied herbicides. It also appears that in these areas that still have a good canopy from corn, that this is an ideal environment for chickweed to survive until fall. This means that chickweed will have a good root system and a jump start on growth going into fall. In fields that fit this scenario, it would be good to consider fall herbicide applications for chickweed management. Chickweed is typically easier to control with fall herbicide applications than with spring applications. Fall applied glyphosate and Express are both effective treatments.

Pokeweed. We have observed in a number of fields where the pokeweed really took off in early June, reach 3 to 5 feet tall before it was sprayed. Although, we now observe a lot of dead above ground tissue, keep in mind that this weed is a perennial, the root balls can be very large, and effective control with 1 herbicide application is unlikely. As you walk soybean fields, look for new pokeweed sprouts from the base of "dead" plants, particularly in areas where soybean canopy development is poor. If live actively growing leaves are present and effective spray coverage can be achieved, consider a followup postemergence glyphosate or glyphosate + Classic or Synchrony application to further weaken these plants. If the soybeans are not Roundup Ready, Classic or Synchrony will provide the best control of

the products available. If you have fields with heavy pokeweed pressure, another option to strongly consider would be a fall application of glyphosate, glyphosate + 2,4-D, or glyphosate + dicamba before any frost.

	
<p>Common pokeweed. As seen on the Virginia Tech Weed Identification Guide web site. Accessed July 9, 2004 http://www.ppws.vt.edu/weedindex.htm</p>	<p>Common lambsquarters.</p>

Lambsquarter. We are getting a few scattered reports of lambsquarter escaping glyphosate. In most of these cases, lambsquarter was allowed to reach 12 inches or more before it was sprayed, and the recent warm weather has caused this plant to harden off. Keep in mind that lambsquarter is one of the tougher weeds to control with glyphosate (or any other product for that matter). The best hope in these situations is to hope for some rain and cooler weather to allow these plants to begin growing again and spray with the highest labeled rate of glyphosate.

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