

How Well Do You Know Your Enemy?

DR. KEVIN BRADLEY AND BROCK WAGGONER

COLUMBIA, MO.

Last season, we conducted the first year of a two-year survey to identify the most common weed species encountered in Missouri corn and soybean fields, and to better understand the management practices that producers are utilizing for the control of these species. In this article, we will discuss the most common weeds that were found in corn and soybean fields in 2011. In a subsequent article, we will explain our findings as it relates to the management practices that producers are utilizing for the control of these species in Missouri. This survey was primarily conducted throughout the northern half of the state across 50 different locations in 2011, and will be conducted in a similar number of locations throughout the state in 2012.

In 2011, we identified 23 different broadleaf and 10 different grass weed species in the corn fields that were surveyed. The top 10 most common species were waterhemp, morningglory species, yellow nutsedge, goosegrass, cocklebur, foxtail species, fall panicum, prickly sida, horseweed, and velvetleaf (Figure 1).

In the soybean fields that were surveyed there were 51 different broadleaf and 13 different grass weed species. Waterhemp and the morningglory species were again the top two most common species identified, with 87 percent of the soybean fields containing waterhemp (Figure 2). The other 8 species that rounded out the top 10 were prickly sida, fall panicum, velvetleaf, cocklebur, foxtail species, horseweed, large crabgrass, and horseweed.

If you are at all familiar with Missouri agriculture, there are plenty of things about the results in Figures 1 and 2 that are probably not all that surprising to you. For example, the fact that waterhemp is our most common species encountered in soybean fields is probably not a big surprise to anybody. However, there are some other species that made these top 10 lists that probably would not have been on those lists 5 or 10 years ago. Although we have no previous weed surveys to compare this data to, one of the species that seems to be occurring with more frequency in recent years is fall panicum. This grass tends to be

one of our later germinating species, and as such may escape the timing of our herbicide applications, especially in corn fields. Other weeds on these lists that are likely occurring with more frequency now than in the past include goosegrass and prickly sida.

Whatever weeds you have in your fields, it's important for you to know what they are in order for you to manage them appropriately. If you aren't certain of what weed species you have in your fields, we have an online weed id guide that can help. You can go to: <http://weedid.missouri.edu/index.cfm>, select whether your weed is a broadleaf or grass weed, and then use the keying system and select the appropriate answer to the remaining questions about your unknown species in order to narrow down the possibilities. Δ

DR. KEVIN BRADLEY: Associate Professor Plant Pathology, University of Missouri

BROCK WAGGONER: Graduate Research Assistant, University of Missouri

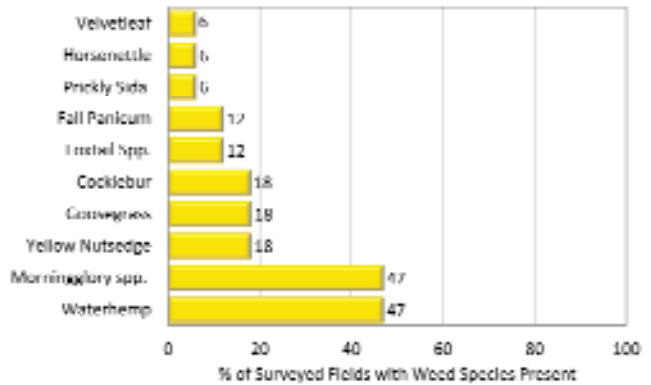


Figure 1. Ten most common weed species encountered in Missouri corn fields.

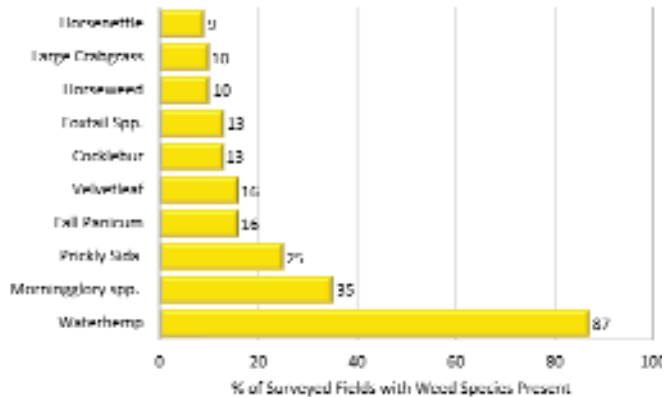


Figure 2. Ten most common weed species encountered in Missouri soybean fields.