

**Travis Legleiter**

*Weed Science Program Specialist*

**Bill Johnson**

*Professor of Weed Science*

*Purdue University*

*Extension Weed Science*

## **Will Winter Annual Weeds be an Issue This Year?**

Summer annual and herbicide-resistant weeds often overshadow winter annual weeds when producers formulate weed management strategies. With the unusually early spring and mild winter, winter annual weed growth is proceeding at a rapid pace and they will be more troublesome this year as compared to past years especially in no-till soybean acres. As I have driven around the state over the last couple of weeks I have noticed an increase in the amount of winter annuals showing up in corn stubble and can only assume these acres will be planted to no-till soybeans. The amount of time between now and herbicide burndown applications and subsequent soybean planting in those fields is dependent on the weather, but no doubt at least a couple of weeks away. If the weather stays warm and dry, then burndown applications and planting will start relatively early on the calendar and should not be adversely affected by these winter annual weeds. Although if the weather turns cold and wet, keeping sprayers and planters out of the field, then the already heavy winter weed pressures will increase and become much more difficult to control. Increased winter annual infestations will slow soil drying, further delay planting, cause mechanical planting interference, and are harder to control with herbicide burndown applications. As well as fields with prolonged infestations of henbit and purple deadnettle can be at risk of high soybean cyst nematode populations.

### ***Winter Annual Weed Burndown Applications***

Some of the common winter annual weeds encountered in Indiana are henbit, chickweed, purple deadnettle, shepherd's purse, and field pennycress. These common weeds, while fully capable being troublesome for the reasons mentioned above, are typically not considered to be hard to control weeds. A burndown containing a non-selective herbicide such as glyphosate (Roundup) plus either 2,4-D, saflufenacil (Sharpen, Verdict, Optill, and Optill PRO), or chlorimuron (Classic, Synchrony XP), will effectively control these weeds when applied at an appropriate time. Other burndown programs to consider are those that would replace glyphosate with Liberty or paraquat. The use of these programs will reduce selection pressure for glyphosate-resistant weeds. However it is important to use Liberty and gramoxone properly, that is, add the appropriate tankmix partners to ensure complete control of winter annual weeds.



Burndown applications are most efficient when made to young actively growing weeds. The likelihood of making soybean burndown applications to young winter annuals this spring is unrealistic as many are already flowering, but a number of practices can be used to assure that a burndown application is effective. Producers may consider making applications to relatively less mature weeds a few weeks prior to soybean planting. This will also allow time for dense mats of winter annual weeds to breakdown resulting in higher soil temps at planting as well as less mechanical planter interference. If choosing to make early burndown applications, producers should also include a residual herbicide to keep the field clean of weeds up to and through soybean planting. Those choosing to wait until just prior to soybean planting to make burndown applications should consider using increased herbicide rates to assure an effective kill of mature winter annuals.

# Will Winter Annual Weeds be an Issue This Year?

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## Troublesome Winter Annual Weeds

Two winter annual weeds that are much more troublesome to control and are already showing up as prevalent weeds in Indiana this spring are wild garlic (which is actually a perennial weed) and marestail. Producers encountering these two weed species need to consider management strategies to control populations as early as possible as both species can be difficult to control in advanced plant growth stages.

Wild Garlic has become much more prevalent in agronomic fields this year especially in southern Indiana. Its hollow leaves, underground bulblets, and garlic to onion odor can help identify wild garlic. This weed is not effectively controlled by typical burndown herbicides mentioned above. Wild garlic can be controlled with a thifensulfuron or chlorimuron-containing product that is applied to plants that are less than 12" tall. Further details of wild garlic biology and control will be covered in a near future article.

Marestail will emerge in both the fall and the spring as a low growing rosette and bolt from early spring to summer. Once in the bolting stage and taller than a few inches, marestail is very difficult to control with herbicide applications. Plants that emerged last fall are undoubtedly already beginning to bolt and will be beyond that ideal application stage when soybean burndown applications begin. Producers should consider making early burndown applications to fields infested with marestail as well as including a residual herbicide at a full rate to reduce the amount of marestail emergence prior to and after soybean planting. For more information refer to the "Control of Marestail in No-till Soybean" publication released in collaboration by Ohio State and Purdue Universities. The following link will provide the PDF version of this publication.

[http://agcrops.osu.edu/specialists/weeds/marestail/marestailfact09\\_000.pdf/at\\_download/file](http://agcrops.osu.edu/specialists/weeds/marestail/marestailfact09_000.pdf/at_download/file)

## Summary

While much is to be seen between now and soybean planting, producers need to be aware that winter annual weed control may be more difficult than in past years because of the mild winter and recent warm temperatures. Strategies such as early burndown applications, increased herbicide rates, and the use of residual herbicides need to be considered in order to avoid planting delays and inference that can be caused by winter annual weeds. Producers with a history of SCN infestations also need to be aware of the harboring abilities of certain winter annual weed species. (Refer to Purdue publication WS-36 for more information on winter annuals and soybean cyst nematodes)

Information listed here is based on research and outreach extension programming at Purdue University and elsewhere.

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