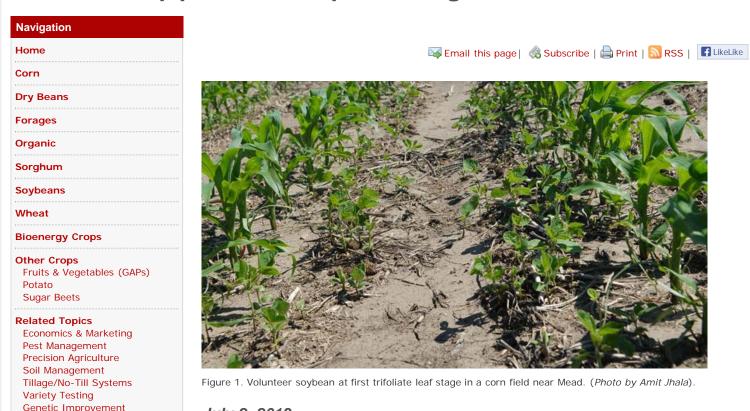


Nebraska crop production & pest management information



July 2, 2013

Control of Glyphosate-Resistant Volunteer Soybeans in Corn

Recently we received several inquiries about the presence of glyphosate-resistant volunteer soybeans in corn fields and cost-effective control options. These volunteers emerge from seed that shattered before soybean harvest or fell during combining. Historically, soybeans are not considered a serious volunteer weed problem in corn because they are not very competitive and several herbicide options are available to control them in corn. However, with the drought last year and harvest losses, there are substantial populations of volunteer soybeans in some corn fields this year. If populations are high and left uncontrolled, they may cause yield loss in corn.

In some areas wet soil conditions due to early spring rains delayed pre-plant/pre-emergence herbicide applications in corn. In other fields excessive rainfall washed away the pre-plant or pre-emergence herbicides that had been applied. These scenarios provided ample conditions for volunteer soybeans to emerge. Postemergence herbicides are the only option at this time to control emerged volunteer soybeans in corn and the window for application is quickly closing.

The size of volunteer soybeans and corn at the time of herbicide application will affect how well herbicides control them. At this time the best control option for volunteer soybeans is a herbicide containing dicamba such as Status. It can be applied at 5 oz per acre in corn up to 36 inches tall. Maximum labeled rate per application is 10 oz per acre (this may cause injury on corn); the maximum rate per season is 12.5 oz per acre. Stinger would be another option and can be applied in corn up to 24 inches tall at a rate of 0.25 to 0.5 pint per acre. Armezon/Impact (topramezone)

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If volunteer soybeans are at V2 to V3 (second to third trifoliate)

If volunteer soybeans are at V2 to V3 (second to third trifoliate) stage, application of herbicides such as atrazine plus HPPDs (Callisto, Laudis, or Impact) might be a good option due to their crop safety. Early postemergence applications are recommended for best control.

is one of the HPPD-inhibiting herbicides that can be applied up to

the V8 stage of corn at 0.5 to 1 fl oz per acre.

Figure 2. Volunteer soybeans above third trifoliate stage in V5 corn are difficult to control. (*Photo by Amit Jhala*)

Because 2,4-D is a cost effective option, some growers may prefer it for volunteer soybean control; however, a study conducted at North Dakota State University suggests that

soybeans are less sensitive to 2,4-D compared with dicamba (Clarity, Status) or clopyralid (Stinger). Dicamba and 2,4-D cannot be broadcasted on corn over 8 inches tall unless drop nozzles are used to place herbicides below the whorl. When corn is over 20 inches tall use drop nozzles to avoid herbicide injury to corn.

Hornet is a selective broadleaf herbicide that contains clopyralid. It can be applied pre-plant, preemergence, or postemergence for control of broadleaf weeds including volunteer soybean in field corn. Do not exceed a total application rate of 6.0 oz per acre of Hornet WDG in a single crop year. Hornet WDG can be tank-mixed with Callisto and atrazine for broad spectrum weed control in corn fields. TripleFLEX/SureStart is a combination of acetochlor (Harness), clopyralid (Stinger), and flumetsulam (Python). It may be used for early postemergence control of volunteer soybeans, but will not be very effective if soybeans are above second trifoliate stage.

Always read the label before applying any herbicide.

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