

Pre-seed tank mixes maximize early-season weed removal

By Jennifer Ewankiw

Early weed removal is the holy grail of weed control. Every field crop grown in western Canada benefits from reduced weed competition, through emergence and the early seedling growth stages.

Weeds are extremely competitive and if they are too large they are a lot harder to manage. If established early, they suck up moisture, nutrients and sunlight otherwise used by a growing crop. Getting seedlings out of the ground and growing strong before weeds can take hold is a big step on the road to maximum yields and profits.

One of the most effective ways to control weeds early and delay resistance is with a pre-seed tank mix. Know which weeds you're targeting and tank mix glyphosate with a herbicide in a different group to ensure at least two effective modes of action on those weeds. Key here is two effective modes of action as inadequate control of those tough to control and high risk weeds such as kochia, cleavers and wild oats puts more pressure on glyphosate to clean up.

Reduce Resistance Pressure

Resistance is a numbers game. The fewer weeds you have at the time of application, the less chance you have of selecting for resistance. There are lots of pre-seed tank mix options; below are some recommended products.

| Crop | Tank Mix Recommendation | Problem Weeds Controlled |
|---|---|---------------------------------------|
| Canola | Conquer [®] or Pardner [®] | Volunteer Canola, Kochia |
| Cereals & Pulse Crops (including corn and soybeans) | Heat [®] LQ | Cleavers, Volunteer Canola and Kochia |
| Pulse crops & Flax (residual) | Authority [®] or Authority [®] Charge | Kochia |

A tank-mix partner that delivers short-term residual control provides additional time and flexibility. Then when an in-crop application is made, there are fewer weeds present and the weeds there are presumably smaller and easier to control. A crop rotation that can incorporate residual herbicides in the pre-seed burndown helps. Additional benefits will also be seen in row crops that use wider rows, where it takes longer for the crop canopy to close in. But there's a benefit in pulse crops and canola, too.

The key takeaway is to tank mix at least one application of glyphosate every year. The pre-seed burnoff application is the easiest. Using multiple modes of action goes a long way to limit the spread of herbicide resistant weeds and keep glyphosate an effective weed control product well into the future.

"I think growers understand how important early season weed removal is, they just sometimes can't get into the field," says Elan Noga, CCA, P.Ag, an agronomist at South Country Co-op in Brooks, Alta. "So especially with glyphosate, you're better to spray too soon than too late, as long as you're still within the label."

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