

# Spin-Aid™ Herbicide

## Add Spin-Aid™ and Increase Control of Yield Robbing Weeds - It Makes \$ense!

Sugarbeet is a high value crop requiring high annual expenditure for production. Weed management is one of the main production costs associated with sugarbeet. A large portion of this cost is spent establishing a weed-free environment due to the sensitivity of sugarbeet to early weed competition because of slow canopy closure and low plant height (Scott & Wilcockson 1976).

If a preemergence herbicide is not used, or adequate moisture is not received to activate, weed escapes must be controlled through the use of herbicides applied postemergence or costly hand hoeing. With the introduction of glyphosate tolerant sugarbeet cultivars, growers have become reliant on simply spraying glyphosate to control most weeds postemergence. This reliance and overuse of glyphosate has selected for weeds that are now resistant to glyphosate; kochia being one of them.

Kochia's large plant size and girth make it a fierce competitor for light. Reduction in sugarbeet yield from kochia competition is primarily due to competition for light. Research has demonstrated that just 0.2 plants/m of row (1/17 row foot) reduced light hitting the top of sugarbeet canopy by 42% and the bottom by 27% resulting in a 12.5% reduction in yield (Mesbah et al 1994: Weed Technol 8:754-759). At a 26 ton/acre average with a \$46.80 beet payment, that equates to \$152/A loss. **Increased kochia competition to 1.5 plants/m of row (1/2.2 row foot) resulted in 78% reduction in light hitting top of sugarbeet canopy and the bottom by 76% resulting in 62.5% reduction in yield (\$761/A loss).**

Not only does adding Spin-Aid™ to the POST program improve control of kochia and common lambsquarters to protect yields **this season**; but will also reduce the selection for and spread of these resistant weeds reducing future weed control costs.

### Adding Spin-Aid Just Makes \$ense!

	Spin-Aid Rate Oz/Ac	Spin-Aid Estimated Cost \$/Ac <sup>a</sup>	Average Yield Loss To Kochia \$/Ac <sup>b+c</sup>	ROI to the Grower \$/AC <sup>d</sup>
No Weed Competition				\$1,216.80
1 Kochia Plant 2.2 row ft			<b>\$(760.50)</b>	\$456.30
Spin-Aid Kochia Control Program: DIME SIZE - 2-lf Sugarbeet Start	16 + 24 = 40oz	\$78.13	\$-	<b>\$1,138.67</b>
Spin-Aid Kochia Control Program: QUARTER SIZE - 4-lf Sugarbeet Start	32 + 48 = 80oz	\$156.25	\$-	<b>\$1060.55</b>
<b>ASSUMPTION ESTIMATES</b>				
<sup>a</sup> MSRP of \$250/gallon				
<sup>b</sup> Mesbah et al (1994) Kochia and green foxtail interference in sugar beets. Weed Technol 8:754-759				
<sup>c</sup> Based upon 26 ton avg crop & \$46.80 beet payment (5-yr avg) at 17.5% crop with 1.5% loss to molasses				
<sup>d</sup> ROI to grower for controlling Kochia				

The table clearly shows the ROI when including Spin-Aid in programs to control kochia at this critical stage of sugarbeet plant development. Additionally, this program will also control common lambsquarters at the same time!

**NOTE: Starting the Spin-Aid program early, to dime-sized kochia, can save an additional \$79 per acre (on Spin-Aid)!**

Please refer to the MN and ND 24(c) Special Local Needs labels for specific rate recommendations.