

Common milkweed control in barley (2004)

A study was initiated in 2003 to determine the short- and long-term impact of herbicides on common milkweed control. Barley was seeded May 20, 2003 north of Minot, ND. The 2-leaf, 5-leaf, and pre-harvest (PRE-H) treatments listed below were applied June 11, June 17, and August 14, 2003 respectively. All milkweed plants in each plot were counted on June 17, 2003 and again on June 21, 2004.

Glyphosate applied pre-harvest in 2003 significantly reduced milkweed densities more than in-crop treatments alone. Pre-harvest glyphosate reduced milkweed densities 91-98% compared to 54-74% and 45-50% for in-crop treatments containing Express and Aim, respectively.

Wheat was planted into the study area in 2004. A blanket treatment of Express (0.33 oz) + MCPE (0.75 pt) + Starane (0.5 pt) + Puma (0.66 pt) was applied June 24, 2004. Glyphosate was applied pre-harvest over the entire plot area September 7, 2004. The milkweed population will continue to be monitored.

Treatment ^{ab}	Rate	Timing	Common milkweed	
			Jun 17 2003	Jun 21 2004
			— plants / plot —	
Express + NIS/ Express + MCPA + Starane + Puma	0.167 oz + 0.25% v/v/ 0.167 oz + 0.75 pt + 0.5 pt + 0.67 pt	2-leaf/ 5-leaf	112	45
Express + MCPA + Starane + Puma	0.33 oz + 0.75 pt + 0.5 pt + 0.67 pt	5-leaf	111	42
Express + NIS/ Express + MCPA + Starane + Puma/ Glyphosate	0.167 oz + 0.25% v/v/ 0.167 oz + 0.75 pt + 0.5 pt + 0.67 pt/ 26 fl oz	2-leaf/ 5-leaf/ PRE-H	123	6
Express + MCPA + Starane + Puma/ Glyphosate	0.33 oz + 0.75 pt + 0.5 pt + 0.67 pt/ 26 fl oz	5-leaf/ PRE-H	132	11
Express + MCPA + Starane + Puma ^c	0.33 oz + 0.75 pt + 0.5 pt + 0.67 pt	5-leaf	130	32
Aim + MCPA + Puma	0.5 oz + 0.75 pt + 0.67 pt	5-leaf	121	60
Aim + MCPA + Puma	1 oz + 0.75 pt + 0.67 pt	5-leaf	74	35
Aim + MCPA + Puma/ Glyphosate	0.5 oz + 0.75 pt + 0.67 pt/ 26 fl oz	5-leaf/ PRE-H	97	2
Aim + MCPA + Puma/ Glyphosate	1 oz + 0.75 pt + 0.67 pt/ 26 fl oz	5-leaf/ PRE-H	128	3
Aim + MCPA + Puma ^c	0.5 oz + 0.75 pt + 0.67 pt	5-leaf	89	45
Aim + MCPA + Express + Puma	0.5 oz + 0.75 pt + 0.167 oz + 0.67 pt	5-leaf	107	32
Aim + MCPA + Express + Puma/ Glyphosate	0.5 oz + 0.75 pt + 0.167 oz + 0.67 pt/ 26 fl oz	5-leaf/ PRE-H	92	4
LSD (0.05)			NS	24
CV			49	64

^aGlyphosate applied was Roundup Ultra Max with AMS at 2.5 gal/100 gal.

^bExpress (0.33 oz) + MCPE (0.75 pt) + Starane (0.5 pt) + Puma (0.66 pt) was applied as a blanket treatment in 2004.

^cA post-harvest glyphosate application was planned, but not applied in 2003 due to no weed regrowth.