

Herbicide Evaluation for the Control of Wild Parsnip

Purpose:

Wild parsnip is an invasive biennial weed spreading mostly along roadside, ditch banks, rights-of-way, disturbed sites and to some extent in pastures and reduced-tillage fields. After coming in contact with this plant, humans can develop mild to severe cases of dermatitis. The skin reaction can range from a mild burning sensations and reddening of the skin to severe skin blistering, extreme burning sensations and inflammation. Wild parsnip reactions are often confused with the allergic reaction to poison-ivy.

Little quantitative information is available on chemical control options for the control of wild parsnip other than the use of glyphosate. However, glyphosate destroys all the vegetation sprayed, resulting in the exposure of bare ground and the potential for soil erosion and/or ditch bank destabilization. A field experiment was initiated in 2009 to rate efficacy of five broadleaf weed herbicides that could control wild parsnip without impacting grasses.

Methods:

Five broadleaf weed herbicides were applied to wild parsnip at the vegetative stage in a replicated trial on October 10, 2009. Wild parsnip density ranged from 5 to 20 plants per ft². Weed control efficacy data was collected in May and in June 2010.

Wild Parsnip



Skin Reaction to Wild Parsnip Contact



Results:

Average control rating

Treatments	Herbicide Rate	Control
Check		0%
Distinct WDG	0.115 Kg/acre + Non ionic surfactant @ 2.5 L/1000 L + 28-0-0 @ 12.5 L/1000 L	86%
Milestone	0.2 L/acre	99%
Estaprop Plus (582 g/L)	0.7 L/acre	61%
Banvel II 480 g/L	0.5 L/acre	24%
Classic 25DF	0.14 g/acre + Agral 90 @ 2.0 L/1000 L	64%

Summary:

The herbicide Milestone was most effective, providing nearly 100% control of wild parsnip at a cost of approximately \$40 per acre. Distinct GDW was also quite effective, providing 86% control at a cost of approximately \$15 per acre.

Next Steps:

To assess the benefits of sequential herbicide applications, in June 2011 herbicide treatments will be overlaid on top of the original block to control the newly established wild parsnip seedlings.

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