

The facts on Glyphosate-Resistant Canada Fleabane

Know Canada fleabane by its numbers.

1,000,000

Each plant can produce up to one million seeds per season.¹

500

Seeds can travel up to 500 km with the wind each season.²

71

This is the average yield-loss percentage in hardest-hit soybean fields.³

2

Canada fleabane primarily germinates during two seasons – spring and fall – but it can emerge throughout the growing season.⁴

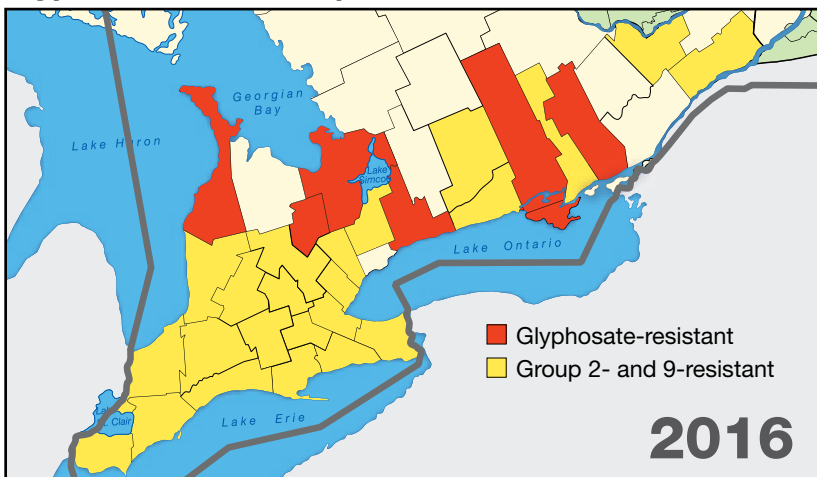
Distribution of Canada fleabane in Ontario.

Glyphosate-resistant Canada fleabane



Source: Sikkema, 2010

Glyphosate- and multiple-resistant Canada fleabane



Source: Sikkema, 2016

Identification of Canada fleabane.

The vegetative stage

At the vegetative stage, Canada fleabane leaves are hairy, round and oval with 2-3 notches in the margins and round apex that tapers.⁵ The leaves are dull green, turning pale green at flowering.⁶ The stem is erect and branched in the upper part.⁵ The fall-emerged plants will grow in a rosette.



Source: BASF

The reproductive stage

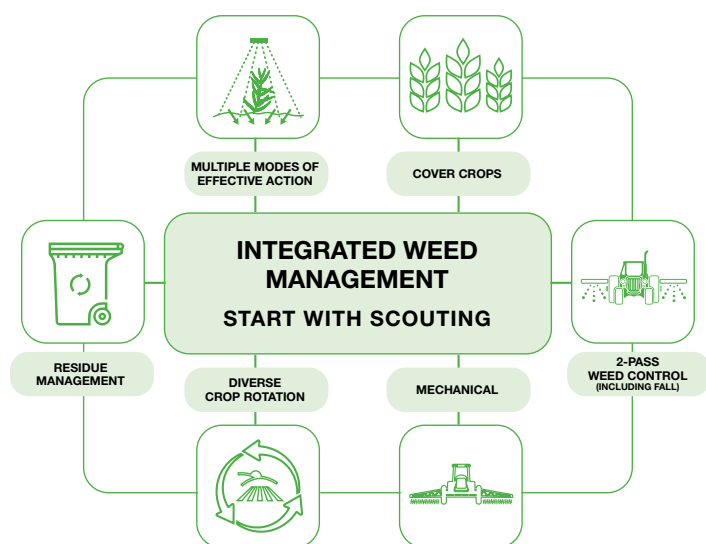
Canada fleabane reproduces by seeds and, at the reproductive stage, has fuzzy, white-green flowers with a yellow centre.⁵ There are multiple flowers on each stem.⁵



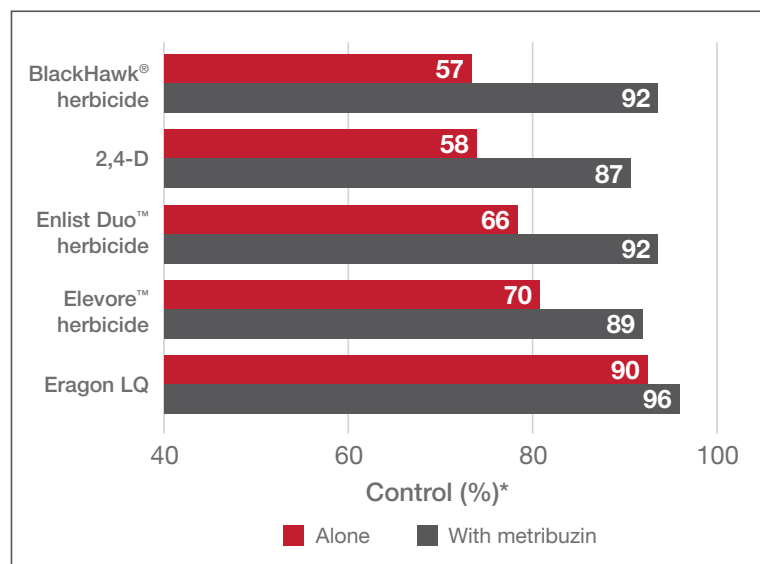
Source: BASF

The solutions to manage glyphosate-resistant Canada fleabane

An integrated weed management strategy against Canada fleabane



Eragon® LQ herbicide is the ultimate pre-plant option for Canada fleabane control



*8 weeks after application
Source: Sikkema, University of Guelph, 6 observations

BASF solutions for managing Canada fleabane in soybeans

	Glyphosate-tolerant soybeans	Dicamba-tolerant soybeans	Liberty® tolerant soybeans	Enlist E3™ soybeans	Conventional/IP soybeans
Pre-plant/ Pre-emergence	Eragon LQ or Integrity® herbicide or Optill® herbicide + metribuzin + glyphosate	Engenia® herbicide + Eragon LQ or Integrity or Optill	Eragon LQ or Integrity or Optill + metribuzin + glyphosate	Eragon LQ or Integrity or Optill + metribuzin + glyphosate	Eragon LQ or Integrity + Conquest® LQ herbicide
Post-emergence	-	Engenia (early post-emergence if necessary)	Liberty 200 SN	Liberty 200 SN	-
Pre-harvest	Eragon LQ				
Post-harvest	Distinct® herbicide				

Tips for managing Canada fleabane.

1. Since Canada fleabane is wind dispersed, you aren't just managing your own population, but also your neighbours' and others in close proximity. That's why you may still have Canada fleabane even if you do everything right.
2. Tillage isn't the answer. Spray before using tillage and have an in-crop or fall management plan.
3. Use high water volumes.
4. Make an application when the weeds are still small and actively growing.
5. Use multiple modes of effective action.

¹ Byker et al., "Occurrence of glyphosate and cloransulam resistant Canada fleabane (*Conyza canadensis* L. Cronq.) in Ontario," Can. J. Plant Sci., 2013.

² Shields et al., "Horseweed (*Conyza canadensis*) seed collected in the planetary boundary layer," Weed Science, 54: 1063-1067, 2006.

³ Baerg, M., "Limit corn and soybean losses due to GR Canada fleabane," Top Crop Manager, 2018.

⁴ Tozzi and Van Acker, "Effects of seedling emergence timing on the population dynamics of horseweed (*Conyza canadensis* car. canadensis)," Weed Science, 62(3):451-456, 2014.

⁵ "A field guide to broadleaf weeds," presented by the Ontario Ministry of Agriculture, Food and Rural Affairs, University of Guelph and Bayer CropScience.

⁶ Bouchard et al., "Identification guide to the weeds of Quebec," Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec, 1999.

Always read and follow label directions.

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