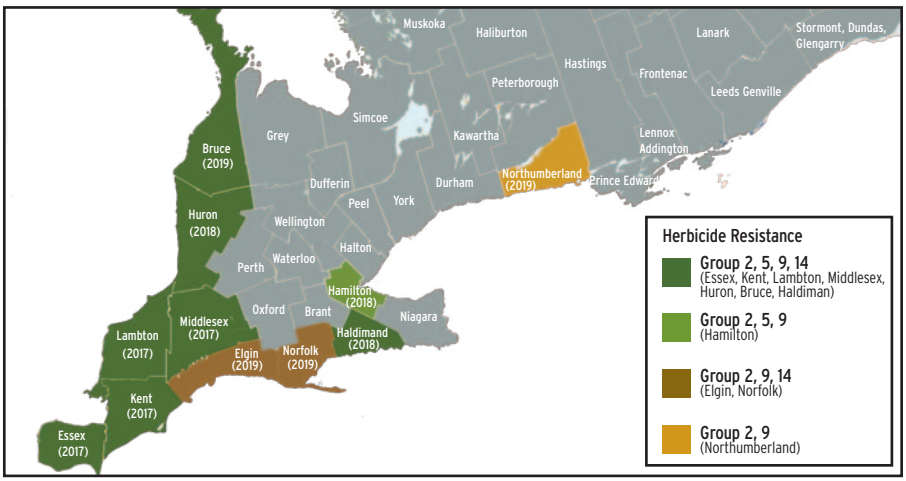
Waterhemp

Is it hiding in your fields?

THREAT

Waterhemp is becoming a greater concern across Ontario as resistant populations are appearing more frequently and in new counties each year. The dioecious nature of this weed and its high seed production are two factors that are influencing its spread across Ontario. •

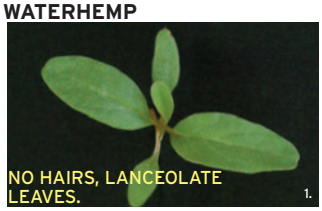


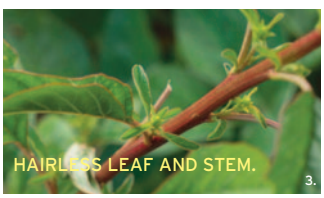
IDENTIFICATION - WATERHEMP VERSUS PIGWEED VARIETIES

IDENTIFICATION

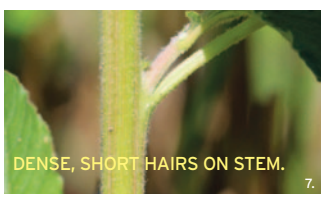
Waterhemp is a weed of the pigweed (Amaranth) family. Family members include pigweeds such as redroot, green, smooth, prostrate, and tumble as well as the United States menace, Palmer amaranth. As waterhemp looks similar to redroot and green pigweed, look for the differences in the photos below. Also, waterhemp has male and female plants (dioecious) that look like two different weed species when they mature.

WATERHEMP

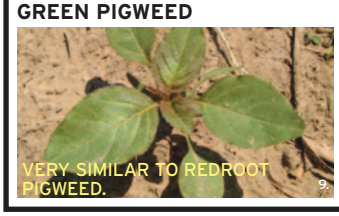




REDROOT PIGWEED



GREEN PIGWEED



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Agronomy alert

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CONTROL

CONTROL SOLUTIONS

Waterhemp's ability to germinate and emerge throughout the growing season allows it to elude some of the more common herbicide programs.

These solutions have been shown to help control waterhemp:

- Residual herbicide programs are necessary as the seed can germinate and emerge after burndown applications.
- There is multiple herbicide-resistant waterhemp in Ontario. A program approach with multiple modes of action should be implemented.
- Reduce the spread of this weed by properly identifying this weed species and then isolating the contaminated fields by restricting equipment movement to clean fields until the equipment is thoroughly cleaned.

TESTING FOR RESISTANCE

If you suspect you have resistance or want to confirm that you have waterhemp or pigweed at seedling stage or later, you can participate in a current testing project to find out. Testing requires a small amount of leaf tissue at any growth stage. Sample kits and directions can be sourced by contacting Kristen Obeid, Weed Management Specialist – Horticulture, OMAFRA, cell: 519-965-0107, email: kristen.obeid@ontario.ca.

More weed control recommendations can be found on the Pest Manager App (https://gfo.ca/about/mobile-apps/)

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Photos on reverse are courtesy of:
Christy Shropshire: 1,5,6,7,9,10,11,12
Lauren Benoit: 2,3
Peter Smith: 4,8

Visit www.gfo.ca/agronomy to download.
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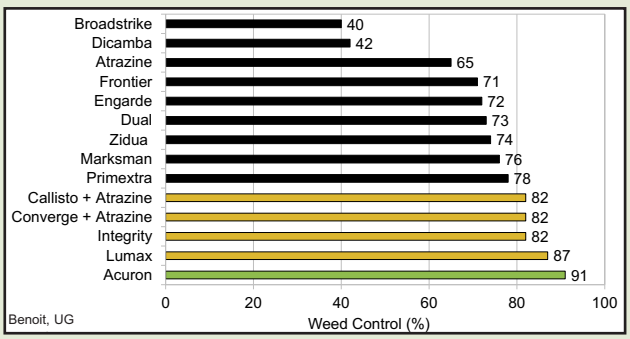
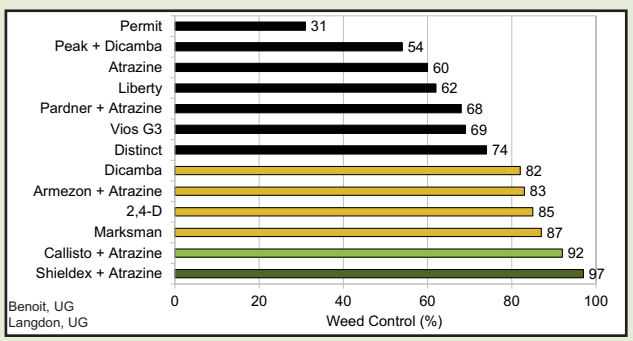
CORN PROGRAM CONTROL ON MULTIPLE-RESISTANT WATERHEMP

CORN, PRE-EMERGENCE.

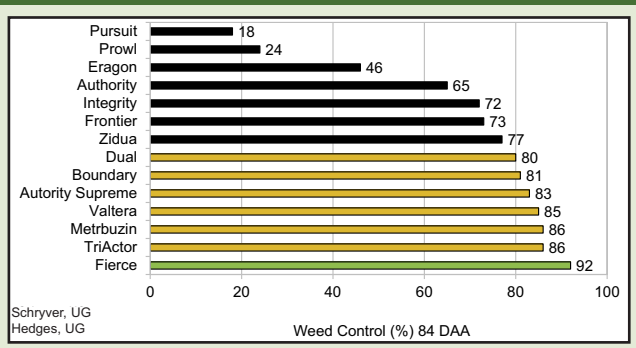


CORN, POST-EMERGENCE.



SOYBEAN PROGRAM CONTROL ON MULTIPLE-RESISTANT WATERHEMP

SOYBEANS, PRE-EMERGENCE.



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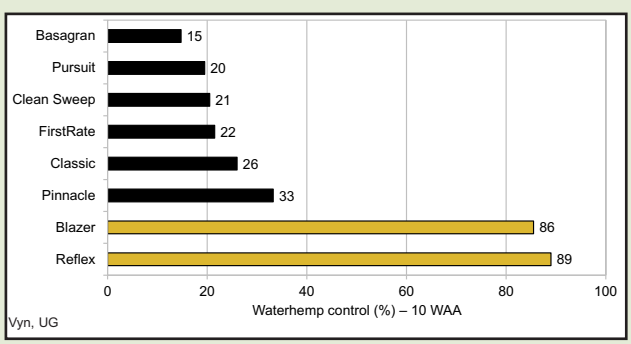

Chart key:

- Below 80% (not acceptable control)
- 80% - 89% (fair control)
- 90% - 95% (good control)
- 95% and over (excellent control)

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