

2022 Snobelen Farms Yield Challenge Newsletter

Weed of the Week: Fleabane



http://www.omafra.gov.on.ca/english/crops/facts/ontweeds/canada_fleabane.htm

Seedling

Seeds will germinate in the fall, sometimes the spring and even in the winter if there are some warm days. Plants that germinate in the fall will overwinter in the rosette stage. Young leaves are round-oval shaped and very hairy. Fall germinated plants will form a rosette while spring germinated will go straight to bolting.

Mature Plant

The plant is very hairy and can reach up to 1.5 meters tall. Mature leaves have toothed margin, are dark green in colour and have an alternate leaf orientation. Fleabane has many small white flowers, and they have a fluffy appearance; flowering occurs late July to late fall.

Favorable Conditions

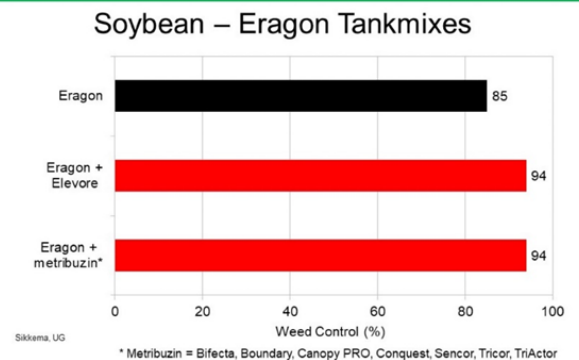
Canada fleabane does well in damp, cool conditions that have little to no soil disturbance. For example, no-till cropping systems.

Management

Fleabane control is best when the plant is less than 10cm in height or diameter. According to Peter Sikkema's research pre-plant herbicide applications are most effective at controlling fleabane in IP soybeans. An integrated weed management is helpful to limit herbicide resistant fleabane:

- Crop rotation
- Use of multiple modes of action and limited reliance on glyphosate: in IP soybeans the use of Roundup + Eragon + Sencor applied pre-plant control glyphosate-resistant Canada fleabane nicely
- For IP soybeans Eragon applied preplant Or Eragon applied with metribuzin or Elevore
- Use of cover crops
- Make fall weed control a priority
- Use a soil applied herbicide

Glyphosate-Resistant Canada Fleabane

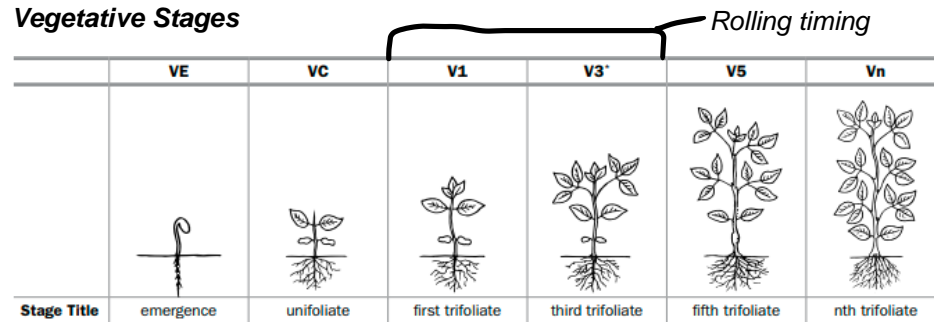


Courtesy of Peter Sikkma

Soybean Growth Stages

Now that a high percentage of the soybeans have been planted, it is a good idea to become familiar with their vegetative and reproductive stages. Understanding what growth stage your soybeans are at will help when determining things like rolling timing, fungicide timing, fertilizer timing etc. *Images courtesy of OMAFRA*

Vegetative Stages



VE- Emergence: the seedlings have emerged

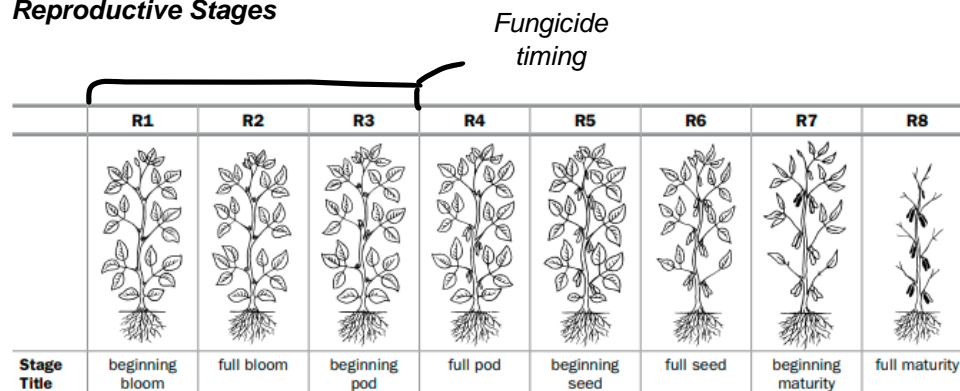
VC- Unifoliolate: hypocotyl is straight, and cotyledons have unfolded, unifoliolate leaves have unrolled, and the growing point is above the ground

V1- First trifoliolate: first trifoliolate is open

V2- Third trifoliolate: three trifoliolate leaves emerged and open

Vn- nth trifoliolate: n representing the number of open trifoliolate

Reproductive Stages



R1- Beginning bloom: there is one open and visible flower

R2- Full bloom: there is one open flower on one of the top two nodes on the main stem

R3- Beginning pod: short pods on the top 4 nodes

R4- Full pod: the pods at the top four nodes are 2cm

R5- Beginning seed: seed can be felt in the pod on the upper 4 pods

R6- Full seed: seeds in the top 4 nodes fill the pod

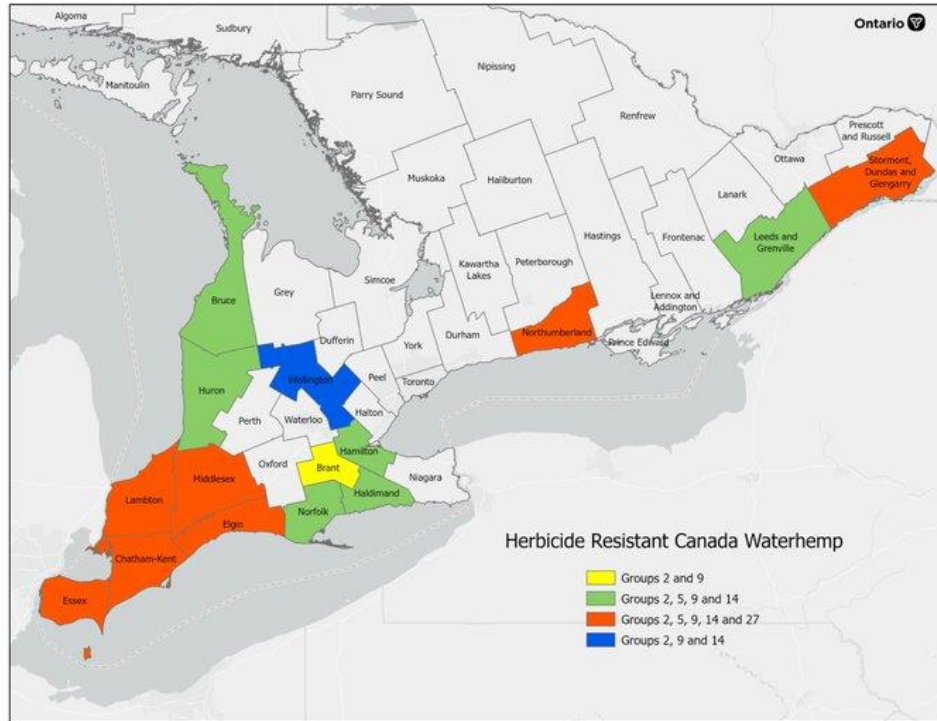
R7- Beginning maturity: a major pod has become brown

R8- Full maturity: atleast 95% of the pods have become brown



Herbicide Resistant Waterhemp

Waterhemp populations that are resistant to group 27 herbicides have been seen in 7 Ontario counties. Currently there are now populations of waterhemp that are resistant to 5 different herbicide modes of action. Like herbicide resistant Canada fleabane soil applied herbicides are an effective practice for early season weed control. It is important to scout your fields to know what you are dealing with.



Courtesy of Peter Sikkema

Examples of Soybean Herbicide Groups and their Trade names

Group 2	PURSUIT
Group 5	SENCOR
Group 9	GLYPHOSATE
Group 14	ERAGON LQ
Group 27	CALLISTO & AATREX (corn)



https://weedid.missouri.edu/weedinfo.cfm?weed_id=319

Controlling Multiple-Herbicide-Resistant Waterhemp in IP Soybeans

According to the Pest Manager app the best control for multiple-herbicide-resistant waterhemp (groups 2,5,9 &14) in IP soybeans is:

Pre-emerge

Trade name	Control percentage
Authority 480	90% control
Authority 480 + Boundary LQD	90% control
Bifecta co-pack	80% control
Commenza	80% control

Post-emerge

Trade name	Control percentage
Blazer, Ultra	90% control
Reflex + Turbocharge	90% control
Hurricane + Merge + 28% UAN	80% control

Growing Degree Days and Crop Heat Units

The following table will provide a look at the approximate growing degree days and crop heat units in your area for a planting date of May 10th.

Table 1: Cumulative growing degree days and crop heat units

Location	Growing Degree Days May 24-31st	Crop Heat Units May 24-31st	Cumulative Growing Degree Days	Cumulative Crop Heat Units
Brantford	430.3	165.8	1136.5	408.8
Lucknow	421.2	159.8	1122.3	399.0
Palmerston	407.1	148.8	1072.6	359.8
Stratford	408.9	149.9	1099.8	379.1
Tiverton	421.0	159.5	1121.4	398.8

Big News with ALPINE Plant Food!



Brendan Zettler and I sat down with ALPINE’s Regional Sales Manager, Ken Brett and District Sales Manager, Nick Cressman to talk Fertilizer. ALPINE is known as an industry leader in NPK liquid fertilizer technology. We talked about plant tissue testing and the benefits of using this tool. Ken and Nick answered many educational questions. If you are interested in learning more about ALPINE fertilizer and reading about our conversation with Ken and Nick, we will be sending out an email shortly.

ALPINE will be supplying those in the yield challenge with a plant tissue analysis. Someone from the Snobelen’s team will take a sample of your IP soybeans and send it in for analysis. You will be supplied with the results!