

## Tansy Ragwort Control In Grass Pastures

### Purpose:

Tansy ragwort is a noxious weed most often found in pastures and hayfields. It is a biennial or short-lived perennial that reproduces through seeds and roots. Tansy is poisonous to livestock and can cause liver damage. Symptoms that may occur after plant consumption include: weakness, high temperature, incoordination and yellow mucous membranes. Currently, there is no known anti-dote for this alkaloid based toxin.

In Eastern Canada, there are four herbicides which list tansy ragwort on their labels as being controlled: Banvel II (dicamba), 2,4-D Amine 600, Milestone (aminopyralid) and Restore II (aminopyralid/2,4-D). It is unclear, from reading each product's label, which herbicide would be the most effective at managing tansy ragwort. A trial was conducted to evaluate the performance of each herbicide.

### Methods:

A randomized strip trial with two replications was conducted at the Arkeil Research Station that evaluated five methods of control, four of which included herbicides and the fifth being mechanical control (digging up the plant). Tansy ragwort plants were 15 cm tall and 10-20 cm in diameter (Figures 1 and 2) at the time of treatment initiation. Visual control, expressed as a percentage of an un-sprayed check strips, was evaluated at 2, 4 and 8 weeks after application.



Figure 1: Tansy ragwort size at time of application



Figure 2: Tansy ragwort size at time of application

**Results:**

**Table 1: Summary of different management options to control tansy ragwort\***

Management Strategy	Rate	Effectiveness	
		2 weeks	7 weeks
Milestone	152 mL/ac	80%	80%
Restore II	850 mL/ac	80%	40%
2,4-D Amine 600	1.6 L/ac	50%	30%
Banvel II	1 L/ac	30%	10%
Mechanical Control (digging)	Roughly 30-60 seconds per plant	100%	100%

\*plant density was around 1,000/acre

**Summary:**

Milestone was the most effective herbicide evaluated in 2015. It caused the majority of plants to wilt and die. However, new plant growth has been observed since application but at levels much lower than all other treatments. Digging up tansy ragwort and removing all of the roots was also effective with no observed re-growth throughout the season.





**Figure 3: A flowering tansy ragwort plant during August**

**Next Steps:**

This trial will be replication in 2016 provided there are adequate populations of Tansy ragwort at the Arkell Research Station.

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