

# Weed Control in Galega



Galega (*Galega orientalis*) is a relatively new, perennial forage with origins between Europe and Asia and is currently imported into Canada from Scandinavia. The legume has the potential to rival the alfalfa currently being grown in Ontario, as a forage crop in both yield and protein content. Though its ability to compete with weeds increases with the development of its canopy, in the first year of establishment Galega is a poor competitor to emerging weeds. This does improve in subsequent years due to its earlier growing time in the spring, however the establishment year is crucial to the crop's overall success.

Through Partnership with LUARS (Lakehead University Agriculture Research Station), RAIN has developed a project that is taking place in Algoma and Thunder Bay. The research is being conducted in order to find the optimum seeding time of Galega in its establishment year, in terms of weed control and yield. This will be performed in Algoma through the following four trials while measuring for growth, stand, and weed percentage:

1. Alfalfa seeded at 15kg/ha, as a check plot
2. Galega seeded at 30 kg/ha (seeded in spring as early as possible)
3. Galega seeded at 30 kg/ha (allow weed to come up in spring, kill the weeds and then seed galega)
4. Galega seeded at 30 kg/ha (seed mid- July after weeds have been killed)

The trial is being duplicated in Thunder Bay but with added trials involving herbicide rates. It will look for growth, stand and weed percentage:

1. Alfalfa seeded at 15 kg/ha, as a check plot
2. Galega seeded at 30 kg/ha (seeded in spring as early as possible)
3. Galega seeded at 30 kg/ha (allow weed to come up in spring, kill the weeds and then seed galega)
4. Seeded after barley harvested at the boot stage
5. Galega seeded at 30 kg/ha (seed mid- July after weeds have been killed)
6. After pre-plant incorporation of Rival (trifluralin) @ 3L/ha
7. After pre-plant incorporation of Sencor @475 g/ha
8. Sprayed with Sencor @ 275 g/ha post-emergence
9. Sprayed with Basagram Forte @1.75L/ha post-emergence
10. Sprayed with pursuit @210 ml/ha + Ag-Surf @ 0.25% v/v post-emergence

In both Algoma and Thunder Bay during the first year of growth, it was noted that if the Galega was seeded after the weeds had been killed off, those plots showed less weed pressure. Thunder Bay also noted that #6 (after pre-plant incorporation of Rival (trifluralin) @ 3L/ha) and #10 (sprayed with pursuit @210 ml/ha + Ag-Surf @ 0.25% v/v post-emergence) showed less weed pressure as well. Killing off the weeds and then planting Galega showed the most promise. This trial will be continued for the next two years, with two harvest dates in 2019. This information will allow us to not only record the weed yield but also the Galega yield as well.



For more information about this project, please contact:  
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