

ADOPT A PROJECT - 20211038

20211038 - Methods for establishing saline tolerant forage mixes

Account: Southeast Research Farm

Total Funds Requested: \$56,000

Funded: Yes

Amount: \$11,200

Objectives:

- 1) Compare two seeding methods for four forages or forage mixes either as a simple planting or combined with a barley cover crop in a saline area
- 2) compare with canola for economic value in 2023 to assess the difference between forage and annual crop productivity in saline areas

Why is this Important?

- 1) Farmers tend to want to use a 'cover crop' to increase biomass production on the establishment year and suppress weed growth, but the cost of this cover crop is not included in the eligible establishment costs. Establishment in marginally saline areas is tricky and requires the right sort of plants
- 2) There are many acres within fields of grainland that are currently unproductive and ill-suited to annual grain production of canola and pulses
- 3) Producers are under seeding forages to gain a cash crop while forage is established, but it is not recommended. Nevertheless, there are benefits that should be highlighted so it can be a recommended practice.

Methodology:

- 1) Using Canola in saline soil as a control, also plant 8 other mixes, with half being saline forage mixes. Replicate 4 times.
- 2) under crop half of the plots with barley
- 3) Apply nutrients and weed control accordingly
- 4) Measure emergence, plant count, biomass, and persistence

Notes: Will occur at Clavet, SERF and WARC

Summary:

There are many acres within fields of grainland that are currently unproductive and ill-suited to annual grain production of canola and pulses. Farmers tend to want to use a 'cover crop' to increase biomass production on the establishment year and suppress weed growth, but the cost of this cover crop is not included in the eligible establishment costs.

Forage establishment in marginally saline areas is difficult and requires the right sort of plants.

To provide more insight, this project will compare two seeding methods for four forages or forage mixes either as a simple planting or combined with a barley cover crop in a saline area. They will then compare the economic values in 2023 to assess the difference between forage and annual crop productivity in saline areas.