



2021-093: Exploring the potential of including chicory in pasture for beef cattle

Researcher: Aklilu Alemu

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Chicory is a perennial, drought-tolerant (deep-rooting), herbaceous, high-yielding, multi-purpose crop found in natural grasslands of Europe, Australia, and North America. Winter-hardiness has been noted in parts of the US and Atlantic Canada, though little information collected in this part of North America and Canada for livestock industry.

Considering that chicory also has been noted for its own NDF and high crude protein, good weight gain, nitrogen efficiency use, milk production, low methane and low parasite load compared to conventional grass-legume pasture, the SCA Board thought it was worth further investigating this forage.

Dr. Aklilu Alemu from the Agriculture and Agri-Foods Research Station in Swift Current will note the yield and nutritional quality of forage chicory as fresh biomass and as hay at AAFC Swift Current and LFCE over the course of 3 years. He and his team will also study the grazing behavior of livestock on pasture, and their associated performance and nutrient use, as well as their parasite load and methane emissions.

Plant survival is also quite important, so it will be assessed over four years, as well as chicory's association with soil health. An economic analysis will also be included, coupling forage establishment costs with animal performance and yield data over time.