



Tall Buttercup (*Ranunculus acris*)

Provincial Designation: Noxious

Overview:

Perennial that spreads only by seed. Tall buttercup contains a bitter, irritating oil called protoanemonin that is toxic to livestock (especially cattle) and other grazing animals. While generally avoided by grazers, poisonings can occur when fresh stems and leaves are consumed. Dried plants are no hazard as the toxic oil evaporates quickly. In mild cases, tall buttercup causes irritation or blistering of the skin, mouth and digestive tract. In more severe cases, it can cause paralysis, convulsions and death. Fresh tall buttercup, or hay in some cases, consumed by lactating animals can result in the production of less milk and may turn the milk a tinted red color and give it a bitter taste. Animals tend to avoid grazing tall buttercup if given a choice, but this may also allow it to dominate. Tall buttercup is an alternate host for Anemone Mosaic and Tomato Spotted Wilt virus.

Habitat:

Tall buttercup prefers moist to well-drained humus soils but can survive coarse, gravelly soils given sufficient moisture. Infestations will decrease dramatically in very dry years, but rebound and expand in wet years.



Identification:

Stems: Stems are erect, hollow, and sometimes hairy, highly branched in the upper part of the plant, and grow to 90 cm tall.

Leaves: Leaves on the lower stem are 3-8 cm long, on long stalks, deeply divided into 3-5 lobes and can be softly-hairy on both surfaces. The upper leaves are smaller and are divided into 3-4 narrow segments. Basal leaves have no stalks, 3 simple lobes and are 1-2 cm long. The amount and depth of the leaf lobes is highly variable.

Flowers: Flowers are bright yellow, on long stalks, and have 5 petals, each 10-14 mm long. The upper surface of the petals is waxy, giving them a shiny, lacquered appearance.

Seed: Each plant produces about 250 seeds which can remain viable for 2-4 years. The tiny, brown-black seeds are carried easily by water. Seed clusters are prickly and can attach to hair and clothing.



Prevention:

Use only certified weed-free grass and forage seed. Do not sell or purchase contaminated hay. Good pasture management will help prevent spread.

Control:

Grazing: Not grazed.

Cultivation: Pastures severely infested with tall buttercup can be ploughed and reseeded



to an annual crop for several years to reduce infestations. Tall buttercup does not persist under cultivation.

Mechanical: Close mowing prior to flowering will prevent seed production and limit an infestation's spread. Hand-pulling can be effective on small infestations. Be sure to wear gloves and long sleeves

as the plant's juices can cause blistering and redness.

Chemical:¹ There are a number of herbicides registered for use on tall buttercup for both agricultural and range. Consult your local Agricultural Fieldman or Certified Pesticide Dispenser for more information.

Biological: None researched to date.

¹ Always follow the product labels. The use of pesticides in any manner not published on the label or registered under the *Minor Use of Pesticides* regulation constitutes an offence under both the *Federal Pest Control Products Act* and *Alberta's Environmental Protection and Enhancement Act*.