



# Tall Buttercup

*Ranunculus acris* (Aka Tall Crowfoot, Meadow Buttercup, Blister Plant, Field Buttercup)



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

**Leaves:** On the lower stem are 3-8 cm long, on long stalks and deeply divided into 3-5 lobes. The upper leaves are smaller, hairy 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:** 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.

**Seeds:** 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:** Maintaining a vigorous grass stand in pasture and rangeland will provide good competition and help control tall buttercup and reduce the likelihood of an invasion. Grazing to control tall buttercup is not recommended as the plant is toxic. Tall buttercup thrives with fertilizer use in a poorly managed pasture.

**Cultivation:** Pastures severely infested with tall buttercup can be ploughed and re-seeded to an annual crop for several years to reduce infestations. Tall buttercup does not persist under cultivation.

**Mechanical:** Mowing prior to seed set can assist in reducing the infestation; however it needs to be timely in order to prevent the further spread of seed. Hand picking is suitable

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for individual plants or small infestations. Be sure to wear gloves and long sleeves as the plant's juices can cause blistering and redness.

**Chemical:** Aminopyralid alone (or in a product mix with Metsulfuron-methyl or 2,4-D), MCPB and MCPA (alone or combined in a product mix), Mecoprop-p, and Tribenuron-methyl are registered for use on tall buttercup. Always check product labels to ensure the herbicide is registered for use on the target plant in Canada by the Pest Management Regulatory Agency. Always read and follow label directions. Always read and follow label directions. Consult your local Agricultural Fieldman or Certified Pesticide Dispenser for more information.

**Biological:** A literature survey completed in 2012 indicated that a couple of very closely related native *Ranunculus* species in BC and the US would make finding a host-specific agent difficult.

