

TALL BUTTERCUP

(Meadow buttercup, tall crow-foot)

What does it look like?

Tall buttercup (*Ranunculus acris* L.) is a simple perennial with a very fibrous taproot. The bright yellow flowers are waxy, with 5 petals and are approximately 2.5 cm in diameter. Each plant is capable of producing up to 250 seeds. The stem and basal leaves are softly hairy, both on the lower and upper surfaces. The stems have several branches on the upper portions of the plants, and can grow to a height of 1 m. The lower leaves are 3-5 lobed, with deeply cut margins. Tall buttercup contains a bitter juice, which cause blistering of the mouth and digestive system when consumed by livestock.



Creeping buttercup is a similar species found in Alberta, however its growth habit is quite different. Its roots form at the nodes of low, creeping stems.



Its weedy nature

Tall buttercup is a non-native plant of European origin. It is a problem in western and central Alberta and the weed itself is well established in most of North America. It is generally found in forage crops and hayfields, rangeland, roadsides and in wetter areas in ditches and near wetlands. Tall buttercup has been responsible for livestock poisonings caused by the acrid juice found in the plant. When the plant is chewed, enzymes break down this juice to form a substance call protoanemonin. This is what irritates the mucous membranes of the digestive system. The toxin, present in the stems and leaves, is usually found in greater amounts in flowering plants and in smaller

amounts in young plants. Fortunately the acrid juice in the plant has a bitter taste so that livestock usually avoid eating tall buttercup.

Although poisonings are rare, they will likely occur when other forages are in short supply. Symptoms of poisoning include signs of abdominal pains, severe diarrhea and convulsions. Milk from affected cows may be bitter and reddish in colour. Symptoms as these do not usually result from eating hay, as the irritating property is lost as the plants dry.

Its control

Although rarely a problem in cultivated land both MCPA-Na (salt) and Mecoprop are recommended for chemical control of tall buttercup in cereal crops such as barley, wheat and oats. Each MCPA product has different recommendations for application, so always be sure to read and follow label directions carefully. Mecoprop can be applied when buttercup is in the 2-4 leaf stage, or on mature plants. The cereal crop should be at the 3 leaf to early flag leaf stage. Cultivation may be used as a cultural control method as long as the taproots are being effectively destroyed. The best control is usually accomplished at the seedling stage.



In the case of native rangeland and permanent grass pastures, MCPA amine at 1.1 - 1.7 L/ac and Grazon can be used. Grazon is a broad-spectrum product and legumes and native forbes will be taken out with the buttercup. Because of the residual property of picloram products, control may be effective for a longer period of time. Legumes should only be reseeded after the label recommended period of time has passed, and perhaps longer in drier years.

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