



Black Henbane

(Hyoscyamus niger)

Provincial Designation: Noxious

Overview:

An annual or biennial (forming a rosette the first year) plant that reproduces by seed only. Black henbane was introduced from the Mediterranean and has been used as a medicinal plant since the Middle Ages, and was also used in ancient religious rites because of its hallucinogenic properties. It was even used as a flavoring in beer until the Bavarian Purity Law of 1516. All parts of the plant are poisonous to humans and animals when ingested – tissues contain several toxic alkaloids. Symptoms of poisoning include impaired vision, convulsions, coma, and death from heart or respiratory failure.

It is a member of the nightshade family and also called 'stinking nightshade'. A single plant can produce as much as half a million seeds in one season, which are viable for about 4 years.

Habitat:

Black henbane grows in a wide range of soil textures and pH but does require well drained soil. It does not tolerate shade.



Identification:

The entire plant is covered with greasy hairs and has a thick, fleshy taproot.

Stems: Stems are upright, tough – almost woody - and can be very thick. Plants can grow to 1m or taller and may be branched or unbranched.

Leaves: Leaves are alternate, large – up to 15 cm wide and 20 cm or more long – and have a heavy, foul scent. Leaf edges are shallowly lobed (variable) and veins are conspicuous.

Flowers: Flowers are pale yellow with deep purple veins and throats and are borne on spikes. Flowers are hermaphroditic – both male and female organs – and have a strong, unpleasant smell. The calyx (flower base) forms a 2.5 cm urn-shaped fruit with a thickened lid that pops off at maturity and spills the numerous, tiny, black-brown seeds.

Prevention:

Black henbane is not a strong competitor, so maintaining healthy vegetation should prevent establishment. Despite its toxic properties, this plant is still valued by some for its medicinal values. Homeopathy enthusiasts and gardeners should never grow non-native plants that could escape cultivation.

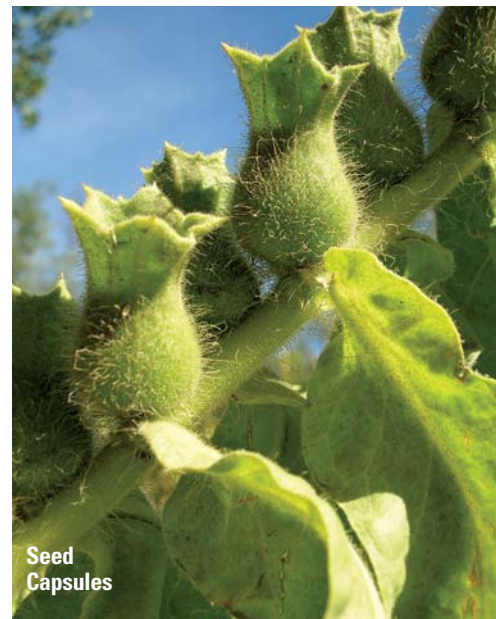
Control:

Grazing: Livestock will avoid Black henbane unless no other forage is available, therefore poisoning cases are rare. Dried plant matter in baled forage retains its toxic properties though, and will be readily consumed.

Cultivation: Does not survive cultivation but must be done before seed production to prevent spread.



PHOTOS:
Alberta Sustainable Resource Development



Seed
Capsules

Mechanical: Mowing is effective, but difficult because of its thick, tough stem. Hand pulling is also effective – be sure to wear gloves and protective clothing to prevent rashes. Care should be taken with mature plants to avoid spreading seed – these can be burned to kill the seed.

Chemical:¹ Picloram, dicamba, metsulfuron, 2,4-D, and Glyphosate can be used pre-bloom. 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*.