



Black Henbane *(Hyoscyamus niger L.)*

aka Hogbane, Hogbean, Insane Root, Stinking Nightshade

SK Provincial Designation: Noxious

Overview:

Black henbane is an annual or biennial plant native to the Mediterranean. It was used in the Middle Ages for medicinal purposes, as well as religious rituals, witchcraft and shamanism, due to its hallucinogenic properties. It was also widely used in Germany to add flavor and enhance the inebriating qualities of beer. Black henbane was introduced to North America in the 17th Century as a medicinal and ornamental plant.

Black henbane reproduces solely by seed, with each plant capable of producing up to half a million seeds that are viable for up to five years.

All parts of the black henbane plant are toxic to humans and animals when ingested, with the potential to cause impaired vision, convulsions, coma, heart and respiratory failure and death. Livestock will typically avoid live plants due to their foul odor and taste; however, dried plant parts retain their toxicity and will be readily consumed in baled forage.



Flowers



PHOTOS: Jan Samanek, State Phytosanitary Administration, Bugwood.org

Habitat:

Black henbane invades pastures, rangeland, riparian zones, roadsides and disturbed areas, forming dense stands that can replace native vegetation and decrease forage production. It thrives in most soil types but is intolerant of shade and water-logged areas.

Identification:

Stems: Thick, erect stems can grow up to 1 metre tall and are coated in fine, sticky hairs. The taproot is large and branched.

Leaves: Greyish-green leaves are large, up to 20 centimetres long and 15 centimetres wide, heavily veined and grow in an alternate pattern. The leaves have a foul odor at all growth stages.

Flowers: Funnel-shaped flowers are pale yellow with dark purple throats and veins and are 5-lobed. The plant typically flowers from June to September, with peak flowering in July.

Seed: Urn-shaped seed pods break open at maturity, spilling large quantities of small, dark seeds. Each black henbane plant can produce up to 500,000 seeds.



PHOTO: Steve Dewey, Utah State University, Bugwood.org

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Black Henbane (*continued*)

Prevention:

Black henbane was introduced primarily for medicinal purposes and, despite its toxic properties, it is still valued by some. Do not purchase or grow black henbane or other invasive plants that could escape cultivation. If removing this plant, ensure proper steps are taken for disposal, site re-vegetation, monitoring and after-care. Maintaining healthy vegetation is an effective prevention strategy.

Control:

Grazing: Grazing is not an option due to the plant's toxicity to animals.

Cultivation: Cultivation may be effective if conducted prior to seed production and repeated annually until the seed bank is depleted.

Mechanical: Mowing may be effective if conducted prior to seed production and repeated annually until the seed bank is depleted. Hand pulling may be effective on small infestations if the entire taproot is removed; however, the plant may be difficult to remove by hand due to its thick stem and root system. If pulling by hand, ensure gloves and protective clothing are worn to prevent skin irritation.

Chemical:¹ 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 provincial acts in Saskatchewan. For the latest information on pesticides for agricultural use in Saskatchewan, please consult the provincial Guide To Crop Protection produced annually by the Saskatchewan Ministry of Agriculture or consult your local Ministry of Agriculture representative.

Biological: To date, there are no biological control agents available or in research for black henbane.



PHOTO: Jan Samanek, State Phytosanitary Administration, Bugwood.org



Leaves

PHOTO: Mary Ellen (Mel) Harte, Bugwood.org



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PHOTO: Jan Samanek, State Phytosanitary Administration, Bugwood.org



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PHOTO: Jan Samanek, State Phytosanitary Administration, Bugwood.org

Sources:

Black Henbane Fact Sheet. Alberta Invasive Plants Council. www.invasiveplants.ab.ca

Black Henbane: Identification, Biology and Integrated Management, MontGuide MT201005AG. Montana State University Extension. 2010. msuextension.org

Hyoscyamus niger. Wikipedia: The Free Encyclopedia. 2013. www.wikipedia.org

Black Henbane *Hyoscyamus niger* L. Center for Invasive Species and Ecosystem Health. 2010.

1 Always follow the product labels. Pesticides should only be applied by certified pesticide applicators. 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 provincial acts in Saskatchewan. For the latest information on pesticides for agricultural use in Saskatchewan, please consult the provincial Guide To Crop Protection, produced annually by the Saskatchewan Ministry of Agriculture.