

# BLACK HENBANE

(*Hyoscyamus niger* L.)



# BLACK HENBANE

State Noxious Weed List: **No.**

Black henbane is native to Europe and was cultivated as a medicinal and ornamental plant. In 1670, the plant escaped cultivation in the United States and became sparingly naturalized by 1859. Black henbane has since spread throughout much of the United States, particularly in the Northeast, Midwest and the Rocky Mountains. Two alkaloids in black henbane tissues (hyoscyamine and scopolamine) are useful sedative or anti-spasmodic drugs when used under controlled conditions.

Identification and growth form:

Black henbane is an annual or biennial plant that can range in height from 1 to 3 feet. Rosette leaves are alternate and have petioles almost as long as the leaf blades. Stems of mature plants are erect, leafy, thick, coarse and widely branched. Leaves are alternate, oblong to ovate, coarsely toothed to shallowly lobed and grayish green. The foliage is covered with fine, sticky hairs and has a foul odor. Flowers are funnel-shaped, five-lobed, brownish yellow with dark purple veins, and arranged in long, leafy, spikelike clusters. Fruit of the plant is pineapple shaped, approximately 1 inch long, and contains hundreds of tiny, black seeds.

Seeds germinate and develop a rosette with a large, whitish branched taproot the first growing season. During the second growing season, the plant bolts and flowers from June to August. The plant produces hundreds of seeds from July to October that can remain viable for five years or more.

Why is this plant a concern?

Black henbane contains alkaloids (hyoscyamine, hyoscyne or scopolamine, and atropine) that have caused occasional livestock poisoning. The plant is not usually grazed by animals unless more palatable forage is unavailable. All parts of the plant, including the seeds, contain the alkaloids that can be toxic to humans and animals if eaten. Even just smelling the flowers can cause headaches and nausea in some people.

How do I control this plant?

**Chemical.** Herbicides recommended for black henbane control include 2,4-D, dicamba (various), Tordon (picloram) and glyphosate. Herbicides should be applied prior to flowering to prevent seed production.

**Mechanical.** Hand pulling, cutting or digging small infestations of black henbane can be effective. Wear gloves and protective clothing when handling these plants. Disking or plowing should be repeated annually because seeds can persist in the soil for an extended period of time.

**Biological.** No biological control agents or pathogens are available for this weed.