

Management of *Hyoscyamus niger* (black henbane)



Lewis and Clark County Noxious
Weed Control District
3402 Cooney Dr Helena | MT 59602

Lewis and Clark County Listed Noxious Weed

Plant Description

Hyoscyamus niger, black henbane, is a biennial to summer annual forb. The flower is funnel-shaped with five fused petals that are pale yellow in color with purple veins and a deep purple throat. The grey-green leaves alternate along the stem, have lobed margins, and are covered in sticky hairs. The stems are erect, usually branched, and grow 25-100 cm tall. The root system of black henbane consists of a large branched taproot that is whitish in coloration.

Mechanical Control

Hand removal or excavation from the soil can provide effective control; taproots must be removed to two inches below soil surface to prevent resprouting. Bag and dispose of plant material if the plant is in the pre-bloom or bloom stage. Repeated mowing prior to seed development can provide effective control.

Gloves must be worn for hand removal as black henbane is poisonous and will cause skin irritation.



Image: J. Caldwell

Biological Control

There is currently no biological control agent available for black henbane.

Cultural Control

Controlled burning can kill plants and seeds. Re-establishment of native plant communities provides competition, which will reduce and prevent black henbane spread.



Image: Black Henbane Rosette. In Summit County Utah.

Recommended Treatment Timeline

Control Type	Winter	Spring	Summer	Fall
Mechanical		Hand pull or dig, bag and dispose, Mow	Hand pull or dig, bag and dispose, Mow	Hand pull or dig, bag and dispose, Mow
Biological	None available			
Cultural	Controlled burn	Controlled burn, Revegetation		Controlled burn, Revegetation
Chemical		Foliar spray		Foliar spray

Chemical Control

Follow the directions on herbicide labels, the label is the law. Calibrate equipment for accurate application. Commonly used herbicides are listed below, order of listing is not reflective of efficacy or recommendation.

Personal protective equipment must be worn when applying herbicides. Only apply herbicides in appropriate weather conditions.^a

Use appropriate surfactants as listed in the product label.^a

^aRead and follow all instructions in the label of the herbicide.

Chemical Control Table							
Use Site	Herbicide (Active Ingredient - Trademark)	Pre-emergent or Soil Residual Activity	Post-emergent (Foliar Applied)	Large Sprayer Rate per Acre	Spot Treatment Rate for Every 1 Gallon of Water	Restricted Entry Interval (Hours)	Application Notes and Environmental Advisories*
Turfgrass, Non-cropland, Rangeland	2,4-D - Gordon's ^b	no	yes	2 - 4 pt	Consult label	48	Best applied to young plants, before flowering. Application at flowering will reduce seed production. Toxic to fish and aquatic invertebrates. Groundwater and surface water advisories.
Turfgrass	2,4-D Amine, Dicamba, MCPA - Gordon's Trimec Broadleaf Herbicide ^b	no	yes	Consult label	Consult label	48	Do not broadcast apply when air temperatures exceed 90°F. Apply before the flowering stage to prevent seed production; best applied to young plants from the rosette to bolting stage. Toxic to fish and aquatic invertebrates. Groundwater and surface water advisories.
Rangeland, Permanent Grass Pasture, CRP, Natural Areas	Aminopyralid + metsulfuron methyl, - Chaparral ^b	no	yes	2.5 - 3 oz	0.7 - 1 gram	48	Apply on actively growing plants. Non-target organism advisory. Windblown soil particle advisory.
Rangeland, Non-cropland, ROW	Aminopyralid - Milestone ^b	no	yes	5 - 7 oz	Calibration necessary, consult label for conversion	48	Apply on actively growing plants. Groundwater and surface water advisories.
	Aminopyralid + metsulfuron methyl - Opensight ^b	no	yes	2.5 - 3 oz	0.7 - 1 gram	48	Apply on actively growing plants. Non-target organism advisory. Windblown soil particle advisory.
	Metsulfuron methyl - Escort XP ^b	no	yes	½ - 1 oz	1 gram	4	Suppression only; bolt to early flowers, or to fall rosettes. Groundwater and surface water advisories. Non-target organism advisory. Windblown soil particle advisory.
	Chlorsulfuron - Telar XP ^b	yes	yes	½ - 1 oz	0.6 grams	4	Apply on pre bloom to bloom stages, or on fall rosettes. Groundwater and surface water advisories. Non-target organism advisory.
Rangeland, Barrow Ditches, Rights-of-way, Fencerows, Natural Areas, Grazed Areas	Fluroxypyr - Vista XRT ^b	no	yes	15 - 22 oz	Consult label	24	Best applied to young plants from rosette to bolting stage. Apply before flowering to prevent seed productions. Toxic to fish. Non-target organism advisory. Surface water advisory.
Ornamentals	Glyphosate - Roundup ProMax ^b	no	yes	2 - 4 qt (Roundup ProMax ^b)	0.5 - 1% v/v solution (Roundup ProMax ^b)	4	Apply before flowering to prevent seed production; best on young plants. Surface water advisory.

^bLewis and Clark County Noxious Weed Control Division does not endorse any trademarks or commercial names listed above.

This table summarizes selected registered use sites and is not intended to represent all approved uses. Pesticide applicability, use sites, and restrictions vary by product and formulation. Applicators must consult and follow the most current product label, which takes precedence over this document.

References

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- Black Henbane — *Hyoscyamus niger*. Montana Field Guide. Montana Natural Heritage Program.
<https://FieldGuide.mt.gov/speciesDetail.aspx?elcode=PDSOL0C020>
- Corteva Agriscience. (2023). *Milestone*. U.S. Environmental Protection Agency Registration No. 62719-519.
- Corteva Agriscience. (2023). *Chaparral*. U.S. Environmental Protection Agency Registration No. 62719-597.
- Corteva Agriscience. (2023). *Opensight*. U.S. Environmental Protection Agency Registration No. 62719-597.
- Corteva Agriscience. (2025). *Tordon 22k*. U.S. Environmental Protection Agency Registration No. 62719-6.
- Corteva Agriscience. (2022). *Vista XRT*. U.S. Environmental Protection Agency Registration No. 62719-586.
- Ditomaso, J. M., Kyser, G. B., Oneto, S. R., Wilson, R. G., Orloff, S. B., Anderson, L. W., Wright, S. D., Roncoroni, J. A., Miller, T. L., Prather, T. S., Ransom, C. V., Kenneth George Beck, Duncan, C. A., Wilson, K. A., J Jeremiah Mann, Department, Davis., & Weed, Davis. (2013). *Weed control in natural areas in the Western United States*. University Of California Weed Research And Information Center.
- Envu. *Escort XP*. U.S. Environmental Protection Agency Registration No. 101563-167.
- Envu. *Telar XP*. U.S. Environmental Protection Agency Registration No. 101563-176.
- PBI Gordon Corporation. Trimec Classic Broadleaf Herbicide. U.S. Environmental Protection Agency Registration No. 2217-543.

