# BLUEWEED

Echium Vulgare

# CONTROL

#### Hand Pulling

Pulling blueweed is effective for smaller infestations, especially if the soil is moist. Be sure to remove the entire taproot otherwise the plant will regenerate from the leftover rootstock. If plants have already begun to flower they should be burned or bagged for disposal to prevent seed production. Stiff hairs on the stem and leaves can cause skin irritation, so gloves and long sleeves are recommended.

#### Mowing

Mowing blueweed will provide you with short term prevention of seed production, but re-sprouting and flowering will occur below the level of the blades after continued mowing. This method alone is not recommended for long term management of this species.

#### Grazing

Blueweed has been shown to contain pyrrolizidine alkaloids, which are toxic to horses and cattle if ingested. While sheep and goats have shown resistance to these alkaloids, grazing is not a recommended control action for this species.

#### Ideal Timing for Treatment Options

Spring	Summer Fall		
Hand pulling preferably in moist soil	Hand pulling flowering plants, and bagging seed heads		
Foliar Spray		Foliar Spray	

#### Herbicide

Some herbicides have resulted in almost 100 percent control of blueweed one year after treatment. Less effective herbicides work better when combined with additional herbicides or control methods. This is also useful in plant resistance which has been documented for chlorosulfuron in Australia. The herbicide chart on the back lists approved controls for blueweed. Always consult product labels and read them carefully to ensure correct species/land management usage and chemical application.



### Blueweed Life Cycle

Life Cycle	Root	Leaves	Stems	Flower	Seed/Fruit	Тохіс
Biennial	Black taproot with fibrous lateral roots	Basal leaves narrow, 2 to 10 inches long, stalked. Stem leaves alternate, smaller and stalkless near top. All leaves covered with stiff hairs.	12 to 32 inches tall. Covered with short hairs and scattered long, stiff hairs. Base of some hairs is dark and swollen.	Buds reddish-purple, becoming bright blue upon flowering. Petals fused at base into a short tube that flares. Numerous flowers 1/3 to 2/3 inch long arranged on upper side of short stems that elongate after flowering.	Nutlets clustered in groups of 4, 1/10 inch long, grayish-brown, angular, and wrinkled.	Horses, sheep

## Herbicides for Blueweed, Echium vulgare

Active Ingredient	Rate	Efficacy	Comments
Metsulfuron	1 oz/acre	Spring/Fall, rosettes	Do not use near wells, surface water, or shallow ground water
Chlorosulfuron	1 oz/acre	Spring/Fall, rosettes	Do not use near wells, surface water, or shallow ground water. Use nonionic surfactant. Combine with other products for effectiveness.
Metsulfuron + chlorosulfuron	.5 oz/acre	Spring/Fall, rosettes	Do not use near wells, surface water, or shallow ground water.
2-4, D	2.1 qt/acre	Spring/Mid-summer to Fall, seedlings and established.	Combine with other products for effectiveness.
Picloram	1 pint/acre	Spring/Fall rosettes	Do not use near water or broadleaf crops.

Information on diagnostic identifying characteristics adapted from "Montana's Noxious Weeds" by Pokorny and Mangold, Montana State University Extension Bulletin EB0159.

