

Horsebrushes

Gray horsebrush (*Tetradymia canescens* var. *inermis*)
& **Littleleaf horsebrush** (*Tetradymia glabrata*)

Other Common Names: Gray horsebrush is also called spineless horsebrush. Littleleaf horsebrush is also called coal-oil brush or spiny rabbitbrush.

Species Affected: Sheep

Description: Both types of horsebrush are coarse, woody, branching shrubs which grow up to three feet tall and five feet wide. Horsebrush leaves and stems are covered in wooly hairs, giving the overall plant a white cast/appearance. Flowers are yellow and bristles appear between florets, growing straight upwards from fruits.

Growing Location and Timing: Littleleaf horsebrush grows on benchlands, dry slopes, and rangelands. It is a very early range plant, beginning its growth in early spring. It may be green by late March and in full flower by the end of June. It dries out and enters dormancy until the following spring by late July.

Gray horsebrush starts growing later than littleleaf horsebrush and flowers in June or July. It usually remains green until the fall.

Littleleaf horsebrush has a narrower range, growing only in Utah, Idaho, Nevada, Oregon, and California. Gray horsebrush grows more widely throughout the west, including in Washington.

Toxin: Tetradymol is the principal liver toxin causing acute poisoning. “Bighead” swollen facial/head symptoms appear only when sheep graze horsebrush in conjunction with black sage, but the chemical mechanism by which this occurs is not well understood. Littleleaf horsebrush is more toxic than gray horsebrush.

Toxic Plant Parts: All parts of both species are toxic, but sheep typically feed only on buds, leaves, and fine stems. The toxic dose is only 0.5% of the animal’s body weight.

Possible Effects on Livestock: Symptoms of poisoning can include loss of appetite, depression, weakness, photosensitivity, swelling of the head (“bighead”), peeling skin from face and ears, abortion, engorged/fatty liver, kidney nephritis, petechial hemorrhage, and death.

Preventative Measures: Injuries typically occur when animals travel along trails. Best practice is to avoid trail routes through horsebrush-infested areas. It is particularly important to keep sheep away from horsebrush during stormy periods, when they are more apt to graze on it. If signs of bighead appear, move affected animals to shade and give them water and supplemental hay.

Resources:

- [NMSU: Selected Plants of Navajo Rangelands](#)
- [Guide to Poisonous Plants – College of Veterinary Medicine and Biomedical Sciences – Colorado State University \(colostate.edu\)](#)
- [Spineless Horsebrush \(*Tetradymia canescens*\) · iNaturalist](#)
- [Horsebrush \(*Tetradymia glabrata*, *T. canescens*\) : USDA ARS](#)

Horsebrush flowers.



Spineless horsebrush is also called gray horsebrush. Photo courtesy U.S. National Park Service.



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