

Mouth Blisters

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Providing research-based information to Minnesota horse owners



Foxtail with seed heads



Foxtail seeds



Sandbur

Species and Scientific Names: Foxtail (*Setaria* species), Sandbur (*Cenchrus* species), and Ticklegrass (*Agrostis hyemalis*).

Origin: Foxtail was introduced from Europe and Asia; sandbur was introduced from Africa, Europe, and Australia; and ticklegrass is native.

Lifecycle: Foxtail and sandbur are annuals reproducing from seed. Ticklegrass is a perennial.

Identification: Foxtail seed heads resemble a bottle brush and are green or light green in color. Sandbur burs (seeds) are barbed, slender, and often have a purple tinge. Ticklegrass seed heads are green to purple in color and shiny, turning tan at maturity. Branches of the flowers are rough to the touch.

Distribution: Foxtail is found through out the United States. Sandbur is found in the central part of the United States, along the north and mid-Atlantic States, and in distinct areas of the western United States. Ticklegrass is found from the Dakotas south to Texas, encompassing most of the central and eastern United States.

Habitat: Foxtail and sandbur are commonly found in recently disturbed soils and sandy areas. They are common in pastures and hay fields after periods of drought or new seeding. Ticklegrass is found in dry or moist soil in woods, fields, bogs, meadows, roadsides, waste areas, stream banks, shores, and also in upland habitats, often where alkaline (basic) soils persists.

Control: Mowing is a relatively effective method of control for all three grasses, since timely mowing can minimize or eliminate seed production. In a grass pasture or hay field, there are no herbicides available for control of foxtail, sandbur, or ticklegrass. Spot treatment with glyphosate is an option, but good pasture management practices will help reduce or eliminate weed populations.

Toxin: These plants are not listed because of a chemical toxin but rather due to the physical trauma to the mouth,



Hay containing a high percentage of ticklegrass (note dark or purple areas)



Microscopic barbs of Ticklegrass



Ticklegrass embedded in a horse's mouth

gastrointestinal tract, and occasionally skin of horses from due to physical contact with the plants.

When Toxic: When ticklegrass, sandbur, and/or foxtail are eaten by horses, usually in baled hay or rarely fresh forage, the microscopic barbs on the seed heads or stems may become embedded into the soft tissue of the lips, mouth, gums, or lower gastrointestinal tract. The leaves (vegetative growth) of sandbur and foxtail do not result in physical trauma and can be grazed, but are not considered recommended forage species.

Signs and Effects of Toxicosis: Horses may have blisters or ulcers on the lips or mouth after ingestion of these plants. Animals may develop weight loss due to gastrointestinal tract damage if large amounts of the plants are ingested for long periods of time.

Treatment: Removal of the plant source and supportive treatment of the blisters or ulcers such as rinsing with water or topical cream.

Other Information: Hay containing moderate amounts of foxtail and sandbur seed heads, and/or ticklegrass seed heads and stems should not be fed to horses.

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In Partnership...



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