

Central Washington Animal Agriculture Team

Fact Sheet #1022-2003



MUSTARDS A CONCERN FOR HORSE OWNERS

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The WSU College of Veterinary Medicine Field Investigative Unit has found the ingestion of certain mustards and possibly other members of the *Brassicacae* family is a concern for horse owners. If mares consume these plants during late pregnancy they can cause a condition called Congenital Hypothyroid Dysmaturity Syndrome in foals. The syndrome most often results when the consumption of mustards occurs in the last 2 to 3 months of pregnancy. Signs of the condition are: 1) Abnormally long pregnancy; 2) Foals commonly born with facial and lower jaw deformities; 3) Foals born with the fine skin and soft, silky hair coat of premature foals even though they are carried longer than normal; and 4) Deformities of the limbs. The abortion and fatality rate of the syndrome is quite high and many of the foals born alive have to be destroyed because of severe deformities.

This syndrome most often occurs in mares that are bred late in the breeding season and fed hay year-around that is

contaminated with mustard plants. However, it can also occur when mares are kept stalled during the winter and then let out in the early spring to exercise yards or weedy pastures that contain winter annuals in the mustard family, such as Blue Mustard, Jim Hill Mustard, Shepherdspurse, and Flixweed.

There is also a risk of this syndrome if a significant amount of mustards are present in the alfalfa or grass hay that is fed in late pregnancy. Mustards are often found in newly seeded alfalfa fields and first cutting hay. The mustards contain chemicals called glucosinolates, which are broken down into compounds that are goitrogenic or act on the thyroid gland.

WSU veterinarians are recommending broodmares are fed hay that is free of mustards, and kept off exercise areas and weedy pastures that contain plants in the mustard family in late pregnancy.