

Mustard *Brassica* spp.



Annual, biennial, or perennial herbs with a pungent odor when crushed. Leaves alternate, simple to highly dissected, often basal with only a few on the upper stem. Flowers borne in a raceme or solitary on a leafless or nearly leafless stem, mostly bright yellow. Fruit dry, dehiscent, 1.5 to 7 cm long, much longer than wide. Seeds numerous, black or brown, globular, 1.5 to 3 mm in diameter. Found throughout the South; in fields, pastures, roadsides, lawns, and waste places; some species in cultivated ground.

Toxicity

Members of the mustard family contain isothiocyanates, commonly called mustard oils. Certain members, such as the rutabaga, have a high concentration of goitrogenic substance that has produced goiter in livestock. Animals are most often poisoned from spring to fall but can show symptoms of toxicity throughout the year if hay is contaminated with a large amount of mustard. All parts of the plant are toxic, especially the seeds. Swine, cattle, and horses are susceptible.

Symptoms

Symptoms are primarily those of a severe gastroenteritis due to irritation of the mucous membranes. Abdominal pain, salivation, and diarrhea are commonly seen.

Rape, a winter annual, often causes a series of problems including pulmonary emphysema, diarrhea, blindness, and hemoglobinuria. Photosensitization can occur in swine and light-skinned animals. Abortions can occur in sows.

Treatment

There is no effective treatment.

Include hay free of mustards in the diet. If rape forage is being used, allow access to other types of pastures.