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Squirrel Tail Grass or Wild Barley

Abstract

Wild barley or squirrel tail grass is one of the most common weeds in Iowa. Not only does it interfere with the production of crops, but it injures domestic animals, like horses; sheep and cattle. Moreover, it is one of the most common hosts of the common stem rust of wheat and if for no other reason than this, it should be exterminated.

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BOTANY SECTION

Squirrel Tail Grass or Wild Barley

By L. H. Pammel.

Wild barley or squirrel tail grass is one of the most common weeds in Iowa. Not only does it interfere with the production of crops, but it injures domestic animals, like horses, sheep and cattle. Moreover, it is one of the most common hosts of the common stem rust of wheat and if for no other reason than this, it should be exterminated.

CHARACTER OF THE WEED

It is an annual or winter annual from six inches to two feet high. It has fibrous roots, which form solid, compact bunches, and rather short leaves, not unlike those of bluegrass, only paler in color, from two to four inches long, with rough margins, flowers in a dense spike from two to four inches long, and pale green or purplish in color; when in fruit the plant has a bushy top and spreading awns, which give it a bristly appearance. At maturity the head breaks up into joints and these separate parts are scattered by the wind. Each head produces from 35 to 60 "seeds." The plant is a wonderful stooler, as many as 40 stalks coming from a single seed. A single cluster of the plant, therefore, produces from 300 to 2,000 seeds. This weed is common on the roadside and the "seed" produced along the roadside are sufficient to sow a good part of a farm quite thickly.



Squirrel tail grass or wild barley.

EXTERMINATION

Squirrel tail grass is not difficult to exterminate where the field is plowed. A single plowing followed with the harrow will destroy the weed. The weed is most common in the pasture and the best way to deal with it there is to cut it at the time of blooming to prevent the

formation of seed. This will not, however, kill the plant, but simply prevents the formation of seed. As soon as possible this meadow or pasture should be brought under cultivation.

RELATION TO STEM RUST OF WHEAT AND OATS

Because squirrel tail grass harbors stem rust, it is the patriotic duty of township trustees and road supervisors to prevent the formation of seeds of this weed on highways, that being the source from which the seeds spread to the adjacent farms.

Observations have been made in Iowa for a period of about 30 years on the abundance of rust on this pernicious weed. During this time the author found rust every season on squirrel tail. Dr. I. E. Melhus and L. W. Durrell, who are making a study of the rust problem in Iowa, find this rust common everywhere in the state. The squirrel tail grass certainly is an important factor in the spread of stem rust. It spreads the rust to wheat, quack grass and other weedy grasses, so every effort should be made to exterminate the pest.

ORIGIN OF THE WEED

It may be of interest to note here that this weed is not a native of Iowa. Originally, it was confined to alkali lake beds and flats of the west. It only became common after 1870. Formerly wheat was grown successfully in most parts of Iowa because there was less risk. Even in the late 80's wheat was an important crop in northwestern Iowa. However, that was before the advent of squirrel tail grass in that section of the state. Undoubtedly the abundance of stem rust in Iowa is closely connected with the spread of this weed.

THE WEED IS INJURIOUS TO STOCK

Many complaints reach the Iowa experiment station during the summer and fall, that the awns of wild barley are injurious to horses. These awns, when taken into the mouth, break up into sections, scatter within the mouth, and adhere to the mucous membranes, which become pierced with the long, stiff awns. As the animal eats more grass, these awns become imbedded in the mucous membrane, working deeper into the flesh and between the teeth, causing ulceration of the jaw bones and the teeth. The teeth become loosened, eating becomes difficult and the animal becomes emaciated.