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Halogeton

A Stock-Poisoning Weed



Halogeton in full seed. Russian thistle in right background.

Agricultural Extension Service
University of Arizona, Tucson

Circular 197

Look For It

There has been a great deal written the past few years about Halogeton (pronounced halo-GEE-ton). This poisonous plant is a native of Russia and was first discovered in the United States about 1935 near Elko, Nevada.

By 1940, it had spread into southern Idaho and northern Utah. At present it has been reported also in Oregon, California, Wyoming, and Montana.

Halogeton has not been reported in Arizona. The purpose of this circular is to give a few facts about the plant and its identifying characteristics so if it should spread into Arizona, early infestations can be caught before they become too abundant to control.

This weed could occur in almost any section of the state. The danger points are the northern corners, since Halogeton has been reported in San Juan County of Utah which borders the northeast corner of Arizona, and in Iron County which

is near the northwest corner of Arizona.

Since Halogeton is not in Arizona as yet, it is of greatest importance that everyone be acquainted with the identifying characteristics so they can discover small patches of the weed and halt its spread. Small patches can be controlled with 2, 4-D if caught soon enough.

If you discover a plant you suspect of being Halogeton, send it in for identification to your County Agricultural Agent or to the Botany Department, College of Agriculture, University of Arizona, Tucson, Arizona.

When sending plants in for identification, first press them in a magazine until they are dry. Then mail them in a large envelope.

Requests for additional information can be made to these same people and in case Halogeton is discovered they are available to help in control methods.

Acknowledgment is hereby made of information contained in Halogeton publications recently issued by the University of Idaho and the Utah Extension Service.

The cover color-picture of Halogeton is used through the courtesy of the University of Idaho. (Note the comparison with the Russian thistle plant which shows in the right background.)

University of Arizona
College of Agriculture Agricultural Extension Service
Chas. U. Pickrell Director
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Halogeton

A Stock-Poisoning Weed

By Walter Armer

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Where It Grows

Normally Halogeton is a dry desert plant, but it is very adaptable. It grows under conditions of from 4 to 20 inches of rainfall and up to 6,000 or 7,000 feet in elevation. It also can stand alkaline soils, but cannot stand too much competition.

It has not been found to spread into areas that have a good stand of grass or other vigorous plants, but spreads most readily along roadsides, washes, trailways, abused rangeland or other places where the soil has been disturbed, or the native plant cover is thin.

How To Identify

This poisonous plant is an annual plant which dies each fall and depends on seed for regrowth. It resembles the Russian thistle or tumbleweed except during the seeding stage when it is very showy, the color of the fruit varying from almost straw color to reddish or yellow green. (See cover photo).

Its size, varying from a few inches to 2 feet in height, depends

on growing conditions. The stems branch out from the base very much like the Russian thistle. (See drawing). The leaves of the young



Above is a drawing of one branch of a Halogeton plant. Note the weiner-shaped leaves and the fine hair at the end of each of the leaves.

seedlings are bluish color rather than bright green, and the stems often have a reddish color.

The leaves are the easiest ways to distinguish Halogeton from Russian thistle. The Halogeton has weiner-shaped leaves that are from $\frac{1}{4}$ to $\frac{3}{4}$ inches long, with a slender bristle or hair about $\frac{1}{8}$ inch long at the tip. Russian thistle leaves are longer and more slender, narrowing gradually to sharp points which become "stickery" when ripe.

Halogeton is hardest to identify in late fall or winter. At this stage most of the fruit falls off and the hairs on the tips of the leaves usually drop off. This makes it look very much like the Russian thistle. However, it is not prickly.

Preventing Losses

The poisonous substance of Halogeton is an oxalate which builds up with plant growth and reaches its maximum concentration in late summer or fall. During winter the rain and snow washes out some of the oxalate, so it should be less dangerous by spring. It is safer to assume that it is poisonous at all stages and to try to keep livestock away from badly infested areas.

Fortunately, livestock do not relish this plant, so they will eat very little of it if other feed is available. Sheep seem to eat more

Halogeton than cattle, but this may be because of their herding habits. If given a choice of feed, sheep probably would not choose this plant.

As little as $\frac{1}{3}$ pound of this plant has been found to kill a sheep if eaten on an empty stomach. Most of the losses have occurred when hungry sheep have been driven across a patch of Halogeton.

There have been no reports of horses eating this plant, and not too many reports of cattle. Sheep are most seriously affected.

Once an animal eats a toxic amount of Halogeton, nothing can be done to treat it. So prevention is the only cure. There are no visible symptoms of poisoning with Halogeton — the animals just die.

Control

After Halogeton has spread over large areas, it is very difficult, if not impossible to eradicate it. In those cases, stockmen probably will have to learn to live with it through grazing management, supplemental feeding and range re-seeding.

Halogeton cannot compete with a good stand of grass. Keep ranges in good condition, and they will be less susceptible to invasion by this plant.

Use 2, 4-D on small patches.