

PUBLISHED IN FEBRUARY, MARCH. APRIL, AUGUST AND SEPTEMBER BY O. M. SCOTT & SONS CO. MARYSVILLE, OHIO

Fifteenth Year

Number 72

DEVIL'S PAINT BRUSH

THE alarming spread of this weed into lawns along the eastern seaboard and its steady trek westward, is fast bringing it into the company of those turf pests which have become bywords in every home. If allowed to spread unmolested, some authorities have predicted that it may some day be as common as Plantain. This weed invaded our shores from

Europe, first gaining a foothold in Canada and New England. By reason of its wind blown seeds which possess equipment of the parachute type, it has moved into New York, Pennsylvania, and Ohio. At its present rate of spread, Devil's Paint Brush may yet span the country. Thus every home owner should be on the alert to check this pest and see that it is not accorded a welcome.

Description

Orange Hawkweed is a name more familiar in some localities than Devil's Paint Brush. The botanical name *Hieracium aurantiacum* is from the Greek word meaning "a hawk" and implying that the weed is to grass

what the hawk is to the defenseless fowls upon which it preys. The name Devil's Paint Brush doubtless arises from the flaming orange-red flowers which are borne at the end of a stem of 6 to 18 inches in length. At the base of the stem, dark green leaves, hairy on both sides, form in rosette clusters. As shown in the illustration, they are oblong to spatulate. This flat, matted growth of leaves chokes out grass while running surface roots spread out in all directions and have buds or young plants at their tips. Such interwoven growth permits very little grass to penetrate. Obviously the weed is a perennial reproducing its kind by both seed and stolons or runners. Because of the

spreading tendency, this weed is hard to eradicate and when once introduced into lawns may become a serious pest.

Other Characteristics

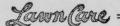
Like most other weeds. Devil's Paint Brush first began to cause alarm in fields and along roadsides from which places it gradually invaded home lawns. It has the questionable distinction of being only one of a dozen weeds beginning with the name "Devil." A member of the same family known as Yellow Flowered Hawkweed is exalted to the dignity of "King Devil." A writer in the 16th Century describing the spreading habit of this weed said: "The seeds turne into

downe that flies away with the Winde," but actually instead of having a downy sail, the seeds are supplied with a sturdy but gossamer-thin wing such as that of pine seeds concealed beneath the woody scales of the cone. In this respect they resemble the wings of the more familiar maple's twin seeds.

DEVIL'S PAINT BRUSH

Orange Hawkweed

(Hieracium aurantiacum)



How to Combat It

An English botanist warned some ten years ago that Orange Hawkweed, as it is better known in Europe, would bear watching in this country but declared at the same time that it could be stopped in its tracks. He recommended that a can of dry sulphate be used so that one may douse the plants when the weather is hot and dry. The weeds, he reported, will turn brown, wither and die. (Ammonium sulphate is not now procurable on account of the war.)

A mixture of four parts sodium chlorate and one part sodium arsenite will do the job if about a half teaspoonful is placed on the crown of each plant. Commercial preparations of this kind are available. Crude sulphuric acid applied to the weeds with a long-spouted oil can will also do the trick.

In experiments conducted at the Vermont station some years ago it was found that applications of dry salt would kill this weed. At first only the individual plants were covered, but later experiments showed that 18 pounds per square rod (approximately 65 pounds per 1000 square feet) would destroy the weeds without permanent injury to the grass. This is equivalent to 65 pounds of salt to 1000 square feet, which would seem to be too strong for average soils. Because of the danger of sterilizing the soil, it would be better to first try a small scale application and observe the effect on the weeds, grass and soil.

The very fact that this weed grows in poor soils, indicates that by a faithful program of fertilizing and soil improvement it may be discouraged. In actual practice such a program has proven most effective in checking the activity of this weed in lawns. Where heavy infestation has occurred, however, more drastic methods are necessary.

Leaves Should be Removed

It is always a problem to know what to do about fallen leaves, especially on a newly planted area. It seems too bad to tramp on new and tender seedlings but this is necessary if the grass is to be protected from further harm. If the leaves are left on, a heavy rain will beat them down and they may smother out the young grass. In cold weather if a freeze follows the rain the damage will be even greater.

So the best thing to do is to try to catch a time when the surface is relatively dry, take a light broom type rake and brush off the leaves.

This suggestion applies to any lawn old or new. Keep the leaves raked up as often as possible. Those having oak trees that continue to drop leaves all through the winter should rake occasionally in the late fall until the ground freezes.

Grass should not be walked on while it is covered with frost. This will bruise the leaves and grass crowns and possibly kill the plants.

There are many questions about the use of a mulch to protect grass from the cold. There is no such protection; in fact grass does not need it though there may be some benefit from a mulch which prevents too early thaws in the spring. This may be especially beneficial to young grass on a southern exposure slope where the warm sun of late winter may thaw the ground in the daytime. A freeze at night may then result in heaving the grass roots.

Straw is about the only mulching material generally available and it has two serious disadvantages. It is apt to contain weed seeds and possibly worse, unthreshed heads of grain which will germinate in the spring and develop into a coarse, stubbly growth. Peat moss is better if available. Manures should never be used because of weed seeds in them and besides they are more valuable in the compost bed.

Since the only purpose of a mulch is to insulate the ground against too early spring thaws, it should not be put on until after the ground has frozen to a depth of several inches. The mulch itself may be spread to a depth of an inch or two and raked off when the danger of hard freezing seems past.