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CONTROL OF WEEVIL IN GARDEN AND FIELD PEAS IN 1943

by

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Pea weevils may be controlled in small home plantings of a few feet of row, or in large commercial fields of peas grown for processing or for seed, by timely applications of a dust insecticide.

The pea weevil lays its eggs on the green pea pods. The only known satisfactory method of controlling this pest is by preventing this egg deposition. This is done by thorough dust insecticide applications on the pea vines, to kill the adult weevils before the eggs are laid.

Timing of dust applications is of primary importance in weevil control.

1. Peas grown for freezing or canning

Time and number of insecticide applications is best determined for each field by experienced fieldmen, employed either by the processors or the growers, working in close cooperation with state and federal entomologists.

2. Austrian winter field peas

Only one dust application is made on Austrian field peas. These peas bloom at approximately the same time within each area of the state, and the time of dusting is determined by federal entomologists or members of the State Experiment Station or Extension Service staff. Growers are notified as to the most effective time through the Extension Service staff.

Dusting is only half of the weevil control program on Austrian peas. The other half involves early harvest and prompt fumigation to kill the larvae remaining in the peas before germination has been impaired. The primary purpose of weevil control on Austrian peas is to insure high germination.

3. Dry edible peas

From one to three dust applications may be required to control the pea weevil on these varieties. Growers will be notified through the Extension Service as to the proper times to make these applications. Dry edible peas, to be graded as No. 1 or No. 2, must show less than .5% and 1% weevily peas respectively. Dusting alone is not expected to give this degree of control in most cases. In order to eliminate the remaining weevily peas, it is necessary to allow the weevils to complete their development before cleaning. This procedure insures the weevily peas' being light enough to be cleaned out most effectively. Hence, such varieties should be allowed to fully mature before harvest, and should be held thereafter for a period of a month or more before fumigation and cleaning.

4. Peas grown in home gardens and commercial plantings for fresh vegetable markets

The first dust application is made just before or as the first pods form, followed by weekly applications until the crop is harvested.

A dust containing $\frac{1}{2}$ of 1% (.5%) rotenone is the most effective insecticide obtainable for combating the pea weevil. Since rotenone is limited, only those areas in each field of dry edible and Austrian field peas that are infested should be dusted. To determine the infested areas and the probable percentage of weevily seed at harvest, sweep the field with an insect-collecting net as the peas come into bloom. Dust those areas in which four beetles are found in 100 sweeps. Four beetles per 100 sweeps will produce at least 10 percent weevily peas. Twenty-five (25) pounds per acre per application of the insecticide should be used.

Dusting equipment necessary will depend upon the area to be treated. Power dusters mounted on trucks, trailers, or tractors, and equipped with hoods, or canvas trailers, covering a swath 25 to 45 feet wide should be used on the large field plantings. Hand dusters, preferably those of the fan type, are satisfactory for home gardens and small commercial plantings. Bellows dusters are satisfactory, but they have the disadvantage of not giving even coverage. The small dust guns are slow and laborious to operate, and they have the same disadvantage as the bellows type. Where a hand duster is not obtainable, pea weevil can be controlled by shaking the dust through cheesecloth onto the plants.