

NURSERY INSPECTION

By

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Nursery inspection, while regulatory in function, is a public service rendered by the North Dakota Agricultural Experiment Station. It is a program which is established by law. The service extended is designed to prevent the sale or distribution of nursery stock infested with disease and injurious insects. Only nurseries which produce healthy and vigorous stock, free of injurious insects and plant diseases are certified.

During 1948 a total of 38 North Dakota nurseries were certified, two of which are operated by the USDA at Mandan and one by the State School of Forestry at Bottineau. The remainder are privately owned. In addition to this, eight licenses were issued to dealers in nursery stock. This service is supported in part by the North Dakota Agricultural Experiment Station and the \$10.00 license fee collected from each certified nurseryman and dealer.

Insect pests which were more abundant than usual included the currant fruit fly, *Epochra canadensis*, the plum curculio, *Conotrachelus nenuphar* and the spruce budworm, *Archips fumiferana*.

In some plantings where native choke cherry was abundant in the vicinity the cultivated plums showed evidence of virus disease, and it was suspected that the native choke cherry served as the natural reservoir or source of infection. The evidence was sufficiently convincing that in one instance it led to the eradication of the choke cherry bushes growing in the vicinity of the cultivated fruit plantings.

The currant fruit fly, *E. canadensis* was present in 75% or more of the fruit in unsprayed plantings examined at Mandan, Bismarck and Jamestown during the latter part of June. A high degree of control was observed in a planting at Mandan which had been sprayed with a spray containing 2 lbs. of 50% DDT to 100 gallons of water. Spraying of the foliage before the flies have laid their eggs appeared to be satisfactory as a means of control.

The plum curculio, *Conotrachelus nenuphar*, was especially injurious to plums in the Fargo area which were unsprayed this year. Spraying with Benzene hexachloride at the rate of 4 lbs. of 50% wettable powder per 100 gallons of water about the time of "leafing out" proved highly satisfactory in control.

The spruce budworm *A. fumiferana* was very abundant in a large planting of spruce located to the northwest of Valley City some 10 miles and was causing severe defoliation. A few light infestations were encountered in other places. Control recommendations were given.