1960 PEA DISEASE SURVEY IN THE OTTAWA VALLEY

V. R. Wallen

A total of ten fields of field and garden peas were examined for the incidence of disease in an area from Renfrew to Ottawa.

The incidence of virus diseases was particularly noted in fields observed at the Central Experimental Farm, Of the four fields examined, all showed virus infection to some extent. In one field of Chancellor peas three distinct virus diseases were found; pea streak was severe on 50 percent of the plants, common mosaic was moderate on 50 percent of the plants and enation mosaic was slight on 5 percent of the plants. In the same field Fusarium wilt and root rot was severe on 20 percent of the plants. Pea streak was also present in two fields of Arthur and Chancellor field peas and in one field of garden peas, variety Director. Pea virus diseases were noted only on the Central Experimental Farm.

Two fields of Delwiche Scotch field peas grown at Douglas and Shawville were moderately to severely infected with root rot. Subsequent isolation revealed that Ascochyta pinodella was responsible for this condition. One field of this variety grown at Richmond was free of disease.

Trace infections of Septoria leaf spot caused by S. pisi were noted in a field of Chancellor field peas grown at Antrim and a field of Delwiche Scotch grown at Shawville. A moderate infection on the lower leaves of most plants was noted in a field of Delwiche Scotch peas grown at Douglas.

Two fields of the new field pea variety Creamette were found to be free of disease. Information received later revealed that this variety produced over 50 bushels of seed to the acre.

For the first time since I began annual surveys for the incidence of pea diseases, no evidence of the leaf and pod spot disease of peas caused by Ascochyta pisi was noted.

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ASTER YELLOWS IN NOVA SCOTIA IN 1960

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Aster yellows reached epidemic proportions in Nova Scotia in 1960 for the first time since the serious outbreak of 1944, when infection in carrot fields averaged 20 percent and a record high of 40 per cent was found in one field. In fact, although the disease can always be found in weed hosts in the province, it appeared to be on the decline, especially since 1955, with annual losses ranging between 1 and 5 per cent in carrots and occasional outbreaks in beds of Calendula and Callistephus. Aster yellows in 1959 was at a very low ebb except in some fall crops of lettuce in the Grand Pre and Sydney areas where growers for several years have been experiencing a rapid build-up of the disease from July onward, rendering late field plantings of lettuce unprofitable. In the Kentville area there was nothing to indicate that an outbreak would develop in 1960, although the closely-related green petal of strawberries and phyllody of clover were unusually abundant in the spring of 1959.

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