1961 PEA DISEASE SURVEY IN THE OTTAWA VALLEY

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Eleven fields, comprising 90 acres of field peas, were inspected for the incidence of disease in the area between Ottawa and Renfrew, Ontario.

Although conditions were very favorable for the development of leaf and pod spot (Ascochyta pisi), the disease was detected only as a trace infection in one small field, Its absence in 1961 can be attributed directly to the lack of seed-borne inoculum. The seed produced in 1960 was free of A. pisi because of the extremely dry conditions that prevailed during the summer of that year. The absence of leaf and pod spot in a year favorable for its development is strongly indicative that the seed-borne phase is very important in the epidemiology of this disease.

The finding of anthracnose (Colletotrichum pisi) was of interest. It occurred in trace amounts in several fields. Anthracnose has been rarely reported in Canada and has not been observed for a number of years.

Mycosphaerella blight (Mycosphaerella pinodes) and foot rot caused by Ascochyta pinodella were each noted in trace to moderate amounts in several fields, The Ascochyta foot rot caused 25 percent damage in one field. Rust (Uromyces fabae) occurred sporadically in several fields. Both leaves and stems showed trace to moderate infection. Blight and Rot caused by Sclerotinia sclerotiorum was recorded in two fields, Damage was slight at the time of inspection, but by harvest time, under optimal conditions, severe losses could occur.

Virus diseases were observed, particularly in fields on the Central Experimental Farm, Ottawa. One small field of the variety Arthur was severely affected by streak; 50 per cent of the plants in this field failed to set seed, Another small field of Creamette was infected with both streak and mosaic in trace amounts.

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