ROOT ROT. Five/7 plantings on saline soils in Man, were affected by root rot. The crowns and roots were severely damaged and isolations yielded a variety of fungi including Fusarium sp., also yellow bacteria. The high degree of salinity was due to calcium sulfate and magnesium sulfate (W.A.F.H.).

SUNSCALD caused light damage in a 30-acre field at St. Cesaire, Rouville Co., Que. (R. Crête).

Field Bean Diseases in Western Ontario in 1959

R.N. Wensley

Two surveys for field bean diseases on farms selected at random in Kent, Middlesex, Huron and Essex counties showed that the prevalence and severity of bean diseases in Western Ontario were determined largely by two factors: first, the prevailing drought during the growing period and second, the widespread substitution of the early maturing variety, Sanilac, for Michelite and other varieties. This report is based principally upon diseases of Sanilac although some finds do apply to the varieties Michelite, Clipper and Red Kidney.

Root Rot was a factor in some areas during a post-planting period of from one to two weeks, Subsequent drought, however, restricted the development of root rot and minimized its importance in most areas of western Ontario.

Anthracnose (Colletotrichum lindemuthianum) was not found, presumably because of the predominance of the anthracnose-resistant variety, Sanilac, to the exclusion of Michelite and other susceptible varieties on many farms and because of the unfavorable weather conditions that prevailed.

Bacterial Blights (Pseudomonas phaseolicola, Xanthomonas phaseoli) were prevalent in western Ontario. Severity was greatest on early maturing varieties such as Sanilac, planted early and growing under conditions of drought. The green foliage, the greater growth, and the lower incidence of disease among plants in depressions and protected border areas as opposed to those in more open situations caused many fields to assume a patch-like appearance.

Alternaria. Secondary invasion of damaged leaf tissues by Alternaria sp. was severe in numerous fields where leafhopper populations were high. Alternaria infection was also associated with bacterial blight. The incidence and severity of Alternaria infection and of bacterial blight were most pronounced on early maturing crops.

Mineral Deficiencies, Symptoms of mineral deficiencies developed in many fields of beans in Kent, Middlesex apd Huron counties, Symptoms were most pronounced on knolls, in sandy soils and in fields planted to sugar beets in 1958. Severe drought accentuated the symptoms and reduced the effectiveness of fertilization, In one field, an early application of ammonium nitrate to the surface of sandy ridges and knolls at the rate of 150 lb/acre reduced the severity of deficiency symptoms and extended the period of growth. However, under severe drought conditions no evidence was found of increased pod formation or yield, The deficiency or non-availability of mineral nutrients is expected to cause a pronounced reduction in yield in many fields,

Sclerotinia Wilt (Sclerotinia sclerotiorum) was found in one field of Cherokee (wax) and Black Valentine in Essex County. Mortality was 12 1/2 percent in Cherokee and 8 percent in Black Valentine,

BEET

SCAB (Streptornyces scabies). Three-4% of the roots in a late planting in the Dover marshes near Prairie Siding in s-w. Ont. showed deep scab lesions, The pH of the soil was about 9. Scab has not previously been observed on table beets in southwestern Ont. (G. E. McKeen).

BROAD BEAN

FUSARIUM WILT (F. oxysporum f. fabae) affected 80% of the plants of the Windsor variety in a garden at Desbiens, Roberval Co., Que. Broad beans have been grown on this plot for a number of years (L.J. Coulombe).

CABBAGE

BROWN ROT (Alternaria brassicae), A sev. infection developed in the outer leaves of cabbage in storage at Lincoln, Lunenburg Co,, N.S. By stripping affected leaves, the grower was able to salvage most of the crop (K.A.H.).

LEAF SPOT (Alternaria sp.). Light infections appeared in experimental plots at Ste. Glothilde, Chateauguay Co., Que. (R. Crête).

CLUB ROOT (Plasmodiophora brassicae) is widely distributed in cruciferous crops in N.S. The use of crop rotation as a control measure is essential (K, A. H.).

BLACK ROT (Xanthomonas campestris). The number of specimens of infected plants received at the Winnipeg Laboratory for diagnosis would indicdte that black rot continues to do avoidable damage to cabbage in Man. (W, A, F. Hagborg).