

Leaf Spot

Leaf spot of sugar beets caused by Cercospora beticola continued to increase in prevalence this year; the increase being thought to be due to the wider acceptance and use of monogerm seed. Apparently the degree of resistance bred into the monogerm seed is not as high as was anticipated.

Other Observations

BLACK ROOT (Rhizoctonia solani, Pythium sp., Phoma sp.). R. solani was identified as the cause of tr. -sl. root rot in fields in the Raymond and Taber areas of Alta. Pythium sp. was isolated from plants in a Lethbridge field showing sl. -mod. infection. Phoma sp. caused tr. infection in 1 field at Lethbridge (E. J. Hawth).

BORON DEFICIENCY was reported in a single field at Raymond, Alta, (E. J. H.).

D. MISCELLANEOUS CROPS

BUCKWHEAT

BACTERIAL INFECTION (causal organism unknown). About 40 per cent of the plants in 1 field in Man. were affected. Pathogenicity tests with the bacterial isolates are being made (W. A. F. Hagborg).

FIELD CORN

Field Corn Diseases in Ontario in 1959

N. J. Whitney

Root and stalk rot of field corn, a complex disease caused primarily by Gibberella zeae and Fusarium moniliforme, was exceptionally severe in southwestern Ontario in 1959, due mainly to advanced maturity and delayed harvest brought about by wet weather. Early in November, a survey was made of corn in Essex County for damage by this disease. In 16 fields surveyed, 49 per cent of the plants were affected by root-and-stalk-rot and 11 per cent of them suffered stalk breakage as a direct result of the disease. Ten per cent of the ears were in contact with the ground as a result of stalk breakage. With approximately 50 per cent of the corn still to be harvested at the time the survey was made, considerable loss was anticipated from ear spoilage as well as from ears not picked.

In October, a survey was made of 24 fields in the counties of Essex and Kent for the incidence of smut and ear rots. Only three diseases were encountered: smut (Ustilago zeae, 1.7%; Diplodia ear rot (Diplodia zeae), 1.0%; and Pink ear rot (Fusarium moniliforme), 0.8%.