COMMON LEAF SPOT (Pseudopeziza trifolii f. sp, melliloti) caused slight defoliation in 3/8 Sask. fields (H.W. Mead). (See discussion under Common Leaf Spot of Alfalfa (D. W. C.).

B. OIL SEED CROPS

FLAX

Flax Diseases in Saskatchewan in 1959

T. C, Vanterpool

The flax acreage in Saskatchewan in 1959 was 1,162,000 and the average yield was 7.5 bu./ac. Largely because of the dry, warm, and bright conditions prevailing in May, June and July, diseases of a pathogenic nature were scarce and did not affect yields in any part of the province. However, these same meteorological conditions were responsible for severe non-pathological heat canker which was widely distributed on the open plains. Conspicuous heat canker damage was recorded from Colonsay, Kindersley, Madison, Milden and Swift Current.

Rhizoctonia seedling blight, caused principally by R. praticola, was well below the average despite the occurrence of the warm, dry conditions which usually favor its development.

Aster Yellows was first recorded as a trace infection at Naicam on 30 July and did not develop to more than a trace in the province as a whole, Leaf-hoppers were unusually scarce.

Two suspected mineral deficiency disorders were encountered:

(1) On a semi-degraded soil at Goodsoil, a condition was noted in which leaves developed yellow tips which graded into a region with brown to dark brown necrotic flecks, Nitrogen deficiency was suspected.

(2) A white leaf-spotting and general stunting occurred at Kindersley. The high soil pH suggested a deficiency, possibly of zinc.

Chemical injury from herbicides was observed in one field, The growing points were damaged and growth of side branches stimulated, resulting in a late crop.

Flax Diseases in Manitoba in 1959

J. W. Martens and W. E, Sackston

About 625,000 acres were sown to flax in Manitoba in 1959. It was dry early in the season in the western part of the province, but rains fell in time and the yield forecast in September was over 9 bushels per acre. Excessive rainfall

in September, followed by snow in early October, prevented harvesting of much of the flax crop in the fall.

Fifty-dne fields of flax were examined at various times in 1959. Seven fields were checked for the presence of aster yellows on July 15; 25 fields were searched for the same disease July 31 and August 1; 17 fields in the Elm Creek to Rathwell area were examined, primarily for rust, on August 26; and 2 fields were checked for pasmo development, on September 15.

Yellows (Aster yellows virus, California strain) was not significant on flax in 1959. The flax was too young for symptoms to be apparent in 3 of the fields examined in mid-July, and in 2 of the fields in late July. Yellows was present in trace amounts in 20 fields in the first two surveys; affected 1 to 3 per cent of the plants in 6 fields, and 8 per cent in 1 field, In the late August survey, 5 fields were free of yellows, 9 fields showed a trace, 2 fields had 5 per cent, and 1 field 10 per cent. All 4 fields with 5 per cent or more yellows were in the Haywood - St. Claude area.

Rust (Melampsora lini) was found in only 4 fields, all in the Haywood - St. Claude area, Only 1 rusted plant was fodnd in 1 field, and traces in 1 field, Forty per cent of the plants had some rust in 1 field, and 90 per cent of the plants were rusted in 1 field. Infections were not heavy on individual plants and all the rust was in the telial stage.

Pasmo (Septoria linicola) affected from trace to 5 per cent of the stem area in 9 fields, 10 to 20 per cent in 5 fields, and 30 to 40 per cent in 2 fields.

Boll Blight (physiologic) affected 5-15 per cent of the bolls in 5 fields, and 20-30 per cent in 10 fields.

Flax Diseases in Alberta in 1959

W. P. Campbell and J. S. Horricks

A limited flax disease survey was carried out in Alberta with the senior author surveying 14 fields in the north and central areas and the junior author observing 6 fields in the south.

Rust (Melampsora lini) was observed only at Fort Vermilion where it was severe in 1 field of Redwing. Resistant varieties planted nearby were unaffected.

Browning and Stem Break (Polyspora lini) occurred only in the northern areas. One field showed moderate browning near Grand Prairie and a trace of stem break was seen in a field near Peace River. Up to 10 per cent of the plants were affected in 6 fields near Fort Vermilion,