trifolii repentis. All are morphologically alike but physiologically different  $(\mathbf{D}, \mathbf{W}, \mathbf{C})$ .

**CROWN** BUD ROT (<u>Rhizoctonia solani</u>, <u>Fusarium roseum</u>, <u>Ascochyta</u> <u>imperfecta</u>). Twenty-seven/34 s, Alta fields were found affected, 7-tr.-sl. 10-sl.mod. 5-mod.-sev. and 5-sev. A moderately diseased specimen was also seen from Kamloops, B.C. (E.J.H.).

WINTER CROWN ROT (low-temperature basidiomycete) affected 27/56 n. Alta. fields. It as sl. in the Fort Vermilion area,  $sl_*$ -mod. in the region around Edmonton and mod, -sev. in the Peace River district (N.C.). It was sev. in large patches in 2 fields north of Tisdale, Sask. (H.W.M.).

BORON DEFICIENCY. Due to drought in May and June, symptoms of boron deficiency, which usually occur on the second crop, were severe on Grimm before the first cutting at St. Pacdme, Kamouraska Co., Que. (R.O.L.).

POTASSIUM DEFICIENCY. Slight-mod, symptoms were observed in 2/34 fields in s. Alta. (E. J.H.).

WINTER INJURY was found in specimens submitted from Kamloops and Agassiz, B. C., and from Wildhorse, Alta, Severe damage was observed at Brooks, Alta. (E. J. H.).

Report on a co-operative field test to show susceptibility of alfalfa to Ascochyta imperfecta from natural infection

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Samples of twenty-two varieties and 20 polycross lines of <u>Medicago</u> <u>sativa</u>, 6 samples of M. <u>falcata</u> and 1 sample of <u>M. glutinosa</u> were planted in replicated plots at 2 locations in Man., 2 in Sask., and 3 in Alta. in 1956. In the fall of 1957 and 1958, these plots were sampled and the severity of infection of <u>A. imperfecta</u> was estimated at the co-operating laboratories by means of a scale from which percentage disease ratings could be calculated. The results of the 2 years' observations can be summarized as follows:

- (1) At each station, only 10 to 15 per cent in disease rating separated the best from the poorest selections:
- (2) There were large differences between replicates at each station
- (3) There was little or no agreement between the results for 1957 and 1958 at any station
- (4) There was very little agreement between the stations as to ranking of the 49 selections for susceptibility
- (5) No worthwhile resistance to <u>A</u>. <u>imperfecta</u> was observed in the two years<sup>\*</sup> work.