

STEM END DISCOLORATION (non-parasitic) was seen in 30 bin lots in Que., affecting 1-3% of the tubers (B.B.).

MAGNESIUM DEFICIENCY was general in potato crops in the St. John's and Bonavista Bay districts of Nfld. (O.A.O.).

Little Leaf of Potato

D. B. Robinson

A disorder of potato, commonly called 'little leaf', has been observed in a few instances in potato fields in Prince Edward Island for several years past, but has become much more serious in the 1958 crop. It has been observed chiefly in the western part of the province and mostly in the variety Sebago, although it is occasionally reported in other varieties. Of the numerous fields in which outbreaks were recorded in 1958, 11 were affected to an extent of 0.1 % or more of the crop, and in one field 8% of the plants were affected.

'Little leaf' is so named because the chief characteristic of the disorder is the smaller than normal size of the leaves of affected plants. Also the foliage of such plants is generally somewhat lustreless, the flowers are smaller and the plants are slightly shorter. The tubers are normal in appearance but quite small. Preliminary observations indicate that the number of tubers formed is not affected but that total weight may be decreased by half. It has also been found that such tubers produce plants with typical little leaf symptoms the following season. Thus, the disorder may be spread very rapidly by the use of seed from an affected crop, and especially so because many of these smaller tubers are of acceptable seed size grade.

Elimination of 'little leaf' by roguing is difficult because many cases have been observed in which the symptoms described above are not clear cut. In some instances this may be because of uneven fertility in the field, but in many others it seems apparent that the disorder is present in varying intensity so that some plants are slightly, and others severely, affected. This difficulty in diagnosis is increased when the crop is not grown in tuber units.