BRIEF ARTICLES

Elephant hide of potato

E. H. Peters[1]

A skin defect of potato, called elephant hide, is reported for the first time in Canada. It was observed by L.M. Casserly of the Ottawa Research Station on one tuber in a hill of potato seedling 'G-581-25' in October 1965 and identified by Dr. D.S. MacLachlan of the Plant Protection Division.

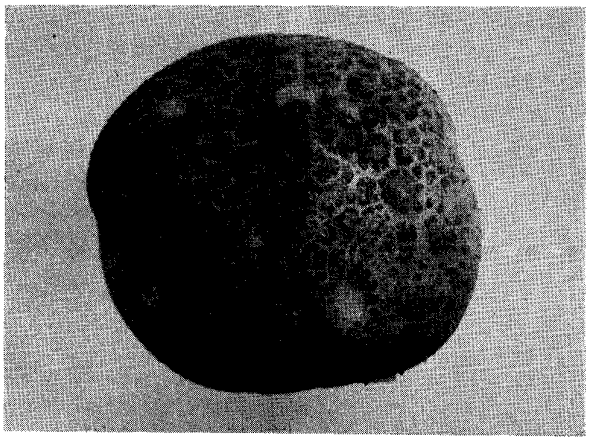

Fig. 1. 'Elephant hide' on potato seedling G.581–25.

The symptoms (Figure 1) are typical of those described by Blodgett and Rich (1) who state that portions or the entire surface of some tubers show very coarse netting or furrowing of the outer skin. The condition has been reported (1, 2) in the United States wherever the cultivar 'Russet Burbank' is grown.

The cause of the condition is not known but, according to Blodgett and Rich it is probably due to environmental factors such as contact with decaying organic matter or possibly with fertilizer or soil salts. Tests (1) have shown that it is not perpetuated through the stock.

literature cited

1. Blodgett, Earle C., and Avery E. Rich. 1949. Potato tuber diseases, defects, and insect injuries in the Pacific Northwest. Pop. Bull. No. 195. State Coll. Wash. 116 pp.
2. Index of plant diseases in the United States. 1960. U. S. D. A. Agr. Handb. 165. 531 pp.

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Drechslera phlei as a contaminant of red clover seed

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Drechslera phlei (Graham) Shoem. was found on seed of red clover, Trifolium pratense L. The seed from the 1962 crop was obtained from Dr. W.R. Childers, Ottawa Research Station, C.D.A. and was a blended mixture of 'Dollard' and 'La Salle' varieties. The seed was untreated and for examination was separated according to color into three groups: yellow (Dollard), dark brown (La Salle), and medium brown. Seeds were plated on yeast-extract mannitol medium and examined for percentage germination, and for contamination by fungi and bacteria. The yellow (Dollard) seed had 89% germination and 21% contamination and the dark brown (La Salle) seed had 77% germination and 16% contamination. The medium brown seed had only 16% germination and the contamination was 45%; 24% by bacteria and 21% by fungi. The fungi included species of Alternaria, Penicillium, Aspergillus, Cladosporium, Candida and Fusarium, with Penicillium and Aspergillus being the most common fungi found on the 'Dollard' and 'La Salle' seed and Alternaria the most common fungus in the medium brown group. Drechslera phlei was found in the sample of medium brown seed possessing low germination. This is the first record of the occurrence of Drechslera phlei on red clover seed. The low incidence of the fungus on the seeds suggests that it may only have been present as a contaminant, and was not a cause of the lowered germination.

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