A selenophoma leaf spot on cereals in the Maritimes'

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A leaf spot caused by *Selenophoma donacis* var *stomaticola* was found on barley and wheat in several locations in Nova Scotia and Prince Edward Island in 1978

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Une tache feuille causee par *Selenophoma donacis* var *stomaticola* a ete trouvee sur les plantes d orge et du ble dans plusiers locations de la Nouvelle Ecosse et L'Ile du Prince Edouard

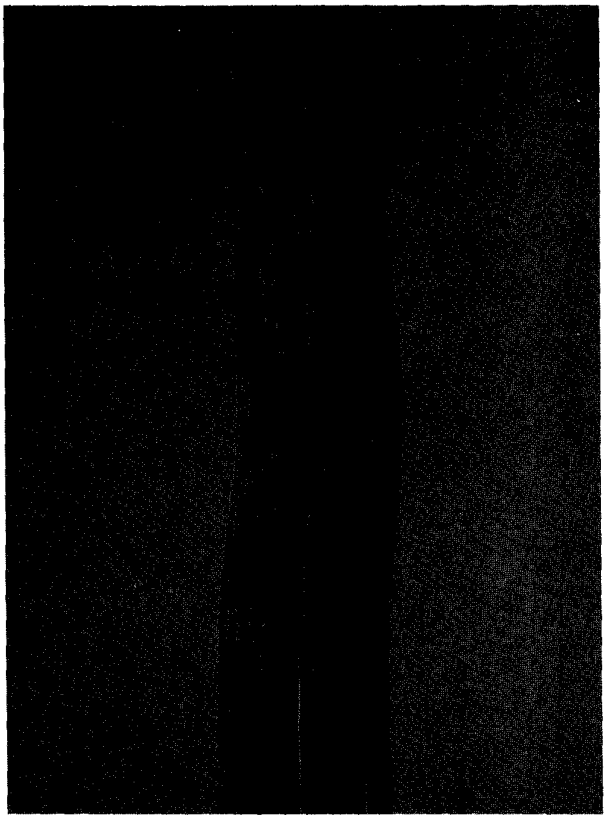

Fig. 1. Symptoms of selenophoma leaf spot on barley

Introduction

Leaf spots caused by species of *Selenophoma* have been described by Sprague (4) on a number of grass and cereal hosts in the United States. In Canada species of the fungus were reported on *Hordeum vulgare* L. in 1943 (1) and *H. jubatum* L. *(2)* in Alberta in 1956, but there are no previous published records of its Occurrence in Eastern Canada. In this paper we report the occurrence of *Selenophoma donacis* var. *stomaticola* (Bauml.) Sprague & Johnson on barley and wheat in Nova Scotia and Prince Edward Island. This is the first record of this disease in the Maritimes.

Observations

Symptoms of the disease on barley were small rectangular or squarish lesions with grey to straw colored centres and dark brown margins (Fig. 1.). Older lesions contained rows of black pycnidia. There was some coalescence of lesions from older infections and in some cases lesions were surrounded by a chlorotic halo or streaking between lesions. Typical lesions were also found on leaf sheaths and culms but not on awns. Pycnidia were not found on culm lesions. In moist conditions mucilaginous cirrhi were observed oozing from pycnidial ostioles. The cirrhi contained septate, sickle-shaped pycnidiospores 12-20 mμ in length. These features distinguish S. *donacis* var. *stomaticola* from S. *donacis* (Pass.) Sprague & Johnson which has larger aseptate spores of a similar shape (4).

The disease was prevalent in early sown fields but severities were generally slight except in fields with a dense canopy and in test plots with high nitrogen rates where leaf spots accounted for up to 25% of the leaf area according to the assessment keys of Cooke and Brokenshire (3).

In Nova Scotia the disease was found most frequently in Cumberland, Colchester, and Pictou counties. It was recorded also in Hants, Antigonish, and Kings Counties. In Prince Edward Island the disease was found in fields in Queens and Kings counties. In the majority of cases in both provinces the disease was on Loyola barley.

The only observations of the disease on wheat were from trials at Brookside, N. S., and the Charlottetown Research Station where it was noted on a number of different cultivars.

Leaf spots caused by *Selenophoma* spp. are described by various common, names, notably 'speckle' (4) 'eye spot' (4), and 'halo spot' (3). These common names are

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inappropriate since they do not accurately describe symptoms and may be confused with other diseases, namely eyespot of wheat caused by *Cercosporella herpotrichoides* Fron and halo blight of oats caused by ***Pseudomonas coronafaciens*** (Ch. Elliot) Stev. Therefore we suggest that the use of these common names be discouraged and the disease be referred to as selenophoma leaf spot.

Literature cited

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