Anthracnose on field beans in Ontario[1]

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Anthracnose caused by ***Colletotrichum lindemuthianum*** was found in a Select seed plot of the white field bean ***(Phaseolus vulgaris)*** cv. Sanilac and in a Foundation field of Sanilac and a commercial field of Kentwood in southwestern Ontario in 1976. All cultivars grown commercially in the area are regarded as resistant to anthracnose, suggesting that a race of the fungus new to the area has been introduced.

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On a constaté la presence d'anthracnose causee par ***Colletotrichum lindemuthianum*** dans une parcelle de sernences Select de haricot blanc ***(Phaseolus vulgaris*** cv. Sanilac), ainsi que dans une parcelle de semences de fondation de Sanilac et une autre de sernences commerciales de Kentwood dans le sud-ouest de l'Ontario en 1976. Tous les cultivars cultives commercialement dans la region sont consideres comme resistants a l'anthracnose, ce qui laisse supposer l'introduction d'une race du champignon jusque-là inconnue dans la region.

During the inspection of Select white field bean plots in southwestern Ontario in August, 1976, a pod with anthracnose-like symptoms was located in one of the Sanilac plots, near Staffa, Ontario. A thorough inspection of the 1 acre plot did not reveal any further infected material at that time. Subsequently a culture of ***Colletotrichum lindemuthianum*** (Sacc. and Magn.) Bri. and Cav. was isolated from the infected pod. A second inspection on September ***8*** revealed that at least 5% of the plants were infected. Pods on infected plants were severely affected. The pattern of infection in the field was indicative of seed-borne infection with heavily infected plants surrounded by healthy plants.

An adjacent field of Foundation Sanilac was also affected at this time, also with approximately 5% of the plants infected. As most of the leaves had either fallen or were in an advanced stage of senescence, it was not possible to determine if any leaf infection had occurred. Since then a number of cultures of ***Colletotrichum lindemuthianum*** have been obtained from infected material from these two fields.

The staff of the London district office of Plant Products Division was notified of the finding and infected pods were subsequently forwarded from a commercial field of the variety Kentwood from the Springfield area. In this field 75% of the plants were infected. Cultures of the anthracnose organism were also isolated from two samples of Flageolet Verte beans grown in the Dublin, Ontario, area.

The principal white field bean varieties Kentwood, Sanilac, and Seafarer are regarded as resistant to anthracnose, at least to the races of anthracnose present in Ontario. This finding suggests the presence of a race new to the area. In preliminary greenhouse trials all three varieties have proven susceptible to the original two isolates, and on the basis of the reaction of differential bean cultivars, the race has been identified as delta.

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