A recurrence of tomato corky root in Ontario

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Corky root rot of tomato, caused by ***Pyrenochaeta lycopersici,*** was found in several greenhouses in southwestern Ontario in 1982 and 1983, the first records since 1944.

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La maladie des racines liégeuses de la tomate, causée par ***Pyrenochaeta lycopersici,*** a été identifiée dans plusieurs serres du sud-ouest de l'Ontario an 1982 et 1983 pour les premieres fois depuis 1944.

Introduction

Corky root rot was found in a greenhouse crop of tomatoes, ***Lycopersicon esculentum*** Mill., at Chatham, in southwestern Ontario in the summer of 1982. The cv. Vendor was being grown in plastic greenhouses in steam-sterilized soil groundbeds but the crop was unthrifty. Many of the plants wilted on hot days. The disease was found in cv. MR13 in several other greenhouses in the Learnington area in 1982 and 1983. Symptoms typical of corky root rot (1-5, 7) occurred in the roots of both cultivars and some roots also had microsclerotia of ***Colletotrichum coccodes*** (Wallr.) Hughes. Isolations from surface-sterilized portions of affected roots yielded cultures of the so-called gray sterile fungus (GSF) (2), known since 1966 as ***Pyrenochaeta lycopersici*** Schneider & Gerlach (6). The roots also yielded cultures of ***C. coccodes.***

The isolates of P. ***lycopersici*** alone first induced symptoms typical of brown root rot and, later, corky root rot, in tomato seedlings of the cv. MR13 grown in sterilized potted soil infested with the fungus cultured on sterile rye seed. Infesting the soil with chopped infected roots also induced symptoms in seedlings.

The last report of this disease in Ontario was made by Richardson and Berkeley in 1944 (5), before its etiology was defined, and the causal fungus identified as P. ***lycopersici.*** ***Colletotrichum coccodes*** is often associated with P. ***lycopersici*** but is not itself an incitant of corky root rot.

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