

REPORT ON TURFGRASS DISEASE RESEARCH

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THE ROLE OF TYLENCHORHYNCHUS DUBIUS IN THE DEVELOPMENT
OF FUSARIUM BLIGHT

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Fusarium blight, a disease reported to be incited by Fusarium roseum (LK) amend. Synd. and Hans. F. sp. cerealis has been a serious problem on Merion Kentucky bluegrass turfs, Poa Pratensis L., in Michigan for the past several years.

A survey of Fusarium blighted turfs revealed the presences of high populations of Tylenchorhynchus dubius (Butschli), Filipjev, the stunt nematode. A green house study was initiated to determine the possible role of T. dubius in the development of Fusarium blight. The study showed that the symptoms associated with individual plants affected with Fusarium blight. Preliminary evidence indicates that two nematocides, Bay 68138 (nemacur) and duPont 1410, may be effective in controlling Fusarium blight. However, further evaluation is necessary before positive conclusion can be drawn. Furthermore, Tersan 1991 which effectively controlled Fusarium blight in the past was shown to reduce the T. dubius population in infected plots. This may explain why it has been successful in controlling this disease while known fungicides controls of other Fusarium diseases have failed.

In conclusion, our results suggest that the disease called Fusarium blight, previously believed to be caused solely by the fungus F. roseum actually involves an interaction with the nematode T. dubius.