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Agricultural and Food Science - abstract



Vol. 15 (2006), No. 1, p. 35-42

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Prochloraz tolerance of *Pyrenophora teres* population in
Finland

Keywords barley, *Drechslera teres*, fungicide tolerance, population
diversity, sterol-biosynthesis inhibitor, net blotch,

Abstract

Barley leaves infected with *Pyrenophora teres* Drechs. f. *teres* were collected from farmers' fields and an experimental field for evaluation of efficacy of fungicides at MTT Agrifood Research Finland (MTT), in 2003. The aim was to test the efficacy of prochloraz to inhibit in vitro growth of *P. teres*. Potato dextrose agar (PDA) dishes amended with 0.1 and 1.0 ig ml⁻¹ prochloraz were used for testing 364 isolates of *P. teres* based on preliminary experiment. Isolates from MTT's experimental field were growing slower on fungicide- amended media than isolates from farmers' fields. The overall mean inhibition of radial growth was 63 and 86% on media amended with 0.1 and on 1.0 ig ml⁻¹ prochloraz, respectively. Isolates of different origin differed significantly on growth on fungicide-amended media. The isolates capable of growing on increased concentrations of prochloraz were most commonly isolated from fields, where prochloraz was sprayed during the growing season. Within MTT's experimental field no effect of fungicide application during the growing season was observed on growth of isolates in vitro. Data from this survey was insufficient for making further conclusions regarding the effect of agricultural practices on selection of fungicide tolerant *P. teres* isolates. Fungicides with different types of mode of action are recommended for use together with prochloraz against the net blotch pathogen in Finland. These results are preliminary.

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Update 10.5.2006.

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