

PATHOTYPIC DIVERSITY OF *Rhynchosporium secalis* ISOLATES IN FIVE PROVINCES OF IRAN *

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(Received: 11. 12. 2010; Accepted: 20. 7. 2011)

Abstract

Leaf blotch of barley, caused by *Rhynchosporium secalis*, is a major disease of barley in Iran. Pathogenic variation of barley scald pathogen was determined by testing 47 isolates collected from five provinces of Iran. Among the isolates tested Rs55 and Rs86 were the most virulent and Rs45 was the least virulent. According to their reactions against eight differential barley cultivars containing known resistance genes, 20 different pathotypes were determined and these pathotypes represent a very broad virulence spectrum. Pathotype 1 (pt1) was found in all five surveyed provinces. Pathotypes pt15, pt12 and pt13 caused susceptible reaction in 62, 50 and 50% of cultivars, respectively. Of these cultivars Igri and Armele containing *BRR4* and *BRR1* resistance genes were the most resistant whereas cultivars WI and Digger were the most susceptible against these pathotypes, respectively. There was no association between pathogenic variability and geographical location of *R. secalis*.

Keywords: Barley, Scald, Differential cultivars, Resistance genes, Aggressiveness.

See Persian text for figures and tables (Pages ۳۳۱ –۳۴۰).

*: A Part of PhD. Thesis of the First Author, Submitted to College of Agriculture and Natural Resource, Islamic Azad University, Science and Research Branch, Tehran, Iran.

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