

Erratum

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Inheritance of downy mildew resistance, β -1,3 glucanases and peroxidases in pearl millet [*Pennisetum glaucum* (L) R. Br.] crosses Theor Appl Genet (2001) 102:1221–1226

Due to unfortunate oversight two of the authors and some details in the acknowledgements were missed. The corrections made accordingly are given below.

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Abstract The inheritance of resistance to downy mildew disease and the defense-related enzymes β -1,3-glucanase and peroxidase was studied in crosses of pearl millet using a generation-mean analysis. The study material comprised six generations (susceptible and resistant parents, F₁, F₂, BC₁ and BC₂) in three crosses. Seedlings from these generations were inoculated with the downy mildew pathogen *Sclerospora graminicola* and disease incidence was recorded. Analysis of constitutive levels of β -1,3-glucanase and peroxidase in the seedlings of different generations indicated that the resistant populations showed higher enzyme activities, while lower activities of the enzymes were recorded in the susceptible populations. In the generation-mean analysis, the significance of scaling tests revealed the existence of non-allelic interactions in the inheritance of resistance to downy mildew as well as with the enzymes. Among the gene effects, both additive and dominant effects were significant. All the non-allelic interaction effects were significant in the crosses. Studies on the isozyme patterns of the enzymes substantiated the results of the disease-incidence

experiments in most of the generations. The results indicated that the inheritance of downy mildew disease resistance and the expression of β -1,3-glucanase and peroxidase in pearl millet is not only under the control of additive and dominant genes but are also governed by complex non-allelic interactions.

Keywords Pearl millet · Downy mildew · Resistance · Inheritance · β -1,3-Glucanase · Peroxidase

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