

Cultural and morphological variability and identification of anastomosis group of *Rhizoctonia solani* (*Thanatephorus cucumeris*) causing sheath blight of rice in Kashmir

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ABSTRACT: Twenty seven isolates of *Rhizoctonia solani* collected from different locations across five districts of Kashmir valley were observed for cultural and morphological variation and identification of anastomosis group causing sheath blight of rice in Kashmir. The isolates belonged to five cultural and morphological groups designated as A, B, C, D & E on the basis of colour of mycelium, growth rate, colour of sclerotia, average size of sclerotia and pattern of sclerotia formation. Isolate Shb 4, Shb 6, Shb 10, Shb 14, Shb 18 & Shb 24 belonged to group A, while isolate Shb 3, Shb 5, Shb 9, Shb 12, Shb 13, Shb 15, Shb 16, Shb 20, Shb 22 and Shb 23 belonged to group B. Group C comprised of isolates Shb 7, Shb 11, Shb 21 and Shb 25 whereas group D and group E comprised of isolates Shb 1, Shb 8, Shb 17, Shb 27 and Shb 2, Shb 19 and Shb 26, respectively. However, no correlation was found between morphological groups and anastomosis grouping of isolates as all the isolates belonged to only one anastomosis group (AG1-1A) on the basis of observations on hyphal anastomosis and their pathogenic reaction to rice, maize, soybean and wheat plants.

Key Words: Rice (*Oryza sativa* L.), sheath blight, cultural, morphological characters, anastomosis grouping, *Rhizoctonia solani*,