

Research Article

UV-B Radiation Tolerance in the Conidia of *Beauveria bassiana* (Balsamo) Vuillemin

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Abstract

Study was conducted to determine the variation in UV tolerance between seven isolates of *B. bassiana*. The conidial suspension of each *Beauveria* isolates were spread and exposed to UV(305 nm) at distance of 10 cm from source for different exposure times (10s, 20s, 30s, 40s, 50s and 60s). The colony forming units decreased as the exposure time to UV radiation increased. Significant difference in tolerance to UV radiation was recorded between *B. bassiana* isolates, After 60s of exposure, maximum viable count of 8.66×10^3 cfu ml⁻¹ and 8.00×10^3 cfu ml⁻¹ was recorded in the commercial isolate *B. bassiana*. Mycojaal and native isolate *B. bassiana* (F10), respectively with per cent culturability of 18.28 and 16.88 per cent respectively. So, negative effect of UV-B radiation on conidial culturability was recorded and among the all seven *Beauveria* isolates native isolate F10 and commercial formulation isolate (Mycojaal) were more UV tolerant as compared to other.

Key words: *Beauveria bassiana*, cfu, culturability, tolerance, UV radiation

Citation: Devi Kirti, Joshi Neelam and Sodhi HS. 2017. UV-B radiation tolerance in the conidia of *Beauveria bassiana* (Balsamo) Vuillemin. J Mycol Pl Pathol 47 (4): 441-446.