

# **Efect of U V Protectants on the Pathogenicity Growth and Spore Production of *Beauveria bassiana* (Bals) Vuil.**

**B Sabitha, P V Krishnaya, P Arjuna Rao and V Srinivasa Rao**  
Department of Entomology, Agricultural College, Bapatla-522 101

## **ABSTRACT**

Ultra violet(UV) protectants,viz.,charcoal(1%) Indian ink (1%)congo red (1%)robin blue (0.5%),and Yeast extract 2% were evaluated for their effect on the bioefficacy of *Beauveria bassiana* (Bals) Vuill at its LC<sub>50</sub> (9.4 x 10<sup>4</sup> spores ml<sup>-1</sup>) against the third instar larvae of *Spodoptera litura* (Fabricius) after exposing them to UV-light (30 minutes, one hour and three hours,. Further, the fungal growth and spore protectants resulted significantly higher larval mortalities (20.61 to 71.20%), fungal growth (1.40 to 7.77 cm diam.) and spore production (8.75 to 617.5 x10<sup>4</sup> spores ma<sup>-1</sup>) after 30 minutes to three hours of exposure to UV-light. The LT<sub>50</sub> values for *B.bassiana* at its LC<sub>50</sub> with and without any UV-protectants ranged between 91.2 to 194.4 hours after 30 minutes to one hour exposure to UV-light. Whereas, the LT<sub>50</sub> values of *B.bassiana* at its LC<sub>50</sub> with charcoal (1%) and Indian ink (1%) were 235.2 and 242.4 hours after three hours of exposure to UV-light, respectively.

**Key words :** *Beauveria bassiana*, Charcoal, Congo red, Indian ink, Robin blue, *Spodoptera litura*, UV-protectants, Yeast extract.