## Pathogenicity of Oil Formulations of Entomopathogenic Fungus, Nomuraea rileyi (Farlow) Samson Against Spodoptera litura (Fabricius)

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## **ABSTRACT**

Three oil formulations of entomopathogenic fungus *Nomuraea rileyi* were evaluated for their efficacy in terms of  $LC_{50}$ ,  $LC_{90}$  and  $LT_{50}$  against *Spodoptera litura* during 2011-2012 at the Department of Entomology, S.V. Agricultural College, Tirupati. The lowest  $LC_{50}$  (0.3 x  $10^4$  spores ml<sup>-1</sup>) and  $LC_{90}$  (1.2 x  $10^7$  spores ml<sup>-1</sup>) were obtained with groundnut oil formulation.  $LC_{50}$  and  $LC_{90}$  values of *N. rileyi* were lower with oil mixed application than applying the fungus as crude suspension. Lower  $LT_{50}$  of 3.93 days was obtained with groundnut oil formulation at 1 x  $10^8$  spores ml<sup>-1</sup> concentration. The  $LT_{50}$  values recorded with sunflower oil, coconut oil and crude formulations are 4.81, 5.28, and 5.93 days respectively at higher concentration (1 x  $10^8$  spores ml<sup>-1</sup>).  $LT_{50}$  values were higher at lower concentrations.

**Key words:** LC<sub>50</sub>, LT<sub>50</sub>, *Nomuraea rileyi*, Oil formulations, Pathogenicity.