Interaction Effects of Entomopathogenic Fungi on Lesser Grain Borer, *Rhyzopertha dominica* (F.) in Paddy

P Jyothi, N Sambasiva Rao and P Anil Kumar
Department of Entmology, Agricultural College, Bapatla – 522 101

ABSTRACT

The interaction effects of entomopathogenic fungi, *Beauveria bassiana, Metarhizium anisopliae* and *Lecanicillium lecanii* were tested against lesser grain borer, *Rhyzopertha dominica* at Post Harvest Technology Centre, Bapatla during the year 2011-12. The interactions of entomopathogenic fungi at 15 DAT, revealed that the grains treated with *Beauveria* + *Metarhizium* have recorded the highest adult mortality of 96.30% followed by *Beauveria* + *Metarhizium* + *Lecanicillium* (92.1%) when compared to *Beauveria* (89.2%), *Metarhizium* (84.6%) and *Lecanicillium* (62.2%) tested alone. At 180 DAT, *Beauveria* + *Metarhizium* + *Lecanicillium* has recorded least progeny adults and per cent weight loss of 119.7 and 17.7% followed by *Beauveria* + *Metarhizium* (122.00 and 18.8%) when compared to control (398.67 and 51.3%). Highest per cent reduction in progeny was observed with *Beauveria* + *Metarhizium* + *Lecanicillium* (69.9%) followed by *Beauveria*+ *Metarhizium* (69.40%), *Beauveria* alone (66.6%) and *Beauveria* + *Lecanicillium* (65.5%) when compared to control at 180 DAT. *Beauveria* + *Metarhizium* + *Lecanicillium* has recorded high per cent reduction in weight loss of 65.5% followed by *Beauveria* +*Metarhizium* (63.4%), *Beauveria* (61.8%) and *Beauveria*+ *Lecanicillium* (60.5%) when compared to control at 180 DAT.

Key words : *Beauveria bassiana*, Entomopathogenic fungi, Lesser grain borer, *Lecanicillium lecanii, Metarhizium anisopliae*.