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Pathogenicity of three commercial products of entomopathogenic fungi, *Beauveria bassiana, Metarhizum anisopilae* and *Lecanicillium lecanii* against adults of olive fly, *Bactrocera oleae* (Gmelin) (Diptera: Tephritidae) in the laboratory

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[fulltext]

The pathogenicity of entomopathogenic fungi, *Beauveria bassiana, Metarhizum anisopilae* and *Lecanicillium lecanii*, was evaluated against adults of the olive fly *Bactrocera oleae* (Gmelin) under laboratory conditions by two ways, contact bioassays and oral bioassays. The results showed that oral bioassays caused higher mortality after four treatments than the used contact bioassays. Moreover, the virulence of*L. lecanii* was higher than the virulence of *B. bassiana* and *M. anisopilae* in both ways of experiment. Lethal time (LT_{50}) was shorter in oral bioassays than in contact bioassays in all treatments. It was 14.67, 8.30 and 5.43 days for *B. bassiana, M. anisopilae* and *L. lecanii* with oral treatment while it was 16.6, 26.07 and 12.59 days for *B. bassiana, M. anisopilae* and *L. lecanii*, respectively, with contact treatment. The slope values were 2.41,

2.55 and 2.37 for contact bioassays and 1.64, 1.69 and 1.61 for oral bioassays of *B. bassiana, M. anisopilae*and *L. lecanii*, respectively. The mortality response to the interaction between *B. bassiana* and *M. anisopilae* was synergistic while the interaction between *B. bassiana* + *L. lecanii* and *M. anisopilae* + *L. lecanii* showed an antagonistic response.

Keywords:
Bactrocera oleae; Beauveria bassiana; Metarhizum anisopilae; Lecanicillium lecanii; pathogenicity

[fulltext]