

ABSTRACT BOOK



8th Congress of European Microbiologists

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applied microbiology



7-11 July 2019 | Glasgow, Scotland | www.fems2019.org

PW461 Activity of *Schinus lentiscifolius* ethanolic extract associated to the fungus *Beauveria bassiana* against larvae of the tick *Rhipicephalus (B.) microplus*.

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Background: Infestations by ectoparasites, mainly by the tick *Rhipicephalus (Boophilus) microplus*, represent a great economic obstacle to cattle breeding. The intense massive use of synthetic acaricides has produced ticks that are resistant to the molecules available in the market. Thus, studies seeking effective alternatives should be encouraged.

Objectives: To evaluate derivatives of natural products in association with entomopathogenic fungi against *R. (B.) microplus* larvae.

Methods: *Beauveria bassiana* fungus, kept in BDA medium, was scraped and placed in saline solution adjusting the concentration to 10⁷ conidia/mL. The plant extract was obtained by maceration. The sensitivity tests of *R. (B.) microplus* larvae were performed according to the technique developed by FAO, where approximately 100 larvae of the species were placed on filter paper measuring approximately 10 x 8 cm, impregnated at concentrations of 10 to 1.25% associated with fungal suspension and controls. These papers impregnated with the extracts were folded into a "sandwich", sealed and incubated at 27 ° C and 80% relative humidity. The triplicates were read after 5 days of incubation with the help of a vacuum pump, adapted to differentiate live and dead larvae.

Results: The results showed that in the highest concentration mortality was 15.46%. Despite the low percentage of mortality presented, it should be considered that the concentrations used were small. Another point to be highlighted is that the methodology is proposed for the detection of resistance to commercial acaricides and here is adapted to natural products and fungal associations.

Support: Fapesp, CNPq