



**COMPARATIVE STUDIES BETWEEN THE
MEDITERRANEAN FRUIT FLY, *Ceratitis capitata*
(WIED.) AND PEACH FRUIT FLY, *Bactrocera zonata*
(SAUND.) (DIPTERA: TEPHRITIDAE)**

BY

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ABSTRACT

Laboratory experiments were conducted to evaluate certain crude botanical extracts (Cinnamon, *Cinnamomum verum* - Wormwood, *Artemisia annua* - Thyme, *Thymus vulgaris* - Chili pepper, *Capsicum annum*) and phenol compounds (Salicylic acid - Acetylsalicylic acid - Benzoic acid - Sodium benzoate), at different concentrations in the larval artificial diets of the Mediterranean fruit fly, *Ceratitis capitata* and peach fruit fly, *Bactrocera zonata*. Effect of the treated diets on certain biological aspects of the two species of fruit flies was differently varied according to the used compounds. Also, the mortality percentages of crude botanical extracts and phenol compounds for adults in different ages was determined.

The competition between larvae of both the Mediterranean fruit fly and the peach fruit fly together in different host plants was assessed. Larval duration was determined. The pupation (%), pupal duration, pupal mortality (%) as well as emergence (%) and sex ratio were recorded.

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