ABSTRACT

BIOLOGICAL CHARACTERISTICS OF SEVERAL GENERATIONS OF FIELD COLLECTED AND LABORATORY REARED *COTESIA FLAVIPES* CAMERON COLONIES

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The objective of the study was to examine the biological characteristics of several generations of field collected *Cotesia flavipes* Cameron (Hymenoptera: Braconidae) (wild colony or the first generation, G1) Vs. laboratory reared colonies (5th and 7th generation or cohort, G5 and G7). The study was arranged in a Completely Randomized Design (CRD) with generations of the *C. flavipes* colonies were assigned as the treatments, i.e. generation (G1), generation 5 (G5), and generation 7 (G7). Each treatment was repeated five times. Data of emerging adults and maximum longevity of the parasitoids were subjected to analysis of variance (ANOVA) and followed by means separation test (LSD, α =0.05). The results showed that colonies of *C. flavipes* that had been reared in the laboratory for a longer period produced the lower number of female adults compared to those collected from the field (wild colonies or G1). Colonies of *C. flavipes* reared in the laboratory for a longer period also had a shorter maximum longevity for their female adults. Colonies originated from wild cohort (G1) of *C. flavipes* produced a better sex ratio with a higher number of females compared to those of G5 and G7 colonies. Sex ratio of female to and male of *C. flavipes* for G1 colony was 2,79:1, while the G5 and G7 colonies produced 2,43:1 and 1,89:1 sex ratio, respectively.

Keywords: sugarcane borer, biological characteristics, *Cotesia flavipes*, longevity, sex ratio.