



Biological parameters of *Orius insidiosus* (Hemiptera:Anthocridae) fed with *Sitotroga cerealella* (Lepidoptera:Gelechiidae) eggs

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In order to implement a natural enemy in the management of pest insect, and in this specific case *Orius insidiosus* for the control on *Frankliniella occidentalis* is necessary to determine biological parameters from native populations of this predator. The goal of this study was determinate the biological parameters of *O. insidiosus* fed with *S. cerealella* eggs. 225 *O. insidiosus* eggs laid into bean pods were obtained from the rearing stock under laboratory conditions for the Biological Control group at Militar Nueva Granada University (UMNG); bean pods were kept in glass jars (500 cm³), the eggs and instar I nymphs were counted daily, all nymphs were extracted and individualized in Petri dishes (60 mL). Daily was observed the exuviae presence/absence as indicative of change nymphal stage until adult emergence. 17 couple of adults (maximum 24h of age) were placed in Petri dishes (60 mL) with a segment of bean pod (4cm). The segments of bean pods were extracted and replaced daily, was done counting the number of eggs presents on the pods. The life cycle, survival percentage, sex rate, longevity of males and females, pre-ovoposition, ovoposition and post-ovoposition period were determinated. Finally was calculated the fertility life table parameters. The nymphal development time was 12.0 ± 0.22 days and $80.47\% \pm 3.23$ of survival, while the total development time was 15.0 ± 0.23 days, and $66.67\% \pm 1.90$ of survival, $30.95\% \pm 2.38$ of adults emerged were females. The female sex ratio was 0.75, the oviposition period was 0.86 ± 9.21 days with a total fertility of 60.29 ± 7.39 eggs, the data estimated in the fertility life table were: R_0 : 28.26, r_m : 0.14, T: 24.26, λ : 1.13 and TD: 5.01.

Key words: Biological control, life table, life cycle.

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