
First data about demography and population parameters under captive rearing conditions of *Eumerus* Meigen 1822 genus (Diptera, Syrphidae).

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Abstract

Eumerus Meigen 1822 (Diptera: Syrphidae) is one of the most speciose hoverflies genera with, at least, 170 species in the Palearctic region, having its highest diversity in the Mediterranean Basin. *Eumerus obliquus* (Fabricius, 1805) is the objective species of the present communication. This species is distributed, in the Palearctic region, across the Mediterranean basin and its distribution seems to be expanding inside this territory. Larvae have been cited feeding in decaying tissues of *Opuntia*, *Aloe*, cabbage, tropical fruit or potatoes. Despite there is some information about the life cycle of this species summarized by de Moor (1973), this is the first time that *E. obliquus* is reared under captive controlled conditions and that detailed biological and reproductive parameters such as developmental time, longevity, survival rate, rates of increase, fecundity or preoviposition time, among others, are provided.

These parameters were obtained after the analysis using the software "Age-stage, two-sex life table analysis" to take both sexes and the variable developmental rate among individuals and between sexes into consideration (Chi, 1988, 2019). For the analysis two hundred larvae were used and the larval longevity and mortality of everyone were recorded until their pupation. The pupae were isolated in Petri dishes until adult emergence and the adults were isolated in plastic containers for recording their longevity and fecundity.

References:

Chi, H. 1988. Life-table analysis incorporating both sexes and variable development rates among individuals. *Environmental Entomology* 17, 26-34

Chi, H. 2019. TWSEX-MSChart: a computer program for the age-stage, two-sex life table analysis.

De Moor, F. C. (1973) Notes on a syrphid fly, *Eumerus obliquus* (Fabricius) (Diptera: Syrphidae). *Arnoldia Rhodesia*, 6: 1-7.

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