SPIDERS INCIDENCE IN PARKS AT CAIRO AND GIZA GOVERNORATES

By

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APPROVAL SHEET

SPIDERS INCIDENCE IN PARKS AT CAIRO AND GIZA GOVERNORATES

M.Sc.Thesis In Agric. Sci. (Agricultural Zoology) (Spiders)

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ABSTRACT

Incidence research conducted to give a broad scope of the Egyptian spiders' fauna. This study considered as the real seasonal study of spiders' population inhabiting the ornamental plants in four public parks in two governorates; Zohria and Horreya (Cairo Governorate), Orman and the Zoo (Giza Governorate). 20 plants were examined monthly (five plants were chosen from each park) to evaluate the spider population on each plant. The study was carried out during March 2013 to February 2014. Temperature degrees and Relative Humidity were reported depending on the dats from the Central Laboratory for Agriculture Climate (CLAC), A. R. C., Collecting methods were beating net (branch shaking) and hand sorting. All the collected specimens transferred to the laboratory for counting and identification. Results revaled that the total number of the spider population were 4,184 individuals during the study, from them, 21 families, 31 genera and 24 species were identified. The largest number of spiders species were belonging to the following families: Salticidae, Gnaphosidae, Theridiidae and Oonopidae. Generally, Zohria Park showed a high population of spiders especially in spring, followed by Orman Park. Biological studies on the common spider species, Theridion melanostictum Cambridge, 1876 (family: Theridiidae) was carried out in an incubator 25±1°C and 60-70% R.H.. The movable stages of two-spotted spider mite Tetranychus urticae, the adult of fruit fly, Drosophila melanogaster and the 1st, 2nd and 3rd instars larvae of cotton leaf warm Spodoptera littoralis were used as prey. The incubation period averaged 13.3 ± 1.9 and 15.0 ± 2.0 days when fed on T. urticae & D. melanogaster and S. littoralis, respectively. Male lived shorter than female. , longevity averaged 25.2 \pm 1.2 & 48.0 \pm 1.0 and 25.2 \pm 1.4 & 47.9 \pm 1.2 days when fed on the adult of the fruit fly D. melanogaster and the third instar of S. *littoralis*, for male and female, respectively. Also, results indicate that keeping egg sacs in low temperature elongate the incubation period.

Key words: Incidence, Spiders, Zohria, Horrey, Orman, the Zoo Park, Ornamental plants, Cairo, Giza Governorates, *Theridion melanostictum*, Theridiidae, Biological studies.

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