

Abd El- Gayed, A. A. and Owayss, A. A.(2007): Ecological observations on the earwig, *Labidura riparia* Pallas (Dermaptera: Labiduridae) inhabiting honey bee colonies. *Annals. Agric. Sci., Ain Shams Univ., 52(1): 243 – 251.*

The present study was carried out for two successive seasons, 2005 and 2006, in an apiary situated at Beni-suif governorate to evaluate the role of the predator earwig, *Labidura riparia* Pallas, inhabiting honey bee colonies. Also, a laboratory experiment was conducted in the Fac. Agric., Fayoum Univ. to study the predation potential when feeding on both larvae and pupae of greater wax moth, *Galleria mellonella* L.

Obtained results indicated that the presence of this predator was continuously occurred, but in variable population densities. Reliable abundance was recorded in autumn followed by summer season then winter and spring with an average means; 7.80, 3.95, 0.86 and 0.32 earwig / colony for the 1st year, and 10.43, 0.92, 0.53 and 0.28 earwig / colony for the 2nd year, respectively. Significant difference was found between autumn and other seasons. It seems worth noting here that this earwig preyed, desirably, pupae of *G. mellonella*, and it has not been observed attacking bees in tested colonies. Insignificant difference was found between the population of target predator and weather factors, so it is suggested that this predator feeds on *G. mellonella* stages and may be on other insects visiting or inhabiting bee colonies. It was observed that individuals fed, in laboratory, on larvae and pupae of *G. mellonella* survived during the test period (30 days), while those unfed had died within 2–7 days of starvation. Daily food consumption for female predator seems to be greater than that for male.

