Rahil, A. A.R. and **Abd El- Gayed, A. A.** (2004): Latent effect of actellic, vertimec and biofly on the biology of the predator *Stethorus gilvifrons* Mulsant (Coleoptera: Coccinellidae). *Alex. J. Agric. Res.*, 49(3): 131–138.

Median lethal concentration (LC₅₀) of Actellic , Vertimec and Biofly, which recommended pesticides for controlling sucking-piercing pests, were determined on adults of Tetranychus urticae Koch in the laboratory. Thereafter, the newly emerged adults of the predator, Stethorus gilvifrons Mulsant which associated with this mite were exposed to sweet potato leaves treated with such pesticides at LC₅₀ that previously determined for T. urticae. The alive adults transferred to untreated sweet potato leaves and fed on T. urticae nymphs. Preoviposition, oviposition, postoviposition, longevity, fecundity and preying capacity of adults and each of incubation period, hatchability, duration, preying capacity and mortality of progeny were observed. The longest period of oviposition and female longevity (22.9 and 32.8 days) associated with the highest fecundity (64.00 eggs) and high prey consumption (554.80 prey / couple) were recorded with Biofly treatment. This records reduced significantly in general, to 19.30, 29.20 days and 48.00 eggs with the highest prey consumption (699.30 prey / couple) at control, 14.00, 20.00 days and 22.00 eggs with prey consumption of 199.10 at Actellic and 5.40, 13.80 days and 13.80 eggs with the lowest prey consumption of 122.80 at Vertimec, respectively. For immature stages, the longest total duration, 13.23 days, associated with the lowest mortality (38.10 %) and the highest prey consumption (99.54) were recorded by using Biofly. Such records were reduced at other treatments to reach the shortest duration (11.94 days) and the lowest prey consumption (32.61 nymphs) for control.