

Effects of three soybean cultivars on biological and reproduction parameters of *Orius albidipennis* Rueter (Hem., Anthocoridae) as predatory bug of two spotted mite *Tetranychus urticae* Koch (Acari: Tetranychidae) under laboratory conditions

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Abstract

In this study the biological parameters (life table, reproduction, population growth rate) of the predatory bug *Orius albidipennis* Rueter (Hem., Anthocoridae) were studied on *Tetranychus urticae* Koch reared on three cultivars of soybean. The experiments conducted in laboratory conditions at $25 \pm 1^\circ\text{C}$, % 65 ± 5 relative humidity and a photoperiod of 16:8 hours (L:D). There were no significant differences between mean incubation period and mean preimaginal developmental times on three cultivars of soybean. On three soybean cultivars, the females developmental time were higher than males. Net reproduction rate (R_0), the intrinsic rate of increase (R_m), finite rate of increase (λ), mean generation time (T) and doubling time (D_T) for *O. albidipennis* calculated were on Gorgan3, 7.14, 0.08, 1.09, 22.44 and 7.89 respectively and on DPX 9.68, 0.09, 1.10, 22.87 and 6.96 respectively and on Williams 3.65, 0.05, 1.05, 22.30 and 11.88 respectively.

Key words: predatory bug, *Orius albidipennis*, two-spotted mite, *Tetranychus urticae*, Soybean, functional response, life table parameters

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