

Prey-Stage Preference, Functional Response, and Mutual Interference of *Amblyseius swirskii* Anthias-Henriot on *Frankliniella occidentalis* Priesner

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Abstract : The Western flower thrips, *Frankliniella occidentalis* Priesner (Thysanoptera: Thripidae), is a significant pest of many economically important crops. This study evaluated the functional responses, prey-stage preferences and mutual interference of *Amblyseius swirskii* Anthias-Henriot (Acari: Phytoseiidae) with *F. occidentalis* as the host under laboratory conditions. The predator species showed no prey stage preference for either prey 1st or 2nd instar. Logistic regression analysis suggested Type II (convex) functional response for the predator species. Consequently, the per capita searching efficiency decreased significantly from 1.2425 to -7.4987 as predator densities increased from 2 to 8. The findings from this study could help select better biological control agents for effective control of *F. occidentalis* and other pests in vegetable production.

Keywords : biological control, functional responses, mutual interference, prey-stage preferences

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