Biological pest management of the broad mite *Polyphagotarsonemus latus* and the thrips *Frankliniella occidentalis* using the predatory mite *Amblyseius swirskii*

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So far, no biological means against the broad mite (*Polyphagotarsonemus latus*) could be provided by natural enemies and its eradication was performed using chemicals or sulfur containing pesticides. In a study conducted during the 2006/7 season in Yair Station in the Arava Valley, the feasibility of using the predatory mite *A. swirskii* against the broad mite was investigated in sweet pepper (*Capsicum annuum*) grown in walk-in tunnels. In addition, the effects of this predator on the population of the western flower thrips (*F. occidentalis*) and on the severity of damage to the fruit were evaluated. The predatory mite performed a high level of broad mite eradication, equal to that of chemicals, when applied at a population of 100 individuals/m^2 two weeks after planting in a plot that had been naturally infested by high levels of whitefly and broad mites. Also, the predatory mite lessened the level of the thrips population, particularly on the autumn and the early winter. A reduction in the damage caused by thrips to the pepper fruit was observed as well. Later on, however, with the decline of the predatory mite population during the winter, and along with the rise in the thrips population then, the damage to the fruit increased again. It appears that *A. swirskii* may be used as an auxiliary tool, complementary to *Orius insidiosus* for the reduction of the thrips level in the field, but it should not be considered as the sole solution.