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ABSTRACT BOOK
Diversity and population dynamic of mites from nectarine trees (*Prunus persica var. nucipersica*) in the southwest region of the State of São paulo, Brazil

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Many aspects may affect the nectarine production, mainly those related to phytosanitary aspects. Few knowledge about the mites in nectarine crops are available in the international literature. The objective of the present study was to determine the mite diversity and the population dynamic and their interactions in nectarine trees in the Southwest region of the State of São Paulo, Brazil. The experiment was performed with three nectarine varieties from Germoplasm Bank of Temperate and Subtropical Fruits of Instituto Agronômico de Campinas, situated in the municipality of Capão Bonito, SP, Brazil: ‘Colombina’, ‘Josefina’ and ‘Rubro-sol’. Ninety leaves were collected from each variety. From January 2004 to March 2006, a total of 19,297 specimens of 14 families, 22 genus and 28 mite species was recovered from 3,420 leaves. *Aculus fockeui* (Nalepa e Truesant) was the most abundant mite species (90.2% of total), followed by *Tetranychus urticae* (Koch) (6.9% of total). *A. fockeui* populations occurred during concentrated periods. Phytoseiidae was the most frequent, abundant and richness predator family. *Ricoseius lavocheles* (De Leon) and *Euseius ho* were the most abundant phytoseiid. *Euseius ho* was the most frequent phytoseiid, with preference for ‘Colombina’ trees. The climatic factors influenced the dynamic of predators and phytosanitary mite populations.

Key-words: Acari, *Prunus* sp., *Ricoseius lavocheles*, stone fruit, *Aculus fockeui*

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Species composition of the predatory mites (Acari: Phytoseiidae) and the colonization of a foreign phytoseiid mite, *Phytoseiulus persimilis* Athias-Henriot in tea fields in Japan

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From 2007 to 2011, we studied the predatory mite fauna (Acari: Phytoseiidae) in a total of 98 tea fields in a mountainous region and a southern, flat region in Shizuoka Prefecture, Japan. We identified 6,746 female mites of 12 species of the family Phytoseiidae: 11 were domestic Japanese species—*Neoseiulus womersleyi* (Schicha), *N. barkeri* Hughes, *N. californicus* (McGregor), *Amblyseius eharai* Amitai & Swirski, *A. orientalis* Eharai, *A. obtusellus* Wainstein & Begljarov, *A. tsugawai* Eharai, *Euseius sojaeensis* (Eharai), *Gynaecius liturivorus* (Eharai), *Scaphoideus oxinawanus* (Eharai), *Typhlodromus (Antheonetus) vulgaris* Eharai—and 1 was a foreign species, namely, *Phytoseiulus persimilis* Athias-Henriot, which has been recorded for the first time as wild individuals collected from crop fields in Japan in 2009. The total number of phytoseiid mite species was observed from 1 to 3 in most of tea fields, and the maximum number of species found in a field was 5 at the survey from 2007 to 2009. The dominant species were *A. eharai*, *N. womersleyi*, *E. sojaeensis*, and *A. obtusellus* in the given order. At the survey in 2010, we found *Phytoseiulus persimilis* in 11 of 12 tea fields, and confirmed that *P. persimilis* became temporarily the primary dominant species in some fields at the end of May. Also in 2011, we found *P. persimilis* in some tea fields. These results suggests that *P. persimilis* has already colonized tea fields in Japan.