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Phytoseiid Mite Species (Acari: Mesostigmata) on Blackberry Plants in Florida and Georgia, USA

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Abstract : The family Phytoseiidae are the most common plant inhabiting group of predatory mites. They are generally considered to be important biological control agents of pest mites on many crops world-wide. Several species of these mites are commercially available in many countries. This study was carried out to determine phytoseiid mite species on nine different blackberry varieties (Arapaho, Choctaw, Kiowa, Nachez, Navaho, Osage, Ouachita, Von, Watchita). The survey was conducted from June to October 2016. Leaf samples were collected monthly from selected organic and conventional commercial blackberry (Rubus spp.) farms in Florida and Georgia, USA. Nine phytoseiid mite (Acari: Mesostigmata) species were determined during the study. The results also showed that the incidence of Phytoseiidae was greater in organic than in conventional blackberries. Future survey studies can provide detection of new species, which may hold potential for biological control of economically important pests in key fruit crops.

Keywords : biological control, mite, Phytoseiidae, predator, Rubus spp.
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