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ABSTRACT

During the present work, incidence of some mite species associated with five important field crops commonly grown at Sharkia Governorate, Egypt. (Cotton, maize, peanut, sesame and soybean) was discussed, together with some biological data of the two- spotted red spider mites *Tetranychus urticae* when reared on the investigated crop leaves. The most dominant mites, those phytophagous species of the family Tetranychidae are followed by predacious species of the families Phytoseiidae and Stigmaeidae, respectively. Also, the investigated field crops especially cotton and soybean were found to have a great number of predaceous mites, belonging to families Phytoseiidae, Ascidae, Stigmaeidae and Cheyletidae, that could play an important role in the biological control of various small arthropods that are agricultural pests attacking these crops. The investigated two phytoseiid mites *Euseius metwallyi* and *Typhlodromips capsicum* proved to be the most dominant predaceous species. These species achieved good results of biocontrol of the serious pest mite *T. urticae* infesting soybean plants when they released in greenhouse. In addition the tested natural compounds Bioseed, Bentoseed, Biofertel and powder sulphur showed effect on some biological aspects of *T. urticae* and the aforementioned phytoseiid species under laboratory conditions.

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