

Abstract



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Diversity, distribution and scope of utilization of phytoseiid mites (Acari: Phytoseiidae) in eastern India*

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The mites of the family Phytoseiidae are one of the most studied groups of predatory mites worldwide for its species diversity, wide distribution and feeding potential to act as biocontrol agents for control of pest mites and small soft bodied insect pests. Phytoseiid mites are boon of nature because they sustain on pests of many agri-horticultural crops which are indeed very difficult to manage relying solely on pesticides. Considering its immense importance, it has been extensively explored from eastern India to understand the inherent potential of these biocontrol agents. In the era of biological control, predatory mites, specifically those belonging to the family Phytoseiidae, are now appreciated with farmers worldwide as natural enemies for their exhaustive use in pest control in greenhouses and as well as in open field conditions.

Eastern India is rich in floral and faunal diversity for its extremely zoogeographic variations. It includes southern coastal zone, north eastern great Himalayan range, western arid and central vast area covered by Gangetic plains. Out of 280 described Indian species of phytoseiid mites, more than 200 species have been described and reported from this part where some of the species show potential as biocontrol agents. The taxonomic identification, distribution, feeding preference and scope of utilization of phytoseiid mites occurring in this area are discussed in the present paper.

Keywords: Records, ecological distribution, Phytoseiidae, utilities, potential species