

Biodiversity of Predaceous Coccinellid Beetles in Different Crop Ecosystems

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Abstract—*The diversity of predaceous coccinellid beetles is of great practical and scientific importance due to their worldwide utilization as natural enemy of soft bodied insect pests like aphids, coccids, aleyrodids and hoppers. Survey was carried out in different ecosystems viz., agricultural (rice, wheat, maize, mustard, lentil) and horticultural (brinjal, chilli, okra, pumpkin, cowpea, citrus) at the farm of Uttar Banga Krishi Viswavidyalaya, Pundibari. Random collection was made by hand picking and sweep netting during January 2016 to December 2016. A total of 1721 specimens of coccinellids were collected. Twelve species of coccinellid beetles belonging to three sub-families were recorded during the experimental period occurring on various crops. The species were Anegleis cardoni (Weise), Cheilomenes sexmaculata (Fabricius), Coccinella septempunctata Linnaeus, Coccinella transversalis (Fabricius), Harmonia dimidita (Fabricius), Harmonia octomaculata (Fabricius), Illeis indica (Fabricius), Micraspis discolour (Fabricius), Propylea dissecta (Mulsant), Propylea japonica Thunberg (Coccinellinae), Brumoides suturalis (Fabricius) (Chilocorainae) and Cryptogonus quadriguttatus Weise (Scymninae). Micraspis discolour (Fabricius) was observed to be the most dominant species during the period of survey found in most of the crop ecosystems. It was followed by Coccinella transversalis Fabricius, Coccinella septempunctata Linnaeus and Cheilomenes sexmaculata (Fabricius). Species richness of horticulture ecosystem (9 species) was more as compared to agriculture (8 species).*