

Predatory Potential of *Coccinella septempunctata* Linnaeus and *Coccinella undecimpunctata* Linnaeus on Different Prey Species

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Abstract : The predatory potential and preference of both larvae and adult of seven-spot ladybird, *Coccinella septempunctata* Linnaeus and the eleven-spot ladybird, *Coccinella undecimpunctata* Linnaeus to the green peach aphid, *Myzus persicae* (Sulzer), the cotton aphid, *Aphis gossypii* Glover, the bird cherry-oat aphid, *Rhopalosiphum padi* (Linnaeus) and onion thrips, *Thrips tabaci* Lindeman were investigated under laboratory conditions at varying prey densities at faculty of Agriculture, Damanshour university, Egypt. There were significant differences between the consumed numbers of the four different species by the two different lady beetle species. The most consumed prey by *C. septempunctata* was the *A. gossypii* followed by *R. padi* then *M. persicae* and finally *T. tabaci* and these results were repeated in case of *C. undecimpunctata*. As the grubs of *C. septempunctata* and *C. undecimpunctata* developed from 1st to 4th larval instars, the consumption rate from aphid species and thrips increased. The consumption rate of *M. persicae*, *A. gossypii*, *R. padi* and *T. tabaci* significantly increased with the advancement in the larval stage of the predator. The fourth larval instar of *C. septempunctata* and *C. undecimpunctata* exhibited the highest predatory potential comparing to the first, second and third larval instars. The number of prey eaten by adult stage or different instars of larvae of the two predators increased significantly with prey density, reaching the maximum value when 150 preys were provided compared with 50 and 100 preys.

Keywords : predatory potential, *Coccinella septempunctata*, *Coccinella undecimpunctata*, *Thrips tabaci*, *Myzus persicae*, *Aphis gossypii*, *Rhopalosiphum padi*

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