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Numerical Response of Predator *Chrysoperla mutata* MacLachlan to Varying Densities of *Lipaphis erysimi* (Kalt.)

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Abstract: The numerical response of *Chrysoperla mutata* Maclachlan instar larvae to a different density of mustard aphid *Lipaphis erysimi* (Kalt.) were observed under laboratory conditions. Early hatched larvae were exposed to a varied constant number of the prey (2, 4, 8 and 12 per day). The numbers of the prey consumption were recorded after 24h until complete larval development and the emergence of adults. There was significant increase in the survival rate, fecundity and longevity of predator's adult with the increase in the prey, *L erysimi* density. Prey consumption was highest for the third instar larvae and considered as the most effective stage of *C. mutata* predation. The reproductive numerical responses of the predator were synchronized to prey density. It was possible to complete the larval development of the predator despite the limited prey, which had a negative impact on increasing the average number of days needed to complete the development.

Keywords: Numerical responses, *Chrysoperla mutata*, Survival rate, Oviposition, Fecundity