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Interaction between host plant resistance in Brassicae to DBM *plutella xylostella*(L). (Lepidoptera:Yponomeutidae) and its larval parsitoid *Diadegma eucerophaga* Horsimann

Diamondback month DBM plutella xylostella (L.) showed variable performance on different host plants. Differences in feeding by host larvae on two brassicas (cabbage cultivar "Blue lake" was identified as partially resistant by the depression of Relative Growth Rate, the low final body weight, the low number of eggs and the greatest first instar larval mortality in contrast with maximum number of eggs, the highest larval survival and growth on host susceptible cauliflower cultivar "Early phenomenal". "Blue Lake" and "Early phenomenal" were selected for further experiments as relatively resistant and relatively resistant and relatively susceptible respectively.

The interaction between partially resistance in brassicae and biological control of DBM *P. xylostella* was investigated. *Diadegma eucerophaga* Horstmann is one of the larval parasitoid of DBM in upcountry wet and intermediate zones in Sri Lanka. Behaviour od D. *eucerophaga* was studied on above tow cultivars in the laboratory. Larvae of DBM were more restless and fell off brassicae plants with greater frequency from "Blue lake" than from "Early phenomenal" in the presence of its larval parasitoid *D. eucerophaga*. A significantly higher proportion of DBM larvae falling off from "Blue lake" than "Early phenomenal". There was a significantly higher proportion between percentage of parasitism of *D. eucerophaga* on falling off larvae of DBM occurred from "Blue lake" than "Early phenomenal". The highest dislodgment of larvae of DBM occurred from "Blue lake "probably caused by the increased searching behavior and the ovipostional thrust of the parasitoid. The finding of the study could be used to promote Integrated Pest Management Programmes.