Theme 3: Biodiversity – Terrestrial, Aquatic

T3_Poster_19

LARVAL ENERGETIC STUDIES OF BUTTERFLY STRIPED TIGER, *DANAUS GENUTIA* (FAM: NYMPHALIDAE) IN TWO DIFFERENT HOST PLANTS IN COMPARISON WITH A MEDICINALLY IMPORTANT VULNERABLE HERB *HOLOSTEMMA ADA-KODIEN*

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The butterfly Striped Tiger (*Danaus genutia*) belonging to the family Nymphalidae is a common butterfly in India, Sri Lanka, Myanmar and most parts of the South East Asia and Australia. The caterpillar of these butterflies are known to acquire toxic alkaloids from their host plants making the caterpillars and adults toxic to their predators. The host plants of these butterflies belong to Family -Asclepiadaceae including a medicinally important plant *Holostemma ada-kodien,* which has been listed out as vulnerable and rare in the FRLHT red list of medicinal plants. In the current study, we investigated the energetics of striped tiger larvae with two different milkweed plants as – against *Holostemma.* The study aimed to check the biological association between larvae with their different host plants. The experimental setup was done with three sets each consisting of 30 newly emerged larvae of striped tiger. The first and second sets of larvae were made to feed on *Cynanchum dalhousiee* and *Asclepias curassavica* respectively. At the same time the third set of larvae were made to feed on *Holostemma ada-kodien.* The larvae of first and second set used 1.6068±0.15 g of *Cynanchum dalhousiee* leaves and 1.6464±0.13 g of *Asclepias curassavica* leaves for their metamorphosis into pupae respectively. However it was observed that the third set of larvae which fed on *Holostemma* used 1.868±0.16 g of leaves for their metamorphosis. The result obtained in the current study clearly demonstrates that the Striped Tiger larvae damage the leaves of *Holostemma* more than that of other two host plants as they require more leaves for the their metamorphosis. Considering the vulnerability status of medicinally important plant *Holostemma,* the larvae of striped tiger act as reasonable pests in wild condition.