Research Notes

PREDATION OF THE LARVA OF COMMON EMIGRANT BUTTERFLY, *CATOPSILIA POMONA*, BY A STINK BUG, *PODISUS MACULIVENTRIS*, IN SOLAPUR, MAHARASHTRA

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Butterflies stand as an ideal theme for ecological learning in landscapes (Thomas & Malorie, 1985). Butterflies play vital roles in the pollination and in the study of community ecology (Pollard, 1991). Butterflies act as abiotic indicator for environmental evaluation (Sakuratani & Fujiyama, 1991) and are used for forecasting climate change brunt. The butterflies are very responsive with changes in the microclimate and habitation (Erhardt, 1985). The butterfly *Catopsilia pomona* Fabr., is a member of the family Pieridae : Order Lepidoptera, commonly found in India, which feeds on *Cassia* species (Kunte, 2000).

The spined soldier bug, *Podisus maculiventris* (Say), is a medium sized predatory stink bug, that preys on a wide variety of other arthropods, especially larval forms of Lepidoptera and Coleoptera (Mukherji & LeRoux, 1965). The adult has a prominent spine on each shoulder. This stink bug is the most common predatory bug in North America and ranges from Mexico, the Bahamas and parts of the West Indies, north into Canada. It has also been introduced into other countries as part of classical biological control programme (De Clercq, 2008).

The present observation was made while studying the diversity of bugs in and around Solapur City of Maharashtra, during June to Nov. 2015. While observing the bugs on 15.11.2015, authors sighted that one bug is inserting its proboscis in the middle part of a larva. After careful observation the larva was identified as that of *Catopsilia pomona* and the bug as *Podisus maculiventris*. The duration of insertion and sucking of inside tissues material lasted for about one and half hours. Later on the body of larva was reduced in size and became almost half.

P. maculiventris is a generalist predator with a broad host range, reportedly attacking about 90 insect species belonging to eight orders, including several important economic pests. Reported as prey include the larvae of Mexican bean beetle, European corn borer, diamondback moth, corn earworm, beet armyworm, fall armyworm, cabbage looper, imported cabbageworm, Colorado potato beetle, velvet bean caterpillar, and flea beetles. When its prey is scant, the spined bug may feed on plant juices, but this feeding is not reported to cause plant damage (De Clercq, 2008).

References

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'Homo naledi'

Two new studies describing the structure and function of the *Homo naledi's* hand and foot indicate the species may have been uniquely adapted for both tree climbing and walking as dominant forms of movement. The research was conducted by a team of scientists associated with the University of the Witwatersrand in South Africa.

The *H. naledi* foot shares many features with a modern human foot, indicating it is well-adapted for standing and walking on two feet.