BEETLE FAUNA ASSOCIATED WITH THE TEA GARDENS OF NORTHERN WEST BENGAL

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Tea is an agro-ecosystem comprising tea plants, shade trees and other auxiliary crops along with various biotic and abiotic components (Roy et al., 2014). Tea plantations roughly resemble a single species forest (Cranham, 1966a, b) which is also a shelter, food and breeding ground of various insects.

Keeping in mind, several surveys were conducted during 2012-2016 under the project "Insect Pest and Pollinator diversity of some major Cash Crops of North Bengal" in different tea gardens of North Bengal by the scientists of Zoological Survey of India, Kolkata. As a result, total 13 species under 10 genera of 3 families of Coleoptera were recorded from the different tea gardens of Dooars and high altitude areas in North Bengal.

The Family Scarabaeidae was represented by 8 species which mostly include phytophagous species *(Brahmina* sp., *Holotrichia* sp., *Xylotrupes gideon, Anomala dimidiata, Anomala grandis)*. Of these, two species namely *Holotrichia* sp., and *Xylotrupes gideon* are reported as pests of tea (Roy et al., 2014). Apart from this, few coprophagous species (*Catharsius molossus, Catharsius sagax* and *Onitis subopacus*) were also recorded during this survey. These beetles are dung feeders which feed on the dungs and excreta of the animals. Thus helping in breaking down of plant and animal remains that contribute to the recycling of nutrients and the cleaning of the environment.

Wood boring is carried out by various groups of insects, either to obtain food or as means of protection of their eggs, larvae and pupae. Among the wood boring insects, the members of the family Cerambycidae are the most notorious pests of the freshly felled logs or dying standing trees. They mostly damage the shade trees of tea gardens and may also attack the tea plants. Only three species of Cerambycid beetles were recorded during this survey.

The members of the family Coccinellidae are mostly phytophagous but few species are also flower visitors. The only species recorded during present study is *Micraspis discolor* which is well known as flower visitor of several plant species.

The present communication is a first consolidated report on beetle fauna and their biological role in the tea gardens of North Bengal. All collection were made by B. Mitra and party.

Order COLEOPTERA

Family CERAMBYCIDAE

Subfamily Prioninae

Tribe Prinini

1. ***Dorysthenes (Lophosternus) indicus*** (Hope, 1831)
Material examined: 1 ex., Thurbo Tea garden, 12.vi.14 and 1 ex., Sourenee Tea garden, 15.vi.14; Mirik, Darjeeling district.

2. ***Dorysthenes (Paraphrus) granulosus*** (Thomson, 1861)
Material examined: 3 exs., Nagrakata Tea Research Association garden, Jalpaiguri district, 04.ix.12.

Subfamily Cerambycinae

Tribe Xystrocerini

3. ***Xystrocera globosa*** (Olivier, 1795)
Material examined: 1 ex. Hilla Tea Estate, Jalpaiguri district, 6.i.16.

Subfamily Lamiinae

Tribe Monochamini

4. ***Aristobia approximator*** (Thomson, 1865)
Material examined: 1 ex., Zurrantee Tea Estate, Jalpaiguri district, 14. xi. 14.

Family SCARABAEIDAE

Subfamily Dynastinae

5. ***Xylotrupes gideon*** (Fabricius,1775)
Material examined: 2 exs., Nagrakata tea garden, Jalpaiguri district, 8.ix.12.

Subfamily Scarabaeinae

6. ***Catharsius molossus*** (Linnaeus, 1758)
Material examined: 3 exs., Nagrakata tea garden, Jalpaiguri district, 8.ix.12.

7. ***Catharsius sagax*** (Quenstedt, 1806)
Material examined: 1 ex., Nagrakata tea garden, Jalpaiguri district, 9.ix.12.

8. ***Onitis subopacus*** Arrow, 1931
Material examined: 4 exs., Wasabari tea garden, Jalpaiguri district, 28.i.13.

Subfamily Melolonthinae

9. ***Holotrichia* sp.**
Material examined: 2 exs., Nagrakata tea garden, Jalpaiguri district, 11. ix.12.

10. ***Brahmina* sp.**
Material examined: 5 exs., Kartika tea garden, Aliporeduar district, 3. xi.14.

Subfamily Rutelinae

11. ***Anomala grandis*** (Hope,1840)
Material examined: 1 ex., Hilla tea garden, Jalpaiguri district, 27.vi.14.

12. ***Anomala dimidiata*** (Hope, 1831)
Material examined: 2 exs., Bagracote tea garden, Jalpaiguri district, 8.i.16.

Family COCCINELLIDAE
Subfamily Coccinellinae

13. ***Micraspis discolor*** (Fabricius)
Material examined: 10 exs., Red Bank tea garden, Jalpaiguri district, 5.ii.13.

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News

Fire in the NMNH, Delhi

A blazing inferno reduced the iconic National Museum of Natural History (NMNH) in central Delhi to ashes in the early hours of Tuesday, the 26 April, 2016, destroying precious natural treasures housed in the 38-year-old institution that had been frequented by generations of kids in the city.

The cause of the fire, which broke out in the sixth floor of the seven-storey building, is yet to be ascertained. It took 100 firemen, 37 fire tenders and eight lakh litres of water to control the blaze that had spread to all floors including the galleries, gutting the museum from inside.

No casualities were reported but six firemen who had first responded to the emergency calls had to be rescued from inside the building filled with thick plumes of smoke. They were briefly hospitalised. Police are also probing the possibility of a sabotage.

Fire officials said a notice has been sent to the museum authorities after it was found they did not have fire safety clearance that has to be taken every three years.

Past Forward

- Former PM Indira Gandhi announced the opening of a natural history museum in 1972 on the 25th Independence Day.
- The museum was eventually opened on June 5, 1978, coinciding with the World Environment Day.
- Regional branches of NMNH have come up in Mysore, Bhopal, Bhuvaneshwar, and Sawai Madhopur. Awaited at Gangtok.
- Visitors have very poor comments about the museum, the audit said.
- There were no guides, multimedia devices to enrich the experience of visitors. It's not disabled friendly and continues to function from a rented building even after 32 years.

Important Specimens Lost

- An ammonite fossil, a 160 million-year-old fossil bone of a sauropod, a large collection of bird eggs, including those of ostrich and the long-billed vulture.
- Several stuffed animal specimens, including various lions, tigers, clouded leopard, snow leopard and one horned rhino. Some of them were prepared by Mysore-based taxidermist Van Ingen & Van Ingen.
- A stuffed red panda and a duck billed platypus from Australia were among popular exhibits.
- A collection of butterflies and a melanistic tiger coat also lost.

Neglected all the way

In August 2015 the combined footfall in its five units across the country was a paltry 25,000. The exhibits seemed frozen in time, the descriptions accompanying them had faded, the video screens were too small and navigating from one section to another was quite tedious, owing to design and information flaws. In 2012, parliament's Public Accounts Committee had said the museum had an "amateurish" display and didn't focus on current issues like climate change, desertification and depletion of ozone layer.

The display depended heavily on stuffed animals with little interactive material to keep children engaged. Most of the display items were borrowed from the Zoological Survey of India (ZSI) in Kolkata. Among the important specimens were a sauropod femur bone and an ammonite fossil, an extinct marine mollusc. It was, perhaps, the only one in India. The biggest loss would be destruction of the taxidermy specimens.

Asif Naqvi, former scientist and curator of zoology, recollects that NMNH used to be hangout for some of the leading environmentalists and film makers of today. "Salim Ali, M. S. Swaminanthan, Ashish Kothari, Mike Pandey, and Vandana Shiva were among those who used to frequently visit NMNH. Many from National School of Drama would drop in to watch the film screenings. Everyone will vouch that it was the first museum to be so active and to focus so seriously on conservation," said Naqvi. An environmentalist said "It is the Ministry's neglect. Natural History Museums are incredible places for education..." In the 80s and 90s, there were projects at NMNH in collaboration with the American Museum of Natural History and the Carnegie Museum of Natural History of USA.