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Short Communication

Aulacophora sp. (Coleoptera: Chrysomelidae) - a new pest on Som (*Persea bombycina*) and Soalu (*Litsaea monopetala*) in Kalimpong Hills

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Muga, the golden-yellow silk is obtained from semi-domesticated silkworm called *Antheraea assamensis* Helfer. Muga culture is an age-old practice in the Brahmaputra valley of Assam. However, in recent years production of muga silkworm seed crops is adversely affected in Assam with the rise of temperature due to global warming. Kalimpong (latitude 27°06′N, longitude 88°47′E, 1247 m above msl) is one of the potential zones for production of muga seed during June-July and August September crop. Accordingly, primary food plant of muga silkworm (*Antheraea assamensis* Helfer) *viz.* Som [*Persea bombycina* **(**King ex Hook. f.) Kosterm**]** (Family: Lauraceae)] and Soalu [*Litsaea monopetala* (Roxb) Pearson] (Family: Lauraceae) has been raised in large scale on the hilly terraces of Kalimpong. The food plants are usually attacked by many pests like shoot borer, trunk borer, leaf miners, leaf galls, mealy bugs (3). During the year 2010, a beetle was found severely affected foliage of both som and soalu plants. The aim of this paper is to highlight important observations of the new pest affected the muga food plants and its relationship with the meteorological conditions. Prior to collection, the beetles were photographed under field conditions from May to September, 2010 at Hill Nursery, Department of Textiles (Sericulture), Government of West Bengal. The adult beetles and larvae were collected in a glass jar and added some leaves poked some holes and stored cool place. Beetles, larva and damage symptoms of the host plants were photographed by Kodak AF 3X10.3 mega pixels. For identification of beetles, adult beetles were dried in oven and kept in glass vials and despatched to the Zoological Survey of India, Central Entomological Laboratory, Kolkata (India) for identification. During the year 2010, a new coleopteran beetle was found severely affected som and soalu plants in the Hill Nursery, Kalimpong. It was observed that adult beetle of *Aulacophora* sp. appeared in the last week of May and continued up to September. Larval stage was observed during last week of June. Adult beetle were found 6 mm in length, head black/brown in color, elytra and eyes were black in color (Fig. 1a & c). Mature larvae were found black to brown in color 6-8mm in length (Fig. 1b). Both adult and larvae feed upper surface of the leaf (Fig. 1c & d) and infested leaves become brown and gradually dried up. Infestation of *Aulacophora* sp. was found very high in som plant than that of soalu plant (Fig 1e & f). *Aulacophora* sp. appeared in the hills of Kalim-

pong at maximum temperature (31.60±0.82ºC), minimum temperature (20.30± 0.69ºC), maximum relative humidity (94.96±2.42%) and minimum RH (50.41±2.87%). Further it was revealed that the infestation was found high at an average maximum temperature of 28.51±1.03ºC, average minimum temperature of 21.06±0.18ºC, average maximum RH of 97.81±1.87%, average maximum RH of 68.63±6.77%, rainfall of 552.63±153.19mm and number of rainy days of 27±3. Infestation of *Aulacophora* is common in cucumber, melon, mung bean, soybean and sesame (1). In India, *Aulacophora foveicollis* (Lucas) popularly known as red pumpkin beetle is a destructive pest of many vegetable crops. *A. foveicollis* primarily feeds on the flowers and leaves of the cucurbitaceous crops by making irregular holes and causing retardation of growth, leading to delayed maturation of crop (4). Seedlings of cucurbitaceous crops are also heavily attacked by the insect pests causing death of plants (2, 5). The beetle recorded on Som and Soalu was identified by the Zoological Survey of India, Kolkata as *Aulacophora* sp. The scanning of published literature revealed that the pest was not reported earlier from any other muga growing region of the country. Hence, infestation of this pest (*Aulacophora* sp.) on Som (*Persea bombycina*) and Soalu (*Litsaea monopetala*) plants is a new record from India.

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Fig a. Adult *Aulacophora* sp.

Fig b. *Aulacophora* sp. larvae

Fig c. Feeding habit of adult beetle of *Aulacophora* sp.

Fig d. Feeding habit of larval stage of *Aulacophora* sp.

Fig e. *Aulacophora* sp. infested Som (*Persea bombycina*)

Fig f. *Aulacophora* sp. infested Soalu (*Litsaea monopetala*)

Fig 1 (a-f). *Aulacophora* sp. (adult and larval stage), feeding habit and nature of damge on Som and Soalu plants