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The genus *Comostola* Meyrick is widely distributed in Indo-Australian tropics and subtropics. Typical *Comostola* are pale blue-green or green with red-orange discal spots and punctate yellow, red or orange postmedial spots.

The distal margins in many species are lined finely with red, broken at the veins, the fringes being paler. This group has the discal cross-veins of the forewing cell characteristically stepped towards the margin, proceeding it towards the dorsum (Holloway 1996).

Materials and Methods: The observations in this paper are part of an ongoing Lepidoptera survey in the Mendrelgang division (27°02'N & 90°10'E, 1035m) conducted by the Department of Science, Mendrelgang Middle Secondary School since January 2011. The methodology adopted for the moth survey was visual encounter survey on the whitewashed walls of the residential areas and in the school campus between 20:00–06:00 hr. accompanied by photo-documentation of moths. Moth traps were also set up in different locations of Mendrelgang using white cloth and 20 watt fluorescent bulbs and mercury vapor lamps. Voucher specimens for the species which could not be identified in the field were collected, later sorted out and

A NEW RANGE RECORD OF *COMOSTOLA HAUENSTEINI* SMETACEK, 2004 (LEPIDOPTERA: GEOMETRIDAE: GEOMETRINAE) FROM BHUTAN

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Observations and Discussion: During the survey, *C. hauensteini* was encountered a couple of times. A single male was sighted on 04 March 2012 at 23:27hr. on the whitewashed wall of the author's quarters in the premises of Mendrelgang Middle Secondary School, Tsirang District, Bhutan on which a 20 watt fluorescent bulb was switched on overnight. The specimen was photographed but not collected (Image 1). Later this specimen was identified as *C. hauensteini* by Peter Smetacek, Butterfly Research Center, Bhimtal. Later, on 06 March 2014 at 05:35hr a single male was sighted again on the wooden door of the Department of Science, Mendrelgang Middle Secondary School where a 100 watt tungsten lamp was switched on overnight (Image 2). The specimen was collected as a voucher specimen;



| DATA DEFICIENT | LEAST CONCERN | NEAR THREATENED | VULNERABLE | ENDANGERED | CRITICALLY ENDANGERED | EXTINCT IN THE WILD | EXTINCT |
|----------------|---------------|-----------------|------------|------------|-----------------------|---------------------|---------|
| DD | LC | NT | VU | EN | CR | EW | EX |

Comostola hauensteini



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Image 1. *Comostola hauensteini* (04.iii.2013), Male (24mm, wingtip to wingtip) from Mendrelgang, Bhutan.



Image 2. *Comostola hauensteini* (06.iii.2014), Male (24mm, wingtip to wingtip) from Mendrelgang, Bhutan.



Image 3. *Comostola hauensteini*, Lectotype, female (28mm, wingtip to wingtip), Butterfly Research Centre, Bhimtal, Uttarakhand, India.



Image 4. *Cosmotola pyrrhogona* Walker (11.viii.2012) from Mendrelgang, Bhutan.

a photograph of the curated specimen was sent to Peter Smetacek and he confirmed that the specimen was a *C. hauensteini*.

The species *C. hauensteini* was described by Peter Smetacek in 2004 from Bhimtal Valley (29°20'41"N & 79°36'17"E) in Nainital District in Uttarakhand. The type series of *C. hauensteini* comprised a holotype male and paratype female captured from Bhimtal (Image 3). This species is distinguished from other species of *Comostola* by the vertex of the head being green, frons and palpi white. Antennae of male, pale brown, bipectinate to two-thirds the length and rami long. Collar is white and thorax pale green, abdomen with first segment dorsally green and rest of the abdomen shining white and legs are white. This species can be immediately distinguished from the other known members of the genus by the prominent white forewing costa (Smetacek 2004). A review of the literature reveals that the species has neither been reported from the Indian sub-region nor any other localities of the Himalaya (Chandra 2007; Chandra & Sambath 2013). The present record

extends the known distribution of *C. hauensteini* to the eastern Himalaya. It thus represents a significant range extension for the species.

Other species of the genus *Comostola* which are reported from the Indian sub-region are given in Table 1, of which *Comostola pyrrhogona* Walker, 1866 (Image 4) was also reported and sighted very regularly from the study area during the survey; this is also a new record for Bhutan, as it was not reported from Bhutan previously.

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Table 1. Species of the genus *Comostola* reported from the Indian sub-region

| | Species | Geographical distribution |
|---|--|---|
| 1 | <i>Comostola chlorargyra</i> Walker | Indian sub-region, Andamans, Borneo, Java, Philippines, Sulawesi. |
| 2 | <i>Comostola dyakaria</i> Walker | Borneo, Philippines, Sumatra, Peninsular Malaysia, northeastern Himalaya. |
| 3 | <i>Comostola hauensteini</i> Smetacek* (New record and range extension) | Bhimtal (India). |
| 4 | <i>Comostola laesaria</i> Walker | Widespread in Indo-Australian tropics from Sri Lanka, India, Taiwan to northern Australia, Bismarcks. |
| 5 | <i>Comostola pyrrhogona</i> Walker* (New record) | Indo-Australian tropics from India to Taiwan, and east to Vanuatu, New Caledonia, northern Australia, Norfolk Island. |
| 6 | <i>Comostola subtiliaria</i> Bremer | Korea and adjacent parts of Siberia, Japan, northeastern Himalaya, southern China, Borneo. |
| 7 | <i>Comostola turgescens</i> Prout | Northeastern Himalaya, Sundaland, Sulawesi. |

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