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The Comma, *Polygonia c-album* (Linnaeus, 1758), ranges across Europe and temperate Asia to Japan and south to Morocco as various geographical subspecies. The species is distributed within the Indian region from Pakistan, Afghanistan, India (Jammu & Kashmir to Sikkim), Nepal and Bhutan (Kehimkar 2008), and is represented there by three subspecies: *Polygonia c-album kashmira* Evans, 1932 (Kashmir, Ladakh); *Polygonia c-album cognata* Moore, 1899 (northwestern Himalaya); and *Polygonia c-album agnicula* Moore, 1872 (Nepal-Bhutan). This paper reports the sighting of *Polygonia c-album agnicula* from Tawang District, Arunachal Pradesh on 10 July 2013. This subspecies has not been reported previously from eastern Himalaya in northeastern India and hence this record adds to its known range in western Arunachal Pradesh. However, it is pertinent to note that Tawang District shares a border with Bhutan, and hence this additional record is not surprising, especially given the lack of Lepidoptera surveys in this area.

In contrast to the other two subspecies within the Indian region, *Polygonia c-album agnicula* is a rare butterfly (Evans 1932). It was reported as uncommon in Bhutan (Poel & Wangchuk 2007) and also listed from the Sankosh River catchment, Bhutan by Singh (2012). It was also considered as rare in Nepal (Smith

## NOTES ON THE EASTERN COMMA *POLYGONIA C-ALBUM AGNICULA* MOORE, 1872 (LEPIDOPTERA: NYMPHALIDAE: NYMPHALINAE) FROM TAWANG DISTRICT, ARUNACHAL PRADESH, INDIA

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1989). Gupta & Shukla (1988) did a survey in western Arunachal Pradesh but did not record it, nor was it included in the list of butterflies from this area published by Betts (1950). Hence, the sighting of this subspecies in this area is significant. The butterfly (Image 1) was photographed sitting on a rock in an open patch of forest at Jang Waterfall, Tawang District (27°35'20.89"N & 91°59'5.63"E; Image 3) at an elevation of 2240m. It flew away after it had been observed for a minute.

*Polygonia c-album* is generally tawny above with black spots, and on the underside of hindwing there is a central silver dash or comma (Evans 1932). The spring and summer forms are often different in tone (Kehimkar 2008). The subspecies, *Polygonia c-album agnicula*



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

*Polygonia c-album agnicula*



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Image 1. Eastern Comma, *Polygonia c-album agnicula*  
10 July 2013, Tawang District, Arunachal Pradesh, India



Image 2. Eastern Comma, *Polygonia c-album cognata*  
May 2007, Great Himalayan National Park, Himachal Pradesh, India

is a more uniform fulvous-red above with narrower markings in comparison with the other subspecies in the Indian region (e.g., *Polygonia comma cognata*, Image 2). Furthermore, the wing margins above are not as ashy as in the other subspecies, and on the upperside of the hindwing, there are no yellow spots in the submarginal area. Instead, the submarginal area is represented by a red band, bordered along its inner margin by a broken dark brown postdiscal band (Evans 1932).

*Polygonia c-album* is similar to the Asian Comma,

*Polygonia c-aureum* (Linnaeus, 1758), the nominotypical subspecies of which is distributed from Myanmar, northern Thailand, Laos, Vietnam, China, Korea and Japan. However, *Polygonia c-aureum* has a black spot at the base of the discal cell on the upperside of the forewing and on the upperside of the hindwing, the postdiscal black spots have blue centres (Evans 1932).

Little is known about the butterflies of western Arunachal Pradesh. Recently, the western Himalayan species, *Heliophorus sena* Kollar (Lycaenidae), was

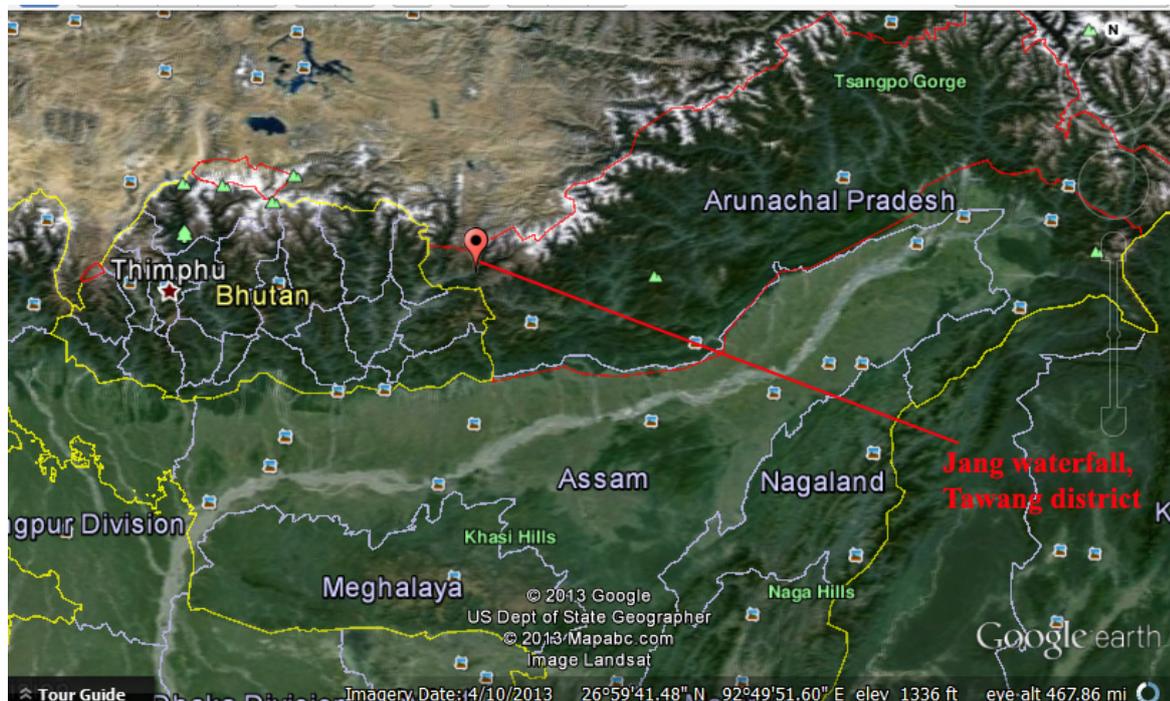


Image 3. Map showing the location of the record of Eastern Comma, *Polygonia c-album agnicula* from Jhang Waterfall, Tawang District, Arunachal Pradesh, India

reported from Rupa, Arunachal Pradesh, India (Greeshma 2010) and this species has also occasionally been seen by the first author in the same area in May (unpublished data 2010). This, together with the report herein of *Polygonia comma*, shows that more butterfly surveys are needed in western Arunachal Pradesh, especially the Tawang District, to document fully the butterfly fauna of this area.

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