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Newsletter of the Invertebrate Conservation & Information Network of South Asia (ICINSA)

Toddalia asiatica: new larval host plant of two *Papilio* species from eastern India

Toddalia asiatica (L.) Lam. is a woody climber plant, member of Rutaceae family. It is a native plant in many countries of Africa and Asia. In the Indian sub-region *T. asiatica* is confined to the lower subtropical Himalaya, in southern India it is common in Nilgiri and Palani Hills, in the Eastern Ghats of Andhra Pradesh, in the scrub forests of Odisha as well as in coastal areas of southern West Bengal (Rajkumar et al. 2008; Sen & Bhakat 2018).

T. asiatica is already known as larval host plant of few Indian butterflies. These are Common Banded Awl *Hasora chromus chromus* (Cramer, [1780]) (Hesperiidae), Red Helen *Papilio helenus daksha* Hampson, 1889, Paris Peacock *Papilio paris tamilana* Moore, 1881 (Papilionidae) and Small Salmon Arab *Colotis amata modestus* (Butler,

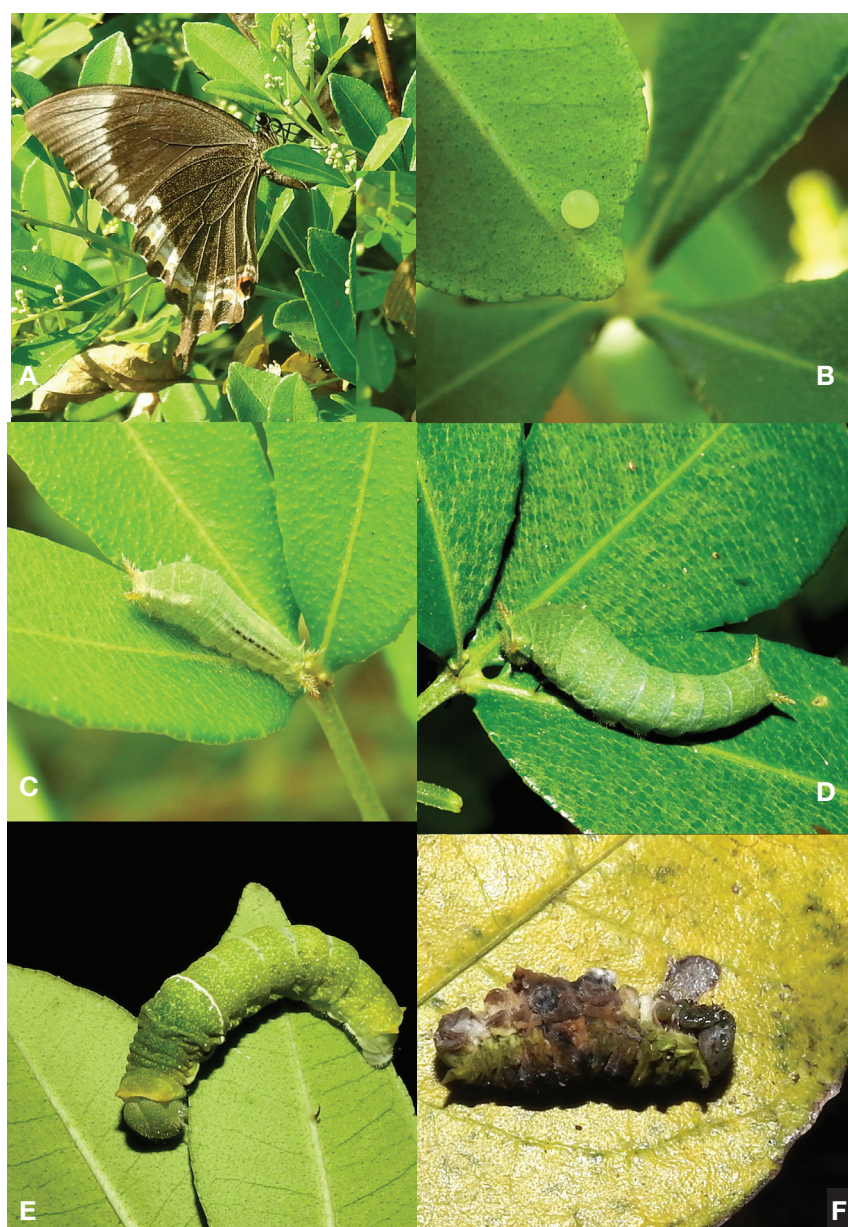


Image 1. *Papilio crino*: A—Female *P. crino* laying eggs on *T. asiatica*. (31.x.2020) | B—Egg of *P. crino* (31.x.2020) | C—Larval stage of *P. crino* (12.xi.2020) | D—Larval stage of *P. crino* (17.xi.2020) | E—Larval stages of *P. crino* (21.xi.2020) | F—Dead caterpillar of *P. crino* (26.xi.2020).

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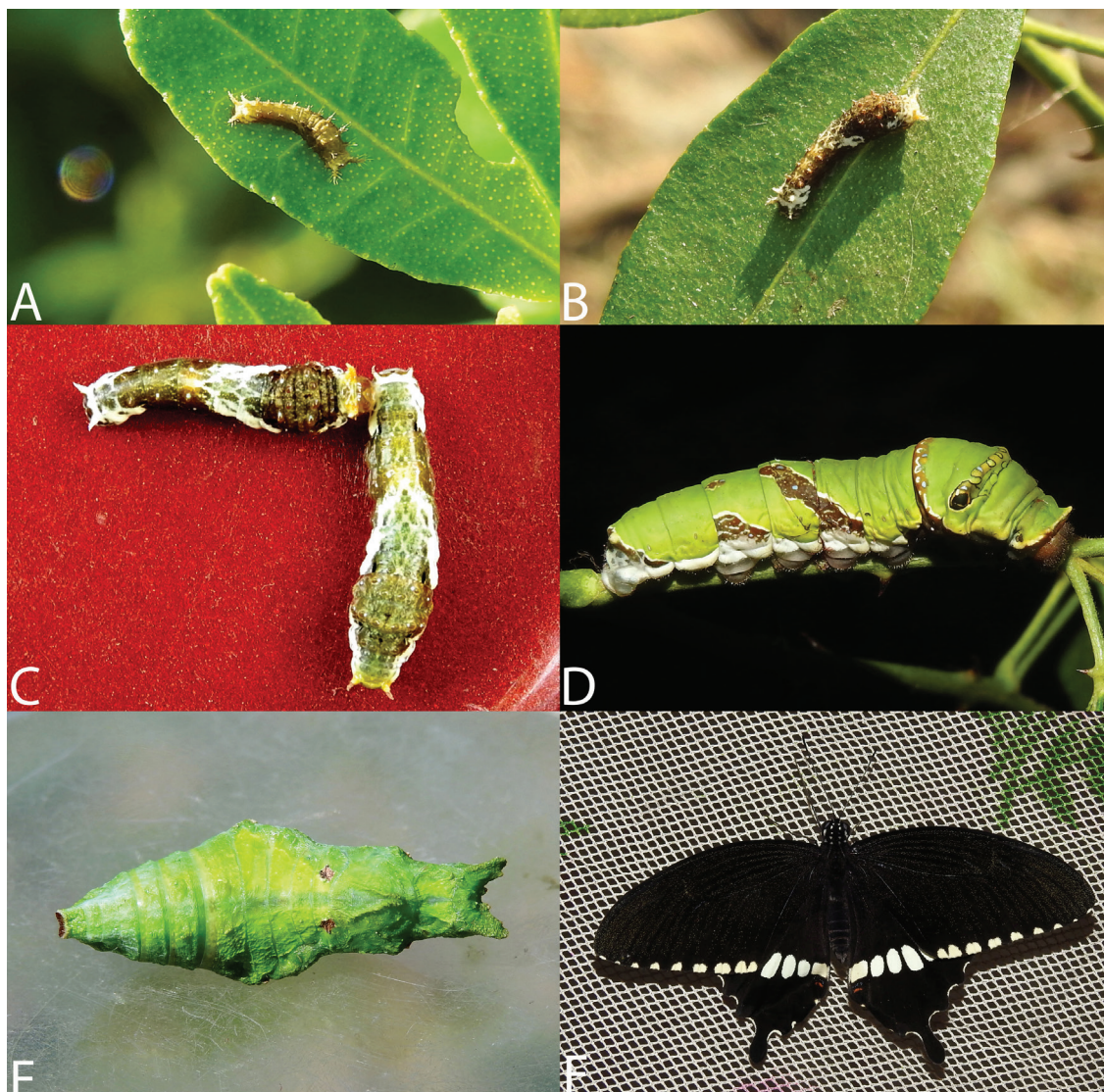


Image 2. *Papilio polytes romulus*: A—Larval stage of *P. p. romulus* on (31.x.2020) | B—Larval stage of *P. p. romulus* from Talsari, Odisha (19.xii.2020) | C—Larval stage of *P. p. romulus* on (17.xi.2020) | D—Final Instar larva of *P. p. romulus* (21.xi.2020) | E—Pupae of *P. p. romulus* (10.xi.2020) | F—Newly emerged male of *P. p. romulus* (31.xi.2020).

1876) (Pieridae) (Nitin et al. 2018). In the present note, for the first time *T. asiatica* is documented as a new larval host plant of two Papilionidae butterflies *Papilio crino* Fabricius, 1793 and *Papilio polytes romulus* Cramer, [1775] from the coastal areas of southern West Bengal and Odisha, India.

***Papilio crino* Fabricius 1793 or Common Banded Peacock (Image 1A–F)**

It is an uncommon Papilionidae butterfly confined mainly in the peninsular India, distributed from southern India to Madhya Pradesh, Odisha, and West Bengal (Varshney & Smetacek 2015; Kehimkar 2016).

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Previously known larval host plants of this butterfly are *Chloroxylon swietenia* DC. (Wynter-Blyth 1957; Kunte 2000; Robinson et al. 2010) (Rutaceae), which is mainly distributed in southern India. Most recently Mukherjee & Ghosh (2018) reported *Citrus limon* (L.) Osbeck as another larval host plant from Bankura District of West Bengal.

On 31 October 2020, at 1345 h, a Peacock Butterfly was seen laying eggs on the leaves of *T. asiatica*, at the Ghersai area (21.6308°N, 87.5319°E), Purba Medinipur District, West Bengal. The individual has been observed laying more than seven eggs at different branches of the plant. All eggs were laid underneath the leaves. A single egg was collected on that day, but unfortunately it remained unfertilized. Thereafter, on 12 November 2020, a single caterpillar was observed on the same plant, and collected on the same day for rearing.

The caterpillar was rearing in a small plastic container, and fresh young leaves of *T. asiatica* were provided regularly. On 26 November 2020, the caterpillar died before the initiation of pupal stage. Although rearing was unsuccessful, by confirming the egg laying adult individual as a female *P. crino*, here I report, *T. asiatica* as a new larval host plant of *P. crino*.

***Papilio polytes romulus* Cramer, [1775] or Common Mormon (Image 2 A–F)**

Papilio polytes romulus or Common Mormon is a commonly found butterfly all over India (Varshney & Smetacek 2015; Kehimkar 2016). Previously recorded larval host plants of this butterfly are *Aegle marmelos* (L.) Corrêa; *Atalantia racemosa* Wight ex Hook.; *Citrus aurantiifolia* (Christm.) Swingle; *C. maxima* (Burm.) Merr.; *C. limon*; *C. medica* L.; *Clausena anisata* (Willd.) Hook.f. ex Benth.; *Glycosmis pentaphylla* (Retz.) DC.; *Murraya koenigii* (L.) Spreng.; *M. paniculata* (L.) Jack; *Ravenia spectabilis* Engl.; *Triphasia* sp.; and *Zanthoxylum rhetsa* DC. (Rutaceae) (Wynter-Blyth 1957; Kunte 2000, 2006; Robinson et al. 2010; Nitin et al. 2018; Karmakar et al. 2018).

During September 2020 to December 2020, I observed many caterpillars (larvae of different instars) of *P. p. romulus* from Bara Solemanpur Village (21.6722°N, 87.5764°E), Shankarpur (21.6344°N, 87.5581°E), Gherashai area (21.6308°N, 87.5319°E) of Purba Medinipur District, West Bengal and from Talsari Coastal area (21.5853°N, 87.4336°E) of Odisha. Two caterpillars were collected on 31 October 2020 from Gherashai area and one final instar caterpillar was collected on 04 November 2020, from Shaankarpur, Purba Medinipur, West Bengal. Then after, larvae were reared in a small plastic container and two males of *P. p. romulus*

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emerged. Findings of several larval instars and successful rearing of *P. p. romulus* on *T. asiatica* confirm it as a new larval host plant.

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