

# Bugs & ALL

Invertebrate Conservation & Information Network of South Asia (ICINSA)

Newsletter of the

## COMMON BANDED PEACOCK

### Record of new larval host plant of *Papilio crino* from Bankura, West Bengal

#### Introduction

*Papilio crino* Fabricius, 1793 belongs to the Papilionidae family and commonly known as Common Banded Peacock (Evans 1927). Papilionidae is the family of long tailed butterfly; most members of this family have tailed hind wing (Kehimkar 2008). *Papilio crino* is not common in Bankura District of West Bengal as well as in India. In Bankura, it is generally found both in the moist and dry forests, though population density is quite higher in the moist scrub jungles and plantations. This butterfly is found throughout the year but more common in July (Kehimkar 2008). The larval host plant of *Papilio crino* is known to be *Chloroxylon swietenia* (Roxb.) DC. of the plant family Rutaceae (Bell 1912; Robinson et al. 2010; Theivaprakasham et al. 2018), which is completely absent in the region. Yet presence of the butterfly in this region of India indicates a long migration from Deccan plateau or presence of some another unknown host plant in the Chhotanagpur Plateau and Gangetic Plains (Ravikanthachari et al. 2018).

Moreover, no extensive survey work has been carried out so far to find out the diversity of butterfly species in relation to the associated plants in Bankura as well as records of larval host plants of butterflies are not so well documented (Das 2014).

#### Methodology

A survey had been carried out at Raibaghini (23°01'29.0"N and 87°33'32.6"E), near Kotulpur town in Bankura District of West Bengal. The area is in the connection zone of Chhotanagpur Plateau and Gangetic Plains. The average elevation is about 41.148 meters above sea level. The average annual rainfall of this area is 1236 mm and average temperature throughout the year is 26.6°C.

The study was done following the opportunistic method (Williams 2015). During the survey period (between 6 March

**IUCN Red List:**  
Not Assessed

**Insecta**  
[Class of Insects]

**Lepidoptera**  
[Order of insect including butterflies and moths]

**Papilionidae**  
[Family of swallowtail butterflies]

***Papilio crino***  
[Common Banded Peacock]

Species described by  
Fabricius in 1793

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2018 and 26 April 2018), the egg laying behaviour of female butterflies on host plants and their immature stages were observed. Eggs were collected and reared indoors in plastic containers under a controlled environment. The boxes were covered with a thin cloth to allow for air movement and to protect the larvae from parasitoids. The larvae were supplied with fresh young leaves and the containers were cleaned daily to avoid fungal or bacterial infection. No food supplement was added. The eggs and larvae were reared till pupation and to adulthood. Additionally, immature stages were also observed in the natural environment.

**Global distribution:**  
India, Sri Lanka  
(Kehimkar 2016)



**A site map of the study area**

was of blackish colour with a white dorsal stripe. After 4 days and 9 hours, i.e., on 15 March 2018, first molting took place. It turned greenish and the black parts reduced. Second molting occurred on 25 March 2018, i.e., after 9 days and 13 hours. On 30 March 2018 the size was recorded and that was 1.3 cm. The larva turned more deep green colour after third moulting on 6 April 2018. The larva became large, bluish green in colour and a white stripe was seen on the dorsal side in between the thorax and abdominal segment. The ocelli became more prominent. After 42 days from hatching, the larva successfully pupated on 16 April 2018. The pupa was green in colour, like other pupa of the *Papilio* genus. Just after 10 days 9 hours and 35 minutes from the date of pupa, ultimately an adult emerged on 26 April 2018. Newly emerged adult *Papilio crino* was healthy and normal in size. In the total larval development phase it was given only leaves of *Citrus limon*.

## Result and Discussion

A single egg was laid by a female on 6 March 2018 at about 13:30 hrs on the underside of a leaf of *Citrus limon* (L.) Osbeck, which was about 1.5 m tall shrub of Rutaceae. At first the egg was yellowish in colour and round-shaped; gradually it turned more grayish. After 4 days (on 10 March 2018), the egg hatched and the first instar caterpillar emerged. It remained as larva for 41 days.

The freshly emerged larva

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## Images



Fresh egg of *Papilio crino*



Portion of the new larval host (*Citrus limon*) plant with flower and fruits (Inset)



The egg just before hatching



Freshly emerged larva



Caterpillar after second molting



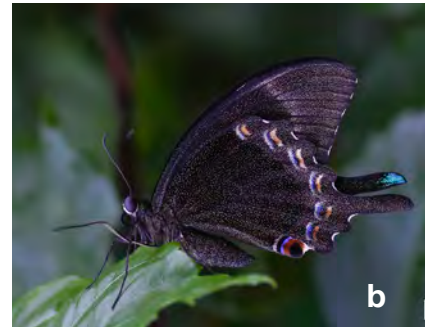
Last instar caterpillar of *Papilio crino*



Pupal stage



Adult *Papilio crino*. a. Dorsal view



b. Side view

## Conclusion

Swallowtail females are very choosy about where they lay their eggs. Common Banded Peacock (*Papilio crino*) butterfly lays eggs on *Citrus* leaf in absence of *Chloroxylon swietenia*, the previously reported larval host plant. Hence, *Citrus limon* (L.) Osbeck is a host plant of *Papilio crino*.



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