

**FOOD PREFERENCE OF THE YELLOW COSTER BUTTERFLY**  
*Pareba vesta* (NYMPHALIDAE: LEPIDOPTERA)  
**IN THE GREAT HIMALAYAN NATIONAL PARK, HIMACHAL PRADESH**

V.P. Uniyal\* & Nagesh Kumar \*\*

**ABSTRACT**

Larval food preference and developmental stages of yellow coster butterfly, *Pareba vesta* Fabricius, were observed particularly in *Debregeasia salicifolia* (D. Don), in the valleys of Great Himalayan National Park.

**INTRODUCTION**

Nymphalids are widely distributed and richly represented in Himalayan region. Globally 14 subfamilies are recorded of which 10 are found in Indian region. Of the total number of butterflies in the world one third are Nymphalidae (Haribal, 1992). The yellow coster butterfly, *Pareba vesta* is the member of subfamily Acraeinae and only two species are recorded in Indian region and both are small and highly diversified found in Himalaya.

Butterflies help in cross pollination and the distribution of butterflies depend on the availability of the preferred food plant. The association between butterflies and plants is highly specific. There are few butterfly species which are associated with the grasslands, grassy clearing in woods and open grassland habitat in Himalaya (Uniyal and Mehra, 1996). The developmental stages of yellow coster butterfly were observed only on *Debregeasia salicifolia* in the valleys of Great Himalayan National Park.

**Study area**

The observation site selected for the present study lies between the elevation of 1500 to 2000m. in Tirthan Valley of the Great Himalayan National Park (GHNP) situated between Lat. 31°38' 15" and 31° 56' 41" North and Long. 77° 20' to 77° 52' 11" E in Kullu district of Himachal Pradesh. About one third of the park area supports closed canopy forest representing five broad forest types.

**Observations**

The black and small hairy monophagous larvae were first observed in the month of February 1996 on the leaves of *Debregeasia salicifolia* of family Urticaceae. It is a good fodder plant in this region. A soft hairy evergreen shrub, with broad to narrow lanceolate sharply toothed alternate leaves which are densely white-woolly beneath. It is found upto 2500m. elevation in Himalaya. In autumn it is full of yellow to orange raspberry like edible fruits. The plants are dioecious (Polumin and Stainton, 1988).

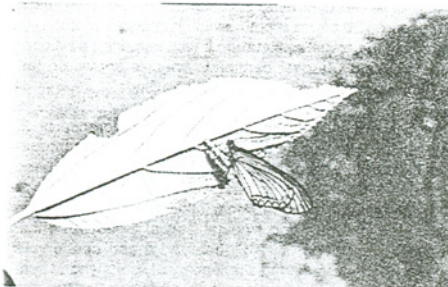
Weekly larval observations were made at different sites. After about 3 months duration all the larvae turn into slightly yellowish white patch on its dorsal side and are visible only when larvae were fully stretched. The larvae are clothed with 50 to 53 black to brown bristles and about 3 to 3.5 cm. in length and feed on the leaves.

When the larvae are ready to pupate, it attaches to the leaf

**Life cycle of Yellow Coaster butterfly**



Pupa



Moulting from Pupa



Adult Yellow coaster

\* Wildlife Institute of India, PB # 13, Chandrabani, Dehradun  
\*\* Director, Great Himalayan National Park, Shamshi, Kullu, Himachal Pradesh.

with silk pad and pupa has yellow and black bands on it. After a period of rest, it start undulating movement from tail up. On the basis of the morphology of pupa it is very easy to distinguish the pupa of yellow coaster from other species. The pupa is pale pink at first, slowly black and orange dots starts appearing, and by the end of the day the pupae turns into light pink with black and orange.

The pupa takes 7-10 days to emerge into adult. The details of wing markings, head, eye, can be observed even before emergence. The pupa splits open on the back, the butterfly crawls out of it and finds suitable resting place, and ready to fly in search of food and mate. After a short flight it comes back to rest on the same plant. The adults mate and

reproduce. The first emerged yellow coaster are seen in first week of June. The eggs are small round and yellow in colour. The adult yellow coaster butterfly is yellowish dark veins with a wing span of 6-8 cm. It has a very short flight range.

**REFERENCES**

- Haribal, M. (1992). *The Butterflies of Sikkim Himalaya and their Natural History*, Sikkim Natural Society Gangtok, 217 pp.  
Polumin, O. and Stainton, A. (1988). *Flowers of the Himalaya*. Oxford University Press, Delhi, 580 pp.  
Uniyal, V.P. and Mehra, B.S. (1996). Preliminary observations on the diversity of butterflies (Lepidoptera: Insecta) in high altitude grazing pasture in Great Himalayan National Park. *Zoo Print*, 9(9): 7-11.