

EARLY LIFE STAGES OF THE BHUTAN BLACKVEIN BUTTERFLY *APORIA HARRIETAE* (DE NICEVILLE, 1893)

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Aporia harrietae (de Niceville, 1893) also known as the Bhutan Blackvein, belongs to the family Pieridae (Insecta: Lepidoptera). It is distributed from Bhutan to North Yunnan (Yoshino, 2018). Though known populations are geographically isolated, the species is locally common. Interestingly, the known distribution of the host plant *Berberis praecipua* includes Bhutan, India (Arunachal Pradesh) and Nepal, concurrent with the restricted distribution of *A. harrietae*. However, the butterfly has so far not been recorded in Nepal. Hitherto, the host plant and early life-cycle stages of the species were unreported.

The early life stages of *Aporia harrietae* were observed in its natural habitat. On 28th July 2020, during a field visit to Dodeydrag (Thimphu, Bhutan), amongst Blue Pine (*Pinus wallichiana*) forest at an elevation of ca. 2300 m, around 11:30 am, a female *Aporia harrietae* was spotted feeding on *Philadelphus tomentosus* flowers. In due course, the butterfly descended and laid 40 eggs under a leaf of *Berberis praecipua*. Eggs hatched after 17 days. For a month, the young caterpillars

fed upon the soft underside of the leaves of the host plant and then they started feeding upon the whole leaf. Caterpillars moulted on 41, 58, 99 and 104th days. Moulting took 1-2 days. By the 147th day, 10 caterpillars entered the pre-pupal stage. The remaining caterpillars probably moved to other plants or were attacked by predators. Considering threats from predators and human interference, no further observations were undertaken.

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Figure 1: Host plant of Bhutan Blackvein



Figure 2: Bhutan Blackvein laying egg



Figure 3: Eggs of Bhutan Blackvein



Figure 4: Freshly emerged caterpillar



Figure 5: After emergence of caterpillars



Figure 6: Grouping of caterpillar while eating underside of a leaf



Figure 7: Started to eat only the underside of host plant leaf



Figure 8: After eating underside they slowly starts to eat both side



Figure 9: Turns their head into totally black



Figure 10: Eating pattern after turning black



Figure 11: Body turning slightly greenish and bigger



Figure 12: Eating pattern once they turn greenish and bigger



Figure 13: How they eat both sides of a leaf



Figure 14: A fully grown caterpillar