

MODIFICATION TO THE KNOWN WINGSPAN OF TWO INDIAN NYMPHALID BUTTERFLIES, *CYRESTIS THYODAMAS* AND *ATHYMA PERIUS*

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ABSTRACT

We report a wingspan of 68 mm for an individual of the Common Map *Cyrestis thyodamas* and 54 mm for an individual of the Common Sergeant *Athyma perius*, making these the largest and smallest known members of their species respectively.

INTRODUCTION

Measurement is an important part of taxonomy. In butterflies, there is only one measurement i.e. wingspan. This measurement is open to several interpretations. The smallest measurement tell us what the minimum food requirement is for a species so that it can complete its metamorphosis: if it gets less than minimum food in the larval stage, metamorphosis will be incomplete. The largest specimen tells us that in some way, there is a barrier to the butterfly growing larger even in the presence of sufficient food. This would probably relate to the limitations of the physical design of the butterfly.

During the 18th and 19th centuries, it was fashionable to pin butterflies with the forewing costae almost in a straight line. At that time wingspan was measured as the distance between the forewing apices. During the latter half of the 19th century, it became fashionable to raise the forewings until the forewing termens were in a straight line. Since the apices were now much closer together, this would reduce the measured wing span following the older method.

Evans (1932) measured all Indian butterflies known at the time and available to him using a measurement from the centre of the thorax to the tip of a forewing apex and doubled the result, assuming the butterfly to be bilaterally symmetrical. Evans (1932) gave a measurement of 50-60 mm for all the known subspecies of *Cyrestis thyodamas* Boisduval, 1846 known from India and a measurement of 60-70 mm for *Athyma perius* (Linnaeus, 1758).

MATERIAL EXAMINED

1. Lepidoptera: Nymphalidae: Cyrestinae

Cyrestis thyodamas Boisduval, 1846

C. t. ganescha (Kollar, 1848)

Specimen examined - One female.
Wingspan- 68 mm. 24.x.1995. Butterfly
Research Centre, Jones Estate, Bhimtal,
Uttarakhand, India. 1500m. *Leg.* Peter
Smetacek *Coll.* B.R.C., Bhimtal. (Figure
1)

2.Lepidoptera:Nymphalidae:Limenitidinae

Athyma perius (Linnaeus, 1758)

Specimen examined - One male.
Wingspan- 54 mm. 26.ii.2023. Butterfly
Research Centre, Jones Estate, Bhimtal,
Uttarakhand, India. 1500 m. *Leg.* Kanika
Pandey *Coll.* B.R.C., Bhimtal. (Figure 2)

DISCUSSION

The two specimens measured in this paper
add to the measurements of those known
species. In the case of *C. thyodamas*, the

largest specimen known measured 60 mm
(Evans, 1932). The present specimen
measures 68 mm, making it the largest
known specimen of *C. thyodamas*. Future
references to the wingspan of this species
may quote 50 – 68 mm, the latter figure
based on the specimen measured in the
present study.

In the case of *A. perius*, the smallest
known specimen measured 60 mm (Evans,
1932). The present specimen measures 54
mm making it the smallest known
specimen of *A. perius*. Future references to
the wingspan of this species may quote 54-
70 mm, the former figure based on the
specimen measured in the present study.

REFERENCES

Evans, W.H. 1932. *The identification of
Indian butterflies*. (The second edition
revised). Bombay Natural History Society,
Bombay. x + 454 pp., 32 pl.



Figure 1: *Athyma perius*



Figure 2: *Cyrestis thyodamas*