

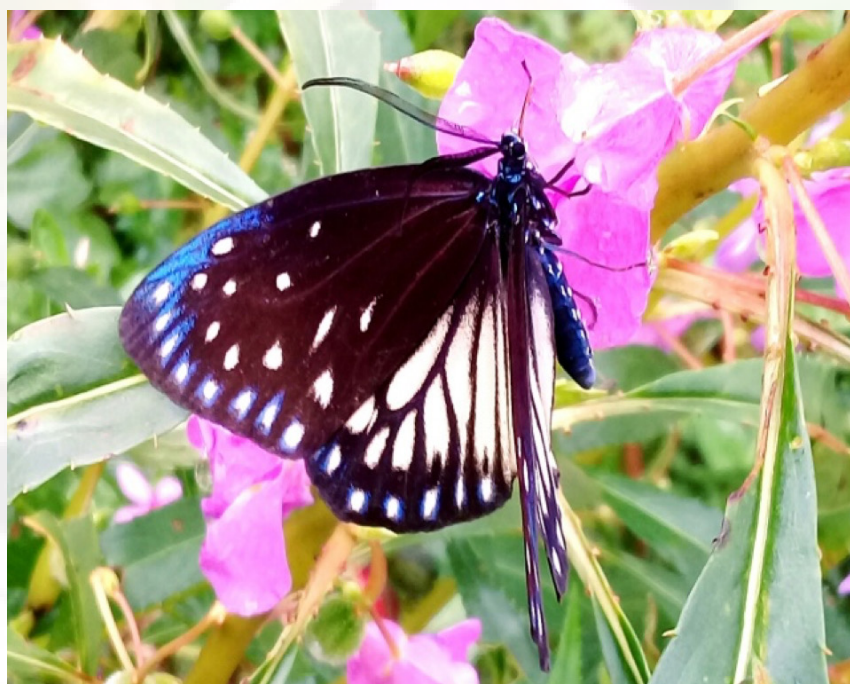
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Invertebrate Conservation & Information Network of South Asia (ICINSA)

Newsletter of the

Record of *Cyclosia midamia*, a day-flying poisonous moth from Tanahun District, Nepal

Cyclosia midamia (Herrich-Schäffer, [1853]) is a day-flying moth that belongs to the order Lepidoptera of the family Zygaenidae (subfamily Chalcosiinae). It looks fascinating and mimics the Spotted Blue Crow. Mimicry and aposematic (denoting colouration to repel predators) in this species is due to the high concentrations of two chemicals lotaustralin and cyanoglucosides linamarin. They release hydrocyanic acid by decomposition of these two chemicals which is poisonous to birds and predators (Naumann et al. 1999; Yen et al. 2005). *Cyclosia midamia* has six subspecies, viz: *C. m. alcahoe* Jordan, 1907, *C. m. dolosa* Jordan, 1907, *C. m. midamia* (Herrich-Schäffer, [1853]), *C. m. padangana* Jordan, 1907, *C. m. submaculans* Walker, 1859,



Cyclosia midamia upper side. © MS Miya.



Cyclosia midamia under side. © MS Miya.

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and *C. m. trepsichrois* Butler, 1883 (<http://insecta.pro/taxonomy/41774>).

In a male, the forewings have two series of small white spots. Hindwings also have two series of spots but contain less or more. One white spot is present in the cell of each underside. Sub-marginal spots (two series) are present on both wings. The outer margin, apex and costa have brilliant blue color whereas the inner area is purplish. The antennae are metallic blue, the collar is spotted blue; abdomen, thorax and the head are black (Hampson 1892). In females, forewings have two spots in the cell, two below the cell, two in beyond the cell. Hindwings have well represented two series of spots along with two spots in the cell (Butler 1875; Moore 1882; Hampson 1892).

Cyclosia midamia is distributed in Bhutan, Borneo, China, Burma, India, Bangladesh, Malaysia, Thailand, Singapore, Vietnam, Laos, Indonesia, and Nepal (Hampson 1892; Endo & Kishida 1999). In Nepal, it is among the 37 species of the Zygaenidae family reported by Haruta (1992) and Smith (2010). But its distribution in Nepal is not well described yet. This is the first report from Tanahun District.

During the survey of butterflies, on 13 July 2020 (1245 h, sunny), a single specimen was sighted in Sanja Village (28.074° N and

84.210° E, 644m) of Byas municipality 6, Tanahun District, Nepal. The species was feeding on the nectar of Balsam *Impatiens balsamina* in the yard of a house. It was initially confused for a butterfly but later learnt identified as a moth. It fed on the flower for about five minutes and flew away. The species was photographed during its feeding and later identified with the help of experts and literature (Hampson 1892) and online reference (<https://thebutterflydiaries.wordpress.com/category/zygaenidae>, <http://www.jpmoth.org>, <https://www.projectnoah.org/spottings/1458623637>).

References

- Butler, A.G. (1875).** The Transactions of the Linnean Society of London (Vol. 2). London, Printed for the Society by W. Lewis at the Cambridge University Press [etc.], 559pp. <https://archive.org/details/transactionsofli7579linn/page/559/mode/1up?view=theater> Accessed on 04.v.2021.
- Endo, T. & Y. Kishida (1999).** Endless Collection Series, Day-Flying Moths, 92 pp. <http://www.jpmoth.org> Accessed on 04.v.2021.
- Hampson, G.F. (1892).** *The Fauna of British India, including Ceylon and Burma. Moths.* Vol. I. Taylor and Francis Ltd., London, 527pp.
- Haruta, T. (1992).** *Moths of Nepal, Part 1. Tinea.* 13 (Supplement 2). Japan Heterocerists' Society, Tokyo, 122 pp.
- Moore, F. (1882).** *The Lepidoptera of Ceylon* (Vol. 2). L. Reeve & Company, 46 pp. <https://archive.org/details/lepidopteraofcey02moor/page/46/mode/1up?view=theater> Accessed on 05.v.2021.
- Naumann C.M., G.M. Tarmann & W.G. Tremewan (1999).** *The western Palaearctic Zygaenidae (Lepidoptera).* Apollo Books, Stenstrup, Denmark, 304 pp.

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

Smith, C. (2010). *Lepidoptera of Nepal*. Himalayan Nature, Nepal.

Yen, S.H., G.S. Robinson & D.L. Quicke (2005). The phylogenetic relationships of Chalcosiinae (Lepidoptera, Zygaenoidea, Zygaenidae). *Zoological Journal of the Linnean Society* 143(2): 161–341. <https://doi.org/10.1111/j.1096-3642.2005.00139.x>

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