



Research Paper

First record of *Cyana puella puella* (Drury, 1773) (Insecta: Lepidoptera: Heterocera: Erebidae) from Banda, District Sagar, Madhya Pradesh, India, with its distribution

Akhlaq Husain* and Ashwani Kumar Dubey

(Zoological Survey of India, former Scientist), 41, Hari Vihar, Vijay Park, Chakrata Road, Dehradun, Uttarakhand, India.

Department of Zoology, Shri Rajiv Gandhi Government College, Banda, District Sagar, Madhya Pradesh, India.

*Corresponding author email: drakhlaqhsan@gmail.com

Received: 31/03/2026

Revised: 08/04/2026

Accepted: 18/04/2026

Abstract: The paper deals with the first record of *Cyana puella puella* (Drury, 1773) moth, belonging to family Erebidae under order Lepidoptera, from Banda, Sagar district, Madhya Pradesh (India), with its distribution and larval host plants.

Keywords: First record, *Cyana puella puell*, Banda, Madhya Pradesh.

Introduction:

The moth fauna of Madhya Pradesh has attracted the attention some workers during the past (Rawat and Verma, 1980; Singh and Rawat, 1980; Vaishampayan and Veda, 1980; Verma et al., 1980; Singh, 1987; Khan et al., 1988; Joshi and Meshram, 1989; Chandra & Nema, 2003, 2007, 2008, Joshi et al., 2004; Ramakrishna et al., 2006; Chandra, 2008, 2009a, b; Chandra et al., 2013; Chandra & Sambath, 2016a, b; Kulkarni et al., 2017; Sambath, 2017, 2018a,

b, 2020, 2022, 2023; Roshni et al., 2020a, b; Singh et al., 2022; Tabassum and Bisen, 2022; Paunikar et al., 2023, 2024, 2026; Sambath, S. and Nair, A., 2023; Paunikar and Nair, 2025a, b) but no records are available from Sagar district. Recently, a good specimen of *Cyana puella puell*, belonging to family Erebidae under order Lepidoptera, was sighted at Banda in Sagar district and recorded here as the first of this and any moth from this area.

Study Site: Banda, Sagar district, Madhya Pradesh (India)

Physiography: Banda tehsil is city in Sagar district of Madhya Pradesh (India), located at Lat. 24°.2' 42 N and Long. 78°.57'39 E, with an average elevation of 508 m. The district is lies on the spur of the Vindhya Range with resplendent water bodies and is a beautiful heartland of the central state of Madhya Pradesh.

Climate: Humid subtropical with hot summers (highest 47.0 in June) and cool winters (lowest 1.1 in February) and somewhat cooler monsoon season; heavy rainfalls (373.4 mm in July) in monsoon season during June- September in the district.

Flora: *Acorus calamus* (Acoraceae), *Holorrhæna antidysenterica* and *Rauwolfia serpentina* (Apocynaceae), *Asparagus racemosus* and *Chlorophytum tuberosum* (Asparagaceae), *Aloe barbadensis* (Asphodelaceae), *Bixa orellana* (Bixaceae), *Buchanania lanzan* and *Mangifera indica* (Anacardiaceae), *Commiphora mukul* (Burseraceae), *Terminalia bellirica* (Combretaceae), *Evolvulus alsinoides* (Convolvulaceae), *Cyprus rotundus* (Cyperaceae), *Dioscorea spp* (Dioscoreaceae), *Butea monosperma*, *Cassia fistula*, *Cassia tora*, *Clitoria ternatea*, *Glycyrrhiza glabra*, *Mucuna pruriens*, *Pongamia pinnata*, *Psoralea corylifolia*, *Tamarindus indica*, *Tamarindus indica* (Fabaceae), *Swertia chirayita* (Gentianaceae), *Curculigo orchioides* (Hypoxidaceae), *Ocimum americanum* (Lamiaceae), *Woodfordia fruticosa* (Lythraceae), *Helicteres isora* (Malvaceae), *Azadirachta indica* (Meliaceae), *Tinospora cardifolio* (Menispermaceae), *Argemone mexicana* (Papaveraceae), *Phyllanthus embilica* (Phyllanthaceae), *Plumbago zeylanica* (Plumbaginaceae), *Embelia ribes* (Primulaceae), *Withania somnifera* (Solanaceae), *Aegle marmelos* (Rutaceae), *Curcuma longa* (Zingiberaceae) and *Tribulus terrestris* (Zygophyllaceae).

Systematic Account and Distribution:

***Cyana puella puella* (Drury, 1773)**

Phalaena puella Drury, 1773. *Illust. Nat. Hist. Exot. Insects.*, 2: index & 3, pl. 2, fig. 2 (type-locality: Madras).

Bizone puella; Moore, 1882. *Lepid. Ceylon* 2 (1): 60, pl. 103, fig. 3, 3a; Elwes, 1890. *Proc. Zool. Soc. Lond.*, 1890: 390.

Cyana puella, Hampson, 1894. *Faun. Brit. India*, Moths, Vol 2: 57; Kishida, 1994. *Tinea*. 14 (Suppl. 1): 70, pl. 80, figs. 3-4; Gurule, 2013. *Taxonomic study of moths (Lepidoptera: Heterocera) from north Maharashtra (India)*; Kirti et al., 2013. *J. Chem. Biol. and Phys. Sci.*, 3 (2): 1309; Singh et al., 2014, *Rec. zool. Surv. India*, Occ. Pap. No. 367: 32; Paunikar et al., 2023. *International Journal of Entomology Research*, 8 (9): 27; Paunikar, S. and Nair, A., 2025b. *International Journal of Global Science Research*, 12 (1): 2562; Anonymous 2026. *Butterflies of India*, v. 4.11.

Chionaema puella; Hampson, 1900. *Cat. Lep. Phalaenae Br. Mus.* 2: 298, fig. 216; Kaleka, 2002, *Zoos' Print J.* 17 (10): 896.

Cyana (Chionaema) puella puella, Karisch, 2013. *Esperiana*, 18: 111.

Cyana puella puella, Singh et al., 2020. *Zootaxa*, 4736 (1): 19.

Classification: Class Insecta, order Lepidoptera, superfamily Noctuoidea Latreille, 1809, family Erebidæ Leach, 1815, subfamily Arctiinae, tribe Lithosiini, subtribe Nudariina, genus *Cyana* Walker, 1854.

Material Examined: 1 example (female); Banda, district Sagar, Madhya Pradesh. India; March 04, 2026; photo by 2nd author (AKD).

Description:

Head and thorax white; palpi crimson, slender and upturned; antennae crimson, ciliated, slender and long; a scarlet thin band on collar and a squarish one with arms and white centre on thorax; fore-wings white; a sub-basal scarlet band; ante-medial band curved outwards, post-medial band

incurved and somewhat irregular, former inwardly edged with black and later outwardly; a marginal crimson band continued along costa to post-medial band; hind-wings pale crimson; legs scarlet, with white bands; abdomen dorsally tinged with crimson except towards the base.

Male: Fore-wings with a more or less strongly developed fringe of hair from the centre of costa on upper side and lobe on underside and with three discoidal black spots.

Female: Fore-wings with one discoidal black spot.

Wing-span: Male 28, female 36 mm (Hampson, 1894); male 35 mm and, female 29 mm (Gurule, 2013).

Distribution:

India:

Madhya Pradesh: Ken-Gharial Wildlife Sanctuary, Panna and Chhatarpur districts (Paunekar and Nair, 2025b); Banda, district Sagar (present new record).

Rest of India: Andaman & Nicobar Islands, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Kerala, Maharashtra, Meghalaya, Sikkim, Tamil Nadu and Uttarakhand (Hampson, 1894; Anonymous, 2026; www.nic.funet.fi).

Elsewhere: China (Yunnan), Indonesia (Java), Nepal, Pakistan and Sri Lanka (Hampson, 1894; Gurule, 2013; www.nic.funet.fi).

Larval Host Plants: Lichens (Paunekar et al., 2023; en.wikipedia.org).

Remarks: Two subspecies are recognized:

Cyana puella puella (Drury, 1773): China (Yunnan), India, Indonesia (Java), Nepal, Pakistan and Sri Lanka.

Cyana puella postflavida Rothschild, 1924: Africa (Cameroon, Congo Demo Repub, Eritrea, Ethiopia, Kenya, Tanzania, Uganda and Zaire), Oman, Saudi Arabia and Yemen.

Acknowledgements:

The author (AH) is thankful to the Director, Zoological Survey of India for encouragement and the Officer-in-Charge, Northern Regional Centre, ZSI, Dehra Dun for library facility.

References:

- Rawat, R. R. and Verma, S. K., (1980) Parasites of *Spodoptera litura* (Fabricius) from M. P. SO: Jnk Research Journal, 10 (4), 413.
- Singh, O. P. and Rawat, R. R., (1980) Ausweichnahrungsplazen der sojabohnen-Eule, *Plusia orechalacea* F. (Lepidoptera: Noctuidae) in Jabalpur, Indien. Anzeiger Fuer Schaedling Skunde Pflanzenschutz Umweltschutz, 53 (2), 25, illustr. Zur Biologie des indischen Sojabohnen-Schodlings *Plusia acuta* Walker (Lepidoptera: Noctuidae).
- Vaishampayan, S. M. and Veda, O. P., (1980) Population dynamics of gram pod borer, *Helicoverpa armigera* (Hubner) and its outbreak situation gram, *Cicer arietinum* L. at Jabalpur. Indian Journal of Entomology, 42 (3), 453-459, illustr.
- Verma, R., Rawat, R. R., Vaishampayan, S. M. and Khatri, A. K. (1980) New record of teak defoliator *Hyblaea puera* Cramer on soyabean (*Glycine max* L.) in M. P. Jnk Research Journal, 14 (1-2), 43.
- Singh, O. P. (1987) New record of *Amyna octo* Guenee as pest of Soyabean in M. P. India. Indian Journal of Plant Protection, 15 (1), 95-96.
- Khan, H. R., Bhandari, R. S., Prasad, L. and Kumar, S. (1988) Population dynamics of *Hyblaea puera* Cramer (Lepidoptera: Hyblaeidae) and *Eutectona machaeralis* Walker (Lepidoptera: Pyralidae) in teak forest of M. P. (India). Indian Forester, 114 (4), 803-813. (MP).

- Joshi, K. C. and Meshram, P. B. (1989) A new report of *Selepa celtis* Moore (Lepidoptera: Noctuidae) as a pest of Babul (*Acacia nilotica*) and Aonla (*Embllica officinalis*). The Indian Forester, 115 (11), 847. (MP)
- Chandra, K and Nema, D. K. (2003) Moths of PENCH Tiger Reserve, Seoni, Madhya Pradesh. Journal of Tropical Forestry, 19 (1-2), 68-78.
- Chandra, K. and Nema, D. K. (2007) Insecta: Lepidoptera: Heterocera. In: Fauna of Madhya Pradesh including Chhattisgarh, State Fauna Series, 15 (Part-1), 347-418. Zoological Survey of India Publication.
- Chandra, K. and Nema, D. K. (2008) Moths of Bandhavgarh National Park, Madhya Pradesh. Rec. zool. Surv. India, 108 (2), 95-110.
- Joshi, K. C., Kulkarni, N., Roychoudhury, N., Chandra, S. and Barve, S. (2004) A study of insects from Kanha National Park. Journal of Tropical Forestry, 20 (3-4): 48-74.
- Ramakishna, Chandra, K., Nema, A. and Alfred. J. B. R., (2006) Faunal resources of national parks of Madhya Pradesh and Chhattisgarh. Conservation Area Series, 30, 1-123 +27. ZSI publication.
- Chandra, K. (2008) Insecta: Lepidoptera: Heterocera. In: *Faunal diversity of Jodhpur district, Madhya Pradesh*: 209-223. Zoological Survey of India Publication.
- Chandra, K. (2009a) Insecta: Lepidoptera: Heterocera. In: Fauna of Pachmarhi Biosphere Reserve. *Conservation Area Series*, 39, 337-354. Zoological Survey of India Publication.
- Chandra, K. (2009b) Insecta: Lepidoptera: Heterocera. In: Fauna of Bandhavgarh National Park. Conservation Area Series, 40, 131-140. Zoological Survey of India Publication.
- Chandra, K., Pandey, R., Bhandari, R. and Sambath, S. (2013) Diversity of Hawk Moths (Lepidoptera: Sphingidae). In: Veeranga Durgavati Wildlife Sanctuary, Damoh, Madhya Pradesh. Biological Forum- An International Journal, 5 (1), 73-77.
- Chandra. K. and Sambath, S. (2016a) Insecta: Lepidoptera: Heterocera (Moths). In: Faunal diversity of Singhori Wildlife Sanctuary, district Raisen, Madhya Pradesh. Fauna of Conservation Area Series, 57, 185-218.
- Chandra. K. and Sambath, S. (2016b) Insecta: Lepidoptera: Heterocera (Moths). In: Faunal diversity of Veeranga Durgavati Wildlife Sanctuary, Damoh, Madhya Pradesh. Fauna of Conservation Area Series, 56, 173-213. ZSI publication.
- Kulkarni, N., Roychoudhury, N., Meshram, P. B., Chander, S. and Barve, S. (2017) *Pictorial catalogue of Insect Reference Collection*: 176 pp. Tropical Forest Research Institute, Jabalpur, Madhya Pradesh. Zoological Survey of India Publication.
- Sambath, S. (2017) A report on the moths of Ghatigaon Wildlife Sanctuary. *Bionotes*, 19 (1), 21-23.
- Sambath, S. (2018a) On a collection of moths (Lepidoptera) from Narsinghgarh Wildlife Sanctuary, district Raigarh, Madhya Pradesh. *Bionotes*, 20 (4), 127-129.
- Sambath, S. (2018b) Moth fauna of Kheoni Wildlife Sanctuary, district Dewas, Madhya Pradesh. *Bionotes*, 20 (4): 127-129.
- Sambath, S. (2020) Insecta: Lepidoptera: Heterocera. In: Faunal diversity of Bhoj Wetland, Bhopal, Madhya Pradesh, India (A Ramsar Site). Wetland Ecosystem Series, 22, 141-152. Zoological Survey of India publication.
- Sambath, S. (2022) Insecta: Lepidoptera: Heterocera. In: Faunal diversity of Nauradehi Wildlife Sanctuary, Madhya

Pradesh. *Conservation Area Series*, 69, 117-123. Zoological Survey of India publication.

Sambath, S., 2023.

Roshni, P., Sambath, S. and Bhandari, R. (2020a) Diversity of species richness of family Geometridae (Lepidoptera: Insecta) in Veerangana Durgavati Wildlife Sanctuary, Damoh, Madhya Pradesh. *International Journal of Global Science Research*, 7, 1284-1290.

Roshni, P., Sambath, S. and Bhandari, R. (2020b) Species diversity of family Crambidae (Moth). In: *Veerangana Durgavati Wildlife Sanctuary, Damoh (M. P.) Pradesh. International Journal of current Advanced Research*, 9, 22037-22039.

Singh, N., Pathania, P. C., Joshi, R., Kalawate, A., Shah, S., Ahmad, J., Raha, A., Das, A., and Mazumdar, A. (2022) Insecta: Lepidoptera (Moths). In: *Faunal diversity of Biogeographic zones of India: Deccan Peninsula*: 487-514. Zoological Survey of India Publication. (226 spp from MP).

Tabassum, S. and Bisen, P. (2022) A preliminary report on the biodiversity of moths (Insecta: Lepidoptera: Heterocera) of Balaghat City from southern Madhya Pradesh, India. *International Journal of Engineering Development and Research*, 10 (3), 104-111.

Paunekar, S., Kulkarni, N. and Barve, S. K. (2023) Moth diversity (Insecta: Heterocera) in the forest ecosystem of Tropical Forest Research Institute Campus (TFRI), Jabalpur, Madhya Pradesh. *International Journal of Entomology Research*, 8 (9), 25-32. (C. puella: 27. Lichens)

Paunekar, S., Nair, A. and Sambath, S. (2024) Study of diversity of moths (Lepidoptera: Heterocera) of Ratapani Wildlife Sanctuary and Tiger Reserve, Raisen and Sehore districts of Madhya Pradesh. *Indian Journal of Tropical Biodiversity*, 32 (1), 22-32.

Paunekar, S., Ramakrisnan, Sharma, A. K., Nair, A. and B. K. Das, B. K. (2026) Diversity of Moths (Insecta: Lepidoptera) in the Agricultural Crop, Chickpea (*Cicer arietinum* L.) of Jabalpur District of Madhya Pradesh, Central India. *Uttar Pradesh Journal of Zoology*, 47 (5), 31-41.

Sambath, S. and Nair, A., (2023) Moths (Lepidoptera: Heterocera) diversity of Sanjay-Dubri National Park and Tiger Reserve, Sidhi, Madhya Pradesh. *Journal of Natural Resources and Development*, 18 (1), 61-69.

Paunekar, S. and Nair, A. (2025a) Studies on distribution of moth (Lepidoptera: Heterocera) of Gandhisagar Wildlife Sanctuary, Mandsaur and Neemach districts of Madhya Pradesh. *Biological Forum- An International Journal*. 7 (2), 42-50.

Paunekar, S. and Nair, A. (2025b) Moth fauna of (Lepidoptera: Glossata) of Ken-Gharial Wildlife Sanctuary, Panna and Chhatarpur districts of Madhya Pradesh. *International Journal of Global Science Research*, 12 (1), 2558-2567.

Hampson, G. F. (1894) *The Fauna of British India including Ceylon and Burma*. Moths. Vol. II: xxii + 609 pp. Taylor and Francis, London.

Gurule, S. A. (2013) *Taxonomic study of moths (Lepidoptera: Heterocera) from north Maharashtra (India)*. Ph.D. thesis, University of Pune, India.

Anonymous 2026. *Cyana puella* (Drury, 1773). In: Sondhi, S., Singh, R. P., G. Iyer, G., D'silva, J. and Kunte, K. (Eds.). *Butterflies of India*, v. 4.11. Published by the Indian Foundation for Butterflies.

Websites:

https://en.wikipedia.org/wiki/Cyana_puella
<https://www.nic.funet.fi/pub/sci/bio/life/insecta/lepidoptera/ditrysia/noctuoidea/tiidae/lithosiinae/cyana/#puella>



Figure. *Cyana puella puella* (female)