Journal of Threatened

TAXA

10.11609/jott.2024.16.8.25639-25790 www.threatenedtaxa.org

> 26 August 2024 (Online & Print) 16(8): 25639-25790 ISSN 0974-79t07 (Online) ISSN 0974-7893 (Print)



Open Access





Publisher Wildlife Information Liaison Development Society www.wild.zooreach.org

Host **Zoo Outreach Organization** www.zooreach.org

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Cover: Watercolour illustrations—Striped Tiger Danaus genutia, Common Silverline Cigaritis vulcanus, Tamil Lacewing Cethosia mahratta. © Mayur Nandikar.

Journal of Threatened Taxa | www.threatenedtaxa.org | 26 August 2024 | 16(8): 25748-25757

COMMUNICATION

ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

https://doi.org/10.11609/jott.8348.16.8.25748-25757

#8348 | Received 29 December 2022 | Final received 15 July 2024 | Finally accepted 12 August 2024

ACCESS



Diversity of butterfly habitats in and around Udanti-Sitanadi Tiger Reserve, Chhattisgarh, India

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Abstract: A survey of Lepidoptera was conducted in habitats including forest trails, nullah, forest gap, and small water bodies, in and around the Udanti-Sitanadi Tiger Reserve (USTR) and agroforest habitats at Nagri block in Dhamtari district of Chhattisgarh State between January 2020 and August 2022. The study recorded 95 species belonging to 69 genera. *Erionota torus* and *Rathinda amor* although common in the Indian mainland, were not documented by previous researchers. This indicates the necessity for a more thorough survey of Lepidoptera in the region.

Keywords: Agroforest, biodiversity, checklist, Erionota torus, Hesperiidae, host plant, Lepidoptera, Lycaenidae, new record, Rathinda amor.

Editor: Monsoon Gogoi , Ashoka Trust For Research In Ecology and The Environment, Bengaluru, India. Date of publication: 26 August 2024 (online & print)

Citation: Tandan, H.N., G.K. Sahu, K. Das, G. Chand, R. Naidu & R. Agrawal (2024). Diversity of butterfly habitats in and around Udanti-Sitanadi Tiger Reserve, Chhattisgarh, India. *Journal of Threatened Taxa* 16(8): 25748–25757. https://doi.org/10.11609/jott.8348.16.8.25748-25757

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Funding: This work was not funded by any agency.

Competing interests: The authors declare no competing interests.

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Author contributions: HNT—Main contributor and corresponding author, led the team in field observations of butterflies. GKS—Conducted observations and photography of butterflies in Garhdongari village, Nagri block. He captured all the images of *Erionota torus* at Nagri. KD—Observed butterflies in urban habitats, recording *Rathinda amor* in her backyard in Raipur. GC—Focused on butterfly observations in Dhamtari district and recorded *Rathinda amor* at Chingrapagar Waterfall, Kodomali, Gariaband. RN—Documented biotiversity in Chhattisgarh since 2015, first recorded Rathinda amor in Kanger Valley National Park. RA—Documented butterflies in Gariaband district, recorded Erionota thrax in Deobhog.

Acknowledgements: The authors sincerely thank Dr. Krushnamegh Kunte, chief editor of the Butterflies of India Website, for his invaluable assistance in confirming the species identification. We also extend our gratitude to the Department of Forest, Government of Chhattisgarh, for granting permission to conduct this study in the core zones of the Udanti-Sitanadi Tiger Reserve.

INTRODUCTION

Udanti-Sitanadi Tiger Reserve (USTR) in Chhattisgarh has not been extensively characterized with regard to Lepidoptera and their habitats. The USTR is located in the Gariaband and Dhamtari districts of Chhattisgarh State and covers about 1,872 km². The USTR has two core areas: Core-I, Udanti Wildlife Sanctuary (UWS) Gariaband, established with 247.59 km² area in 1983 under the Wildlife Protection Act, 1972, lies between 20.000—20.250 °N & 82.500—80.000 °E on the southeast to the capital city Raipur on National Highway 130C; and Core—II, Sitanadi Wildlife Sanctuary (SWS) Dhamtari, was established with 553.36 km² area in 1974 and it lies between 20.183°N & 81.933°E.

In earlier studies, 35 species belonging to five families and 13 subfamilies of butterflies were documented in USTR (Chandra & Boaz 2018). Around 95 species were observed during the present survey, with 60 observed for the first time in USTR. This survey also updated the list of butterflies in Chhattisgarh State, adding two additional species to the previous 170 species (Chandra et al. 2014; Dubey et al. 2015; Sisodia 2019; Sisodia & Kshirsagar 2020; Tandan et al. 2020, 2021a,b; Nihlani et al. 2021; Chand et al. 2022; Jangde et al. 2023).

MATERIAL AND METHODS

Habitats such as forest trails, nullah, small water bodies, agricultural farms, and grasslands within the USTR and small villages around it including Tumdibahra (20.251°N, 82.101°E), Arsikanhar (20.249°N, 82.129°E), Behradih (20.190°N, 82.218°E), Kodomali (20.191°N, 82.247°E), Taurenga (20.144°N, 82.277°E), and Jugad (20.136°N, 82.285°E) were surveyed. An agroforest habitat adjacent to USTR at Garhdongari village (20.270°N, 81.900°E) of Nagri block from January 2020 to August 2022, for the preparation of a database of the butterflies in Chhattisgarh were also surveyed. Paddy is the major crop in Chhattisgarh and some small paddy fields still exist inside the USTR, while the present study may help in planning for the conservation programs of butterflies and other pollinating agents in the reserve area

For the present survey, binoculars were used for field observation of butterflies, a Canon 1300D DSLR Camera, and occasionally by iPhone. The identification of species was based on Evans (1932), Wynter-Blyth (1957), Haribal (1992), Smetacek (2016), and Kehimkar (2018). Species were identified & verified with the expert's help and

following the website www.ifoundbutterflies.org.

OBSERVATIONS

Photographs were taken and a checklist of 95 butterfly species was prepared (Table 1). Among them, two widely spread species in mainland India were curiously absent from previous records:

Family Hesperiidae Subfamily Hesperiinae

Erionota torus Evans, 1941 — Rounded Palm-redeye (Image 5 & 6)

Known distribution in India: Uttarakhand to northeastern India; Karnataka, Kerala, Tamil Nadu (Varshney & Smetacek 2015).

Host plant: Coconut – *Cocos nucifera* and Banana - *Musa x paradisiaca* is the best-known larval host plant of *E. torus* (Nitin et al. 2018).

Remarks: Erionota torus inhabits to hill forest, recorded up to 1,370 m elevation and flying from June to October (Kehimkar 2018). These species were observed first time in Chhattisgarh by GS in Garhdongari village of Nagri block in October 2020 at 456 m elevation. An adult butterfly was sighted in a Banana plant during an opportunistic visit (Image 5). It was further spotted in October and November 2021 at the same plant in later visits, counted in 14 individuals (Image 6), and found some eggs on Banana leaves (Image 1 to 4). Later regular observations were made in December 2021 and 11 individuals at the same plant were photographed.

Family Lycaenidae Subfamily Theclinae

Rathinda amor (Fabricius, 1775) - Monkey Puzzle (Image 7 & 8)

Known distribution in India: Kerala to northeastern India. (Varshney & Smetacek 2015); India (Western Ghats, Andhra–Jharkhand, West Bengal, Sikkim–Arunachal, northeastern India), Bangladesh, Sri Lanka (Kehimkar 2016)

Host plant: Mangifera indica, Meiogyne pannosa, Calophyllum, Hopea, Blachia, Croton, Barringtonia acutangula, Careya arborea, Loranthus, Eugenia roxburghii, Ixora, Ixora brachiate, Schleichera, Quassia indica. (Nitin et al. 2018).

Remarks: *Rathinda amor* or Monkey Puzzle inhabits mainly forests, recorded in low elevations and flying from April to October (Kehimkar 2018). This butterfly was first time observed in Chhattisgarh on 12.x.2019

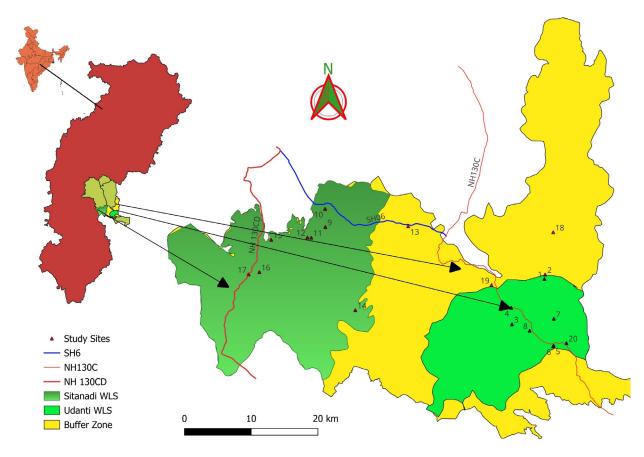


Image 1. Map of the study area and location of study sites.

at KVNP, subsequently observed in various parts of Chhattisgarh on 10.x.2020 & 12.x.2021 in Tatamari Ecocenter Keshkal, it was observed in agricultural land at Garhdongari Village of Nagri block on 15.x.2021, also recorded from Chingrapagar Waterfall on 23.x.2021 and 30.viii.2022 Kodomali in Gariaband. This butterfly is inhabited mainly in forest habitat (Kehimkar 2018), and also observed in very densely populated Raipur City, the capital of Chhattisgarh.

RESULT AND DISCUSSION

The unique ecosystem of small paddy fields, in the villages including Nullah (Rivulet), small water bodies, small ponds, and grasslands inside the tiger reserve area provides a good habitat for butterflies. Agroforests, with their diverse vegetation, tree canopies, and flowering plants, create a unique habitat for butterfly communities. It was found that most of the butterflies were partially dependent on these small habitats for nectaring, puddling, and host plants.

The paddy field and agroforest areas are very

suitable habitat for the butterflies. The study by Johnson et al. (2021) highlights the positive correlation between agroforestry systems and butterfly diversity and abundance. These findings emphasize the importance of considering agroforestry as a viable strategy for creating butterfly-friendly habitats in agricultural ecosystems (Johnson et al. 2021).

The present study showed the rich diversity of butterflies in agroforest habitats and agriculture fields due to the presence of host and nectar plants that are there because of the availability of water supplies during irrigation. About 95 species of butterflies documented belonged to six families and 19 subfamilies, of which 92 species have been observed in the present survey, and 3 species, were reported in the list of 35 species from USTR by Chandra & Boaz (2018), but not observed in the present survey. The absence of records for several common butterfly species from the state fauna of Chhattisgarh and the present study area can be attributed to a lack of concessive surveys. The present report has updated the checklist of butterflies of USTR hereby as 95 species of 69 genera belonging to six families. The two species Rathinda amor and Erionota torus were first



Table 1. Updated checklist of the butterflies recorded from habitats in and around Udanti-Sitanadi Tiger Reserve (USTR), Chhattisgarh, India.

				Recorded in USTR				
	Common name	Scientific name	Present survey (During 2020–2022)					
			UWLS	SWLS	NAGRI	Chandra & Boaz 2018		
Order:	Lepidoptera							
Super I	Family: Papilionoidea							
Family	: Papilionoidae							
Subfan	nily: Papilioninae							
1*	Lime Swallowtail	Papilio demoleus (Linnaeus, 1758)	+	+	+	+		
2*	Common Mormon	Papilio polytes (Linnaeus, 1758)	+	+	+	+		
3	Blue Mormon	Papilio polymnestor Cramer, 1775	+	+	+	-		
4	Common Banded Peacock	Papilio crino Fabricius, 1793	+	+	+	-		
5*	Common Mime	Papilio clytia Linnaeus, 1758	-	+	-	+		
6	Common Jay	Graphium doson (C.& R. Felder, 1864)	-	-	+	-		
7	Tailed Jay	Graphium agamemnon (Linnaeus, 1758)	+	-	+	-		
8**	Spot Swordtail	Graphium nomius (Esper, 1799)	-	-	-	+		
Family	: Riodinidae			ļ				
Subfan	nily: Riodininae							
9	Double-banded Judy	Abisara bifasciata (Moore, 1877)	+	+	+	-		
Family	: Pieridae		1	ı	1	l .		
Subfan	nily: Coliadinae							
10*	Common Emigrant	Catopsilia pomona (Fabricius, 1775)	+	+	+	+		
11*	Mottled Emigrant	Catopsilia pyranthe (Linnaeus, 1758)	+	+	+	+		
12*	Common Grass Yellow	Eurema hecabe (Linnaeus, 1758)	+	+	+	+		
13	Small Grass Yellow	Eurema brigitta (Stoll, [1780])	+	+	+	-		
14	Spotless Grass Yellow	Eurema laeta (Boisduval, 1826)	+	+	+	-		
Subfan	nily: Pierinae			ļ.	Į.			
15*	Indian Jezebel	Delias eucharis (Drury, 1773)	+	+	+	+		
16*	Psyche	Leptosia nina (Fabricius, 1793)	-	+	+	+		
17	Indian Wanderer	Pareronia hippia (Fabricius, 1787)	+	+	+	-		
18*	Common Gull	Cepora nerissa (Fabricius, 1775)	+	-	+	+		
Family	: Lycaenidae		1		1	<u> </u>		
Subfan	nily: Miletinae							
19	Apefly	Spalgis epius (Westwood, [1851])	+	-	+	-		
Subfan	nily: Curetinae					<u> </u>		
20	Indian Sunbeam	Curetis thetis (Drury, [1773])	-	-	+	-		
Subfan	nily: Theclinae					L		
21	Common Shot Silverline	Spindasis ictis (Hewitson, 1865)	+	+	+	-		
22*	Common Silverline	Spindasis vulcanus (Fabricius, 1775)	+	+	+	+		
23	Redspot	Zesius chrysomallus (Hübner, 1819)	-	-	+	-		
24	Purple Leaf Blue	Amblypodia anita (Hewitson, 1862)	+	+	+	-		
25	Indigo Flash	Rapala varuna (Horsfield, 1829)	+	-	+	-		
26	Common Red Flash	Rapala iarbus (Fabricius, 1787)	-	-	+	-		
27	Orchid Tit	Chliaria othona (Hewitson,1865)	+	-	+	-		
		·	1		1			

				Recor	ded in USTF	R
	Common name	Scientific name	Present survey (During 2020–2022)			
			UWLS	SWLS	NAGRI	Chandra & Boaz 2018
29	Common Guava Blue	Virachola Isocrates (Fabricius, 1793)	+	-	+	-
30*	Large Oakblue	Arhopala amantes (Hewitson, 1862)	+	+	+	+
31	Silver Royal	Ancema blanka (de Niceville, 1894)	+	-	-	-
32#	Monkey Puzzle	Rathinda amor (Fabricius, 1775)	+	+	+	-
33**	Yamfly	Loxura atymnus (Stoll, 1780)	-	-	-	+
Subfan	ıly: Polyommatinae			<u> </u>		
34*	Common Pierrot	Castalius rosimon (Fabricius, 1775)	+	+	+	+
35	Lesser Grass Blue	Zizina otis (Fabricius, 1787)	+	+	+	-
36	Forget-me-not	Catochrysops strabo (Fabricius, 1793)	+	-	+	-
37	Angled Pierrot	Caleta decidia (Hewitson, 1876)	+	+	+	-
38	Common Lineblue	Prosotas nora (C. Felder, 1860)	+	+	+	-
39	Tailless Lineblue	Prosotas dubiosa (Semper, [1879])	+	-	+	-
40	Pointed Ciliate Blue	Anthene lycaenina (R. Felder, 1868)	-	-	+	-
41	Small Grass Jewel	Freyeria putli (Kollar, [1844])	-	+	+	-
42	Lime Blue	Chilades lajus (Stoll, [1780])	+	+	+	-
43	Indian Cupid	Everes lacturnus (Godart, [1824])	-	-	+	-
44	Dingy Lineblue	Petrelaea dana (de Nicéville, 1884)	+	+	+	-
45	Common Hedge Blue	Acytolepis puspa (Horsfield, 1828)	-	+	+	-
46	Common Cerulean	Jamides celeno (Cramer, 1775)	-	-	+	-
47	Dark Cerulean	Jamides bochus (Stoll, 1782)	+	-	+	-
48*	Pea Blue	Lampides boeticus (Linnaeus, 1767)	+	-	+	+
49	Zebra Blue	Leptotes plinius (Fabricius, 1793)	+	+	+	-
50	Dark Grass Blue	Zizeeria karsandra (Moore, 1865)	+	+	+	-
51	Tiny Grass Blue	Zizula hylax (Fabricius, 1775)	+	+	+	-
52	Gram Blue	Euchrysops cnejus (Fabricius, 1798)	+	+	+	-
53	Black Spotted Pierrot	Tarucus balkanica (Freyer, 1844)	+	+	+	-
Family	: Hesperiidae					l
Subfan	nily: Coeliadnae		,			
54	Common Banded Awl	Hasora chromus (Cramer, [1780])	+	+	+	-
Subfan	nily: Hesperiinae	,				
55	Dark Palm-Dart	Telicota bambusae (Moore, 1878)	+	+	+	-
56	Paint-brush Swift	Baoris farri (Moore, 1878)	-	-	+	-
57*	Rice Swift	Borbo cinnara (Wallace, 1866)	+	+	+	+
58	Palm Redeye	Erionota thrax (Linnaeus, 1767)	+	+	+	-
59#	Banana Skipper	Erionota torus Evans, 1942	-	-	+	-
60	Chestnut Bob	lambrix salsala (Moore, 1866)	-	-	+	-
61*	Grass Demon	Udaspes folus (Cramer, 1775)	+	+	+	+
Subfan	nily: Pyrginae			•		
62	Golden Angle	Caprona ransonnettii (R. Felder, 1868)	-	-	+	-
63*	Indian Skipper	Spialia galba (Fabriciu, 1793)	+	+	-	+



			Recorded in USTR				
	Common name	Scientific name	Present survey (During 2020–2022)				
			UWLS	SWLS	NAGRI	Chandra 8 Boaz 2018	
Family	: Nymphalidae						
Subfan	nily: Biblidinae						
64	Angled Castor	Ariadne ariadne (Linnaeus, 1763)	_	_	+	-	
65*	Common Caster	Ariadne merione (Cramer, 1777)	+	_	+	+	
	nily: Charaxinae	Through the control (claimer, 1777)	1			<u> </u>	
66	Cryptic Nawab	Charaxes bharata C. & R. Felder, [1867]			+	-	
Subfan	nily: Danainae			_	ı		
67*	Plain Tiger	Danaus chrysippus (Linnaeus, 1758)	+	+	+	+	
68*	Striped Tiger	Danaus genutia (Cramer, [1779])	+	+	+	+	
69*	Blue Tiger	Tirumala limniace (Cramer, [1775])	+	-	+	+	
70*	Common Crow	Euploea core (Cramer, [1780])	+	+	+	+	
Subfan	nily: Satyrinae	· 					
71	Common Palmfly	Elymnias hypermnestra (Linnaeus, 1763)	+	+	+	-	
72*	Common Evening Brown	Melanites leda (Linnaeus, 1758)	+	+	+	+	
73	Bamboo Treebrown	Lethe europa (Fabricius, 1775)	-	-	+	-	
74*	Common Bushbrown	Mycalesis perseus (Fabricius, 1775)	+	+	+	+	
75**	Common Four-ring	Ypthima huebneri Kirby, 1871	-	-	-	+	
Subfan	nily: Heliconiinae						
76*	Common Leopard	Phalanta phalantha (Drury, [1773])	+	-	+	+	
Subfan	nily: Limenitidinae						
77*	Common Sailer	Neptis hylas (Linnaeus, 1758)	+	+	+	+	
78	Chestnut-streaked Sailer	Neptis jumbah Moore, [1858]	+	-	-	-	
79	Short-banded Sailer	Phaedyma columella (Cramer, [1780])	-	+	-	-	
80	Common Lascar	Pantoporia hordonia (Stoll, [1790])	-	+	-	-	
81	Grey Count	Tanaecia lepidea (Butler, 1868)	+	+	_	-	
82	Common Baron	Euthalia aconthea (Cramer, [1777])	+	+	+	-	
83	Gaudy Baron	Euthalia lubentina (Cramer, [1777])	-	-	+	-	
84*	Commander	Moduza procris (Cramer, [1777])	+	+	+	+	
85*	Staff Sergeant	Athyma selenophora (Kollar, [1844])	+	+	-	+	
86*	Baronet	Euthalia nais (Forster, 1771)	+	+	+	+	
Subfan	nily: Nymphalinae						
87	Peacock Pansy	Junonia almana (Linnaeus,1758)	+	+	+	-	
88*	Gray Pansy	Junonia atlites (Linnaeus, 1763)	+	+	+	+	
89	Lemon Pansy	Junonia lemonias (Linnaeus, 1758))	+	+	+	-	
90*	Chocolate Pansy	Junonia iphita (Cramer, [1779])	+	+	+	+	
91	Blue Pansy	Junonia orithya (Linnaeus, 1758)	+	+	+	-	
92	Yellow Pansy	Junonia hierta (Fabricius, 1798)	-	-	+	-	
93*	Danaid Eggfly	Hypolimnas misippus (Linnaeus, 1764)	+	+	+	+	
94	Great Eggfly	Hypolimnas bolina (Linnaeus, 1758)	+	+	+	-	
Subfan	nily: Acraeinae						
95*	Tawny Coster	Acraea violae (Fabricius, 1793)	+	+	+	+	

#—New records added to the state fauna of butterflies, Chhattisgarh in the present study | *—Documented in Udanti Sitanadi Tiger Reserve by Chandra & Boaz (2018) | **—Documented only by Chandra & Boaz (2018) in Sitanadi-Udanti Tiger Reserve.

Table 2. New records were added to the list of butterflies (Lepidoptera: Rhopalocera) of Chhattisgarh (Chandra et al. 2014; Dubey et al. 2015; Sisodia 2019).

	Scientific name	Common name	Recorder/ Author name	
	Order: Lepidoptera			
	Super Family: Papilionoidea			
	Family: Hesperiidae			
	Subfamily: Hesperiinae			
1	Notocryptacurvifascia (C. & R. Felder, 1862)	Restricted Demon		
2	Borbo cinnara (Wallace, 1866)	Rice Swift		
3	Telicota colon (Fabricius, 1775)	Pale Palm-Dart		
	Subfamily: Pyrginae			
4	Celaenorrhinusambareesa (Moore, [1866])	Malabar Spotted Flat		
5	Coladeniaindrani (Moore, [1866])	Tricolour Pied Flat		
6	Tagiadesjapetus (Stoll, [1781])	Common Snow Flat		
	Family: Lycaenidae			
	Subfamily: Polyommatinae			
7	Anthene emolus (Godart, [1824])	Common Ciliate Blue		
8	Acytolepis puspa (Horsfield, [1828])	Common Hedge Blue		
9	Everes lacturnus (Godart, [1824])	Indian Cupid		
10	Freyeria trochylus (Freyer, 1845)	Grass Jewel		
11▲	Petrelaea dana (de Nicéville, [1884])	Dingy Lineblue		
12	Prosotus dubiosa (Semper, [1879])	Tailless Lineblue	Chandra et al. 2014	
13	Catochrysops panormus (C. Felder, 1860)	ormus (C. Silver Forget-me-not		
	Subfamily: Theclinae			
14	Amblypodia anita Hewitson, 1862	Purple Leaf Blue		
15	Rapala pheretima (Hewitson, [1863])	Copper Flash		
16	Virachola isocrates (Fabricius, 1793)	Common Guava Blue		
17	Zesius chrysomallus Hübner, [1819]	Redspot		
	Subfamily: Biblidinae			
18	Ariadne ariadne (Linnaeus, 1763)	Angled Castor		
	Subfamily: Cyrestinae			
19	Cyrestis thyodamas Doyère, [1840]	Common Map		
	Subfamily: Danainae			
20	Parantica aglea (Stoll, [1782])	Glassy Tiger		
21	Tirumala septentrionis (Butler, 1874)	Dark Blue Tiger		
	Subfamily: Papilioninae			
22	Graphium doson (C. & R. Felder, 1864)	Common Jay		

	Family:Hesperiidae			
	Subfamily:Coeliadinae]		
23	Badamia exclamationis (Fabricius, 1775)	Brown Awl		
24	Burara jaina (Moore, [1866])	Common Orange Awlet	Dubey et al	
25	Hasora vitta (Butler, 1870)	Plain Banded Awl	2015	
	Subfamily: Pyrginae]	
26	Caprona ransonnettii (R. Felder, 1868)	Golden Angle		
27	Odontoptilum angulata (C. Felder, 1862)	Chestnut Angle		
	Family: Lycaenidae			
	Subfamily: Curetinae			
28	Curetis acuta Moore, 1877	Acute Sunbeam		
29	Curetis thetis (Drury, [1773])	Indian Sunbeam		
	Subfamily: Miletinae			
30	Spalgis epius (Westwood, [1851])	Apefly		
	Subfamily: Polyommatinae			
31	Chilades lajus (Stoll, [1780])	Lime Blue		
32	Chilades parrhasius (Fabricius, 1793)	Small Cupid		
33	Megisba malaya (Horsfield, [1828])	Malayan		
34	Neopithecops zalmora (Butler, [1870])	Common Quaker		
35	Prosotus nora (C. Felder, 1860)	Common Lineblue		
36	Azanus ubaldus (Stoll, [1782]	Bright Babul Blue		
37▲	Petrelaea dana (de Nicéville, [1884]) Dingy Lineblue			
	Subfamily: Poritiinae			
38	Poritia hewitsoni Moore, [1866]	Common Gem	Sisodia 201	
	Subfamily: Theclinae			
39	Horaga onyx (Moore, [1858])	Common Onyx		
40	Rapala varuna (Horsfield, [1829])	Indigo Flash		
41	Zeltus amasa (Hewitson, [1865])	Fluffy Tit		
	Family: Nymphalidae		_	
	Subfamily: Charaxinae]	
42	Charaxes agrariusSwinhoe, [1887]	Anomalous Nawab		
43	Charaxes psaphon Westwood, 1847	Plain Tawny Rajah		
	Subfamily: Danainae			
44	Euploea sylvester (Fabricius, 1793)	Double-branded Crow		
	Subfamily: Heliconiinae]		
45	Vagrans egista (Cramer, [1780])	Vagrant		
	Subfamily: Satyrinae]	
46	Ypthima asterope (Klug, 1832)	Common Threering		

 $[\]blacktriangle$ Added by Chandra et al., (2014) and repeated by Sisodia, (2019) as new record.



Table 3. Updates on the butterflies of Chhattisgarh: recent findings post 2019.

	Family	Subfamily	Scientific name	Common name	Recorder/Author name
01.	Hesperiidae	Pyrginae	Tagiades litigiosa (Moeschler, 1878)	Water Snow Flat	
02.	Hesperiidae	Hesperiinae	Gangara thyrsis (Fabricius, 1775)	Giant Redeye	Sisodia & Kshirsagar 2020
03.	Lycaenidae	Theclinae	Horaga viola Moore, 1882	Brown Onyx	5.55 a.a. a. 1.5.111 50gui 2020
04.	Lycaenidae	Polyommatinae	Jamides bochus (Stoll, 1782)	Dark Cerulean	
05.	Lycaenidae	Polyommatinae	Anthene lycaenina (R. Felder, 1868)	Pointed Ciliate Blue	Tandan et al. 2020
06.	Hesperiidae	Pyrginae	Caprona agama (Moore, 1858)	Spotted angle	Nihlani et al. 2021
07.	Lycaenidae	Polyommatinae	Freyeria putli (Kollar, 1844)	Lesser Grass Jewel	
08.	Lycaenidae	Theclinae	Spindasis ictis (Hewitson, 1865)	Common Shot Silverline	Tandan et al. 2021a
09.	Nymphalidae	Danainae	Euploea klugii (Moore, 1858)	King Crow	10.100.11 20210
10.	Lycaenidae	Theclinae	Ancema blanka (de Nicéville 1894)	Silver Royal	Tandan et al. 2021b
11.	Lycaenidae	Polyommatinae	Tarucus balkanicus Bethune-(Baker, 1918)	Black-spotted Pierrot	Chand et al. 2022









Image 1–4. Erionota torus (eggs). © Gulshan Kumar Sahu.



Image 5. Erionota torus (adult). ©Gulshan Kumar Sahu.



Image 8. Rathinda amor (adult). © H.N. Tandan.





Image 7. Rathinda amor (adult). © Gulshan Kumar Sahu.



Image 9. Erionota thrax. © Ramanand Agrawal.



Image 10. Ancema blanka. ©H.N. Tandan.



documented here in the Chhattisgarh State and added to the butterfly fauna of Chhattisgarh.

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ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

August 2024 | Vol. 16 | No. 8 | Pages: 25639–25790 Date of Publication: 26 August 2024 (Online & Print) DOI: 10.11609/jott.2024.16.8.25639-25790

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