

TAXONOMIC STUDIES ON ORTHOPTERA FAUNA OF UDANTI WILDLIFE SANCTUARY, GARIYABAND, CHHATTISGARH, INDIA

SUNIL KUMAR GUPTA

ZOOLOGICAL SURVEY OF INDIA, PRANI VIGYAN BHAWAN,
'M' BLOCK, NEW ALIPORE, KOLKATA-700 053, INDIA
(e-mail : skumarento@gmail.com)

The study presents taxonomic account of 50 species pertaining to 45 genera under 8 families of Orthoptera from Udanti Wildlife Sanctuary, Gariyaband, Chhattisgarh, India.

Key words : Orthoptera, Udanti Wildlife Sanctuary, Chhattisgarh, India.

INTRODUCTION

A noteworthy contribution of Orthoptera fauna of Chhattisgarh has been made by Sinha & Agarwal (1973), Dwivedi (1978 & 1990), Dwivedi & Chatteraj (1985), Shishodia (2000), Chandra *et al.* (2007), Gupta *et al.* (2008), Gupta & Chandra (2010, 2013 & 2014), Shishodia *et al.* (2010) and Chandra & Gupta (2011). During the extensive and intensive survey of Udanti Wildlife Sanctuary from 2011 to 2014, a total of 705 specimens pertaining to 51 species and subspecies pertaining to 46 genera under 8 families viz. Acrididae 23 species 21 genera, Pyrgomorphidae 3 species 3 genera, Tetrigidae 5 species 4 genera, Gryllidae 9 species 8 genera, Trigonidiidae 1 species 1 genus, Gryllotalpidae 1 species 1 genus, Tettigoniidae 6 species 6 genera were collected from different localities by the survey team of Zoological Survey of India, Kolkata. The species recorded for the first time from Chhattisgarh state are marked with an asterisk (*). The systematic account, details of material collected and co-ordinates and geographic distribution of all the species in Chhattisgarh are also incorporated.

MATERIALS AND METHODS

Study area : The present study was carried out in Udanti Wildlife Sanctuary is located in the south-western part of earlier Raipur district which is now furcated into Gariyaband district. The area of the Udanti Wildlife Sanctuary is about 247.80 sq. km., which lies between latitudes 20°0' N to 20°15'N and longitudes 82°30'E to 82°0'E. The forest type of the Sanctuary comprises of Tropical Dry Peninsular Sal forests and Southern Tropical Dry Deciduous Mixed Forests. Major flora in the sanctuary comprises of Teak (*Tectona grandis*), Shisam (*Dalbergia sissoo*), Tendu (*Diospyros melanoxylon*), Haldu (*Adina cordifolia*), Harra (*Terminalia chebula*), Sal (*Shorea robusta*), Salai (*Boswellia serrata*), Mahul (*Madhuca longifolia*), Aonla (*Emblica officinali*), Semal (*Bombax ceiba*), Bamboo (*Dendrocalamus strictus*) and Shurbs likes *Lantana camara*, *Butea monosperma*, *Ipomoea carnea*, and *Ziziphus mauritiana*.

The specimens were collected by sweeping over vegetation by insect net, and the larger specimens were picked up directly by hand or with the help of fine forceps. The specimens after collection from the field were killed in benzene or ethyl acetate in a killing bottle. For temporary storage in the field they were kept in insect envelopes. The specimens were brought to laboratory and pinned, labeled and preserved for the

identification. Survey site co-ordinates were recorded using GPS (Garmin Oregon 550). The identified specimens were deposited in National Zoological Collection, Zoological Survey of India, Kolkata.

Table I : Co-ordinates of collection localities of Udanti Wildlife sanctuary.

S. No.	Site	Latitude N			Longitude E			Alt. (m)
		Deg	Min	Sec	Deg	Min	Sec	
1.	Jugad	20	08	42.9	82	16	34.3	438
2.	Udanti Village	20	06	48.1	82	19	10.7	382
3.	Gwarund	20	08	42.9	82	16	34.3	431
4.	Baji nala	20	12	58.2	82	11	16.5	591
5.	Kulhadighat	20	13	47.1	82	20	23.	439
6.	Torenga RH	20	11	07	82	15	31.5	443
7.	Jhariyabahara Forest	20	13	56.6	82	11	48.6	580
8.	Jhariya Nala	20	12	46.2	82	10	47.6	580
9.	Mainpur Forest	20	17	25.5	82	13	57.7	499
10.	Ganga Jamuna village	20	7	24.5	82	15	12.2	495
11.	Kodomali Forest	20	11	537	82	14	858	452

SYSTEMATIC ACCOUNT

Order ORTHOPTERA
 Suborder CAELIFERA
 Infraorder ACRIDIDEA
 Superfamily ACRIDOIDEA
 Family ACRIDIDAE
 Subfamily Acridinae

Genus *Acrida* Linnaeus, 1758

1. *Acrida exaltata* (Walker, 1859)

1859. *Truxalis exaltata* Walker, *Ann. Mag. nat. Hist.*, 4 (3): 222.

2010. *Acrida exaltata*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314: 15-16.

Material examined : Chhattisgarh h; Gariyaband, Udanti WLS, Kodhomali Forest, 8.x.2011, 3(♂); Jugad, 17.x.2011, 4(3♂,1♀); Mainpur, 25.vi.2014, 4(2♂,2♀); Udanti village, 27.vi.2014, 3(♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

2. *Acrida gigantea* (Herbst, 1794)

1794. *Truxalis gigantea* Herbst, *Fuessly Archiv.*, 173.

2008. *Acrida gigantea*, Shishodia, In Faunal Diversity of Jabalpur district, Madhya Pradesh, *Zool. Surv. India* : 97.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Ganga Jamuna, 28.vi.2014, 6(4♂,2♀); Bhaisa sankra, 16.viii.2013, 1(♂) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Gariyaband, Kabirdham and Raipur.

3. *Acrida turrita* (Linnaeus, 1758)

1758. *Gryllus turritus*, Linnaeus, *Syst. Nat.* (ed. X) : 427.

1914. *Acrida turrita*, Kirby, *Fauna Brit. India, Orth.*, : 98.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Torenga Rest house, 23.viii.2013, 2(♂,♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Gariyaband, Kabirdham and Raipur.

Subfamily Catantopinae**Genus *Diabolocatantops* Jago, 1984****4. *Diabolocatantops innotabilis* (Walker, 1870)**

1870. *Acridium innotabile* Walker, *Cat. Derm. Salt. Brit. Mus.*, 4 : 629.

2010. *Diabolocatantops innotabilis*, Shishodia *et al.*, *Rec. zool. Surv. India, Occ. Paper No. 314* : 39.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jugad, 17.x.2011, 6(2♂,4♀); Mainpur, 25.vi.2014, 3(1♂,2♀); Udanti village, 27.vi.2014, 5(♀); Gwarund, 29.vi.2014, 7 (2♂,5♀); Ganga Jamuna village, 28.vi.2014, 13(7♂,6♀); Torenga, 23.viii.2013, 6(♀); Udanti village, 27.vi.2014, 11(5♂,6♀); Jhariya bahara, 23.vi.2014, 7(3♂,4♀); Basin river, 24.vi.2014, 3(2♂,1♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Genus *Stenocatantops* Dirsh & Uvarov, 1953**5. *Stenocatantops splendens* (Thunberg, 1815)**

1815. *Gryllus splendens* Thunberg, *Mem. Acad. Sci. St. - Petersb.*, 5 : 236.

2000. *Stenocatantops splendens* Shishodia & Tandon, *State Fauna Series 7: Fauna of Tripura*, Part 2, Zool. Surv. India : 210.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Ganga Jamuna village, 28.vi.2014, 3(1♂,2♀); Mainpur, 25.vi.2014, 2(♂); Torenga, 23.viii.2013, 1(♀); Udanti village, 27.vi.2014, 2(♂,♀); Jhariya bahara, 23.vi.2014, 2(1♂,1♀); Basin river, 24.vi.2014, 3 (1♂,2♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Genus *Xenocatantops* Dirsh & Uvarov, 1953**6. *Xenocatantops humilis humilis* (Serville, 1839)**

1839. *Acridium humile* Serville *Ins, Orth.*, : 662.

1953. *Xenocatantops humilis humilis*, Dirsh and Uvarov, *Tijdschr. Ent.*, 96 : 237.

2000. *Xenocatantops humilis humilis*, Shishodia, *Rec. zool. Surv. India*, 98(1) : 62.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Torenga, 23.viii.2013, 1(♀); Udanti village, 27.vi.2014, 6(2♂,4♀); Ganga jamuna village, 28.vi.2014, 3(1♂,2♀); Gwarund, 29.vi.2014, 2(♂,♀); Baji Nala, 30.vi.2014, 7(2♂,5♀); Basin river, 24.vi.2014, 6 (2♂,4♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband and Raipur.

7. *Xenocatantops karnyi* (Kirby, 1910)

1910. *Catantops karnyi* Kirby, *Syn. Cat. Orth.* 3: 483

2007. *Xenocatantops karnyi*, Mandal & Yadav, *State Fauna Series 5: Fauna of Andhra Pradesh*, Part 3. Zool. Surv. India, : 220.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Kodhomali Forest, 8.x.2011, 2(1♂,1♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Subfamily Coptacridinae**Genus *Coptacra* Stål, 1873****8. *Coptacra punctoria* (Walker, 1870)**

1870. *Acridium punctorium* Walker, *Cat. Derm. Salt. Brit. Mus.*, 4: 639.

2010. *Coptacra punctoria*, Shishodia et al., *Rec. zool. Surv. India*, Occ. Paper No. 314: 46.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jugad, 17.x.2011, 1(♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband and Raipur.

Genus *Eucoptacra* Bolivar, 1902**9. *Eucoptacra praemorsa* (Stål, 1860)**

1860. *Acridium* (*Catantops*?) *praemorsum* Stål, *Kongl. Svensk. Fregat Eugen. Res.*, Omkring Jorden, 3 : 330.

2010. *Eucoptacra praemorsa*, Shishodia et al., *Rec. zool. Surv. India*, Occ. Paper No. 314: 48.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jugad, 29.vi.2014, 3(♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Subfamily Eyprepocnemidinae**Genus *Eyprepocnemis* Fieber, 1853****10. *Eyprepocnemis alacris alacris* (Serville, 1839)**

1839. *Acridium alacre* Serville, *Ins. Orth.*, 682.

2010. *Eyprepocnemis alacris alacris*, Shishodia et al., *Rec. zool. Surv. India*, Occ. Paper No. 314 : 56.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Mainpur, 25.vi.2014, 1(♂); Jugad, 29.vi.2014, 4(♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Genus *Tylotropidius* Stål, 1860**11. *Tylotropidius varicornis* (Walker, 1870)**

1870. *Heteracris varicornis* Walker, *Cat. Derm. Salt. Brit. Mus.*, 4: 667.

2000. *Tylotropidius varicornis*, Shishodia, *Rec. zool. Surv. India*, 98(1): 60.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Mainpur, 25.vi.2014, 2(1♂, 1♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Subfamily Gomphocerinae**Genus *Aulacobothrus* Bolivar, 1902****12. *Aulacobothrus luteipes* (Walker, 1871)**

1871. *Stenobothrus luteipes* Walker, *Cat. Derm. Salt. Brit. Mus.*, 5: 82.

1993. *Aulacobothrus luteipes luteipes* Ingrisch, *Ent. Scand.*, 24 (3): 321.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jugad village, 17.x.2011, 1(♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Gariyaband and Raipur.

Subfamily Gomphocerinae**Genus *Gelastorhinus* Brunner, 1903****13. *Gelastorhinus laticornis* (Serville, 1839)**

1839. *Opomala laticornis* Serville, *Ins. Orth.*, 590.

1914. *Gelastorhinus laticornis*; Kirby, *Fauna Brit. India, Orth.*, 118.

2010. *Gelastorhinus laticornis*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314: 61.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jugad, 17.x.2011, 2(1♂, 1♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bilaspur and Gariyaband.

Genus *Leva* Bolivar, 1909**14. *Leva indica* (Bolivar, 1902)**

1902. *Gymnobothrus indicus* Bolivar, *Ann. Soc. ent. Fr., Paris*, 70: 596.

2010. *Leva indica*, Shishodia *et al.* *Rec. zool. Surv. India*, Occ. Paper No. 314: 62.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jugad, 17.x.2011, 2(1♂, 1♀); Mainpur, 25.vi.2014, 3(1♂, 2♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband and Kabirdham.

Subfamily Hemicridinae**Genus *Clonacris* Uvarov, 1943****15. *Clonacris kirbyi* (Finot, 1903)**

1903. *Euthymia kirbyi* Finot, *Ann. Soc. ent. Fr., Paris*, 71: 622.

1976. *Clonacris kirbyi*, Tandon, *Rec. zool. Surv. India*, Occ. Pap. No., 3: 10.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Ganga Jamuna village, 28.vi.2014, 1(♂) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bilaspur, Gariyaband and Raipur.

Subfamily Oedipodinae**Genus *Aiolopus* Fieber, 1853****16. *Aiolopus thalassinus tamulus* (Fabricius, 1798)**

1798. *Gryllus tamulus* Fabricius, *Entomologia systematica Suppl.* : 195.

1968. *Aiolopus thalassinus tamulus* Hollis, *Bull. Br. Mus. nat. Hist., (Ent.)*, 22 (7): 347.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Torenga RH, 23.viii.2013, 1(♂); Ganga Jamuna village, 28.vi.2014, 7(2♂, 5♀); Mainpur, 25.vi.2014, 4(2♂, 2♀) coll. S.K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Genus *Gastrimargus* Saussure, 1884**17. *Gastrimargus africanus africanus* (Saussure, 1888)**

1888. *Oedaleus (Gastrimargus) marmoratus* var. *africana* Saussure, *Mem. Soc. Phys. Hist. nat. Geneve*, 30 (1) : 39.

2006. *Gastrimargus africanus africanus*, Shishodia, *Bionotes*, 8 (1): 11.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Torenga Rest House, 23.viii.2013, 10(3♂, 7♀); Jhariya bahara, 23.vi.2014, 7(3♂, 4♀); Basin river, 24.vi.2014, 11 (5♂, 6♀); Mainpur, 25.vi.2014, 9(2♂, 7♀); Udanti village, 27.vi.2014, 9(2♂, 7♀); Ganga Jamuna village, 28.vi.2014, 5(3♂, 2♀); Gwarund, 29.vi.2014, 4(2♂, 2♀); Baji Nala, 30.vi.2014, 7(1♂, 6♀) coll. S.K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Genus *Dittopternis* Saussure, 1884

18. *Dittopternis venusta* (Walker, 1870)

1870. *Oedipoda venusta* Walker, *Cat. Derm. Salt. Brit. Mus.*, **4**: 736.

2000. *Dittopternis venusta*, Shishodia, *Rec. zool. Surv. India*, **98** (1): 50.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jhariya bahara, 23.vi.2014, 7(3♂,4♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Genus *Oedaleus* Fieber, 1853

19. *Oedaleus abruptus* (Thunberg, 1815)

1815. *Gryllus abruptus* Thunberg, *Mem. Acad. Sci. St. Petersburg*, **5** : 233.

1990. *Oedaleus abruptus*, Shishodia & Mandal, *Rec. zool. Surv. India*, **87**(1) : 70.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jugad, 17.x.2011, 2(♂,♀); Mainpur, 25.vi.2014, 4(2♂,2♀); Ganga Jamuna village, 28.vi.2014, 2(♂) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Genus *Trilophidia* Stål, 1873

20. *Trilophidia annulata* (Thunberg, 1815)

1815. *Gryllus annulatus* Thunberg, *Mem. Acad. Sci. St. Petersburg*, **5** : 234.

1990. *Trilophidia annulata*, Shishodia & Mandal *Rec. zool. Surv. India*, **87** (1): 70.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Kodhomali Forest, 8.x.2011, 1(♀); Jungad, 17.x.2011, 10 (4♂,6♀); Torenga Rest House, 23.viii.2013, 7(3♂,4♀); 1.vii.2014, 6(3♂,3♀); Jhariya bahara, 23.vi.2014, 4(3♂,1♀); Basin river, 24.vi.2014, 6 (2♂,4♀); Mainpur, 25.vi.2014, 4(2♂,2♀); Udanti village, 27.vi.2014, 9(5♂,4♀); Ganga Jamuna village, 28.vi.2014, 8(5♂,3♀); Gwarund, 29.vi.2014, 4(2♂,2♀); Baji Nala, 30.vi.2014, 7(2♂,5♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Genus *Morphacris* Walker, 1870

21. *Morphacris fasciata* (Thunberg, 1815)

1815. *Gryllus fasciatus* Thunberg, *Mem. Acad. Sci. St. Petersburg*, **5**: 230.

2000. *Morphacris fasciata sulcata*, Shishodia, *Rec. zool. Surv. India*, **98** (1): 50.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Mainpur, 25.vi.2014, (1♂); Ganga Jamuna, 28.vi.2014, 1(♂); Jugad, 29.vi.2014, 1(♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband and Raipur.

Genus *Heteropternis* Stål, 1873

22. *Heteropternis respondens* (Walker, 1859)

1859. *Acrydium respondens* Walker, *Ann. Mag. nat. Hist.*, **4** (3): 223.

2006. *Heteropternis respondens*, Shishodia & Dey, *State Fauna Series*, **12**: Fauna of Nagaland, Zool. Surv. India, : 100.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Ganga jamuna village, 28.vi.2014, 1(♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bilaspur, Gariyaband and Raipur.

Subfamily Oxyinae

Genus *Oxya* Serville, 183123. *Oxya hyla hyla* Serville, 1831

1831. *Oxya hyla* Serville, *Ann. Sci. nat. (Zool.)*, Paris, 22 : 287.

2010. *Oxya hyla hyla*, Shishodia *et al. Rec. zool. Surv. India*, Occ. Paper No. 314 : 109.

Material examined: Chhattisgarh; Gariyaband, Udanti WLS, Jugad, 17.x.2011, 3(1♂, 2♀); Kodhomali Forest, 8.x.2011, 5(♀); Torenga, 23.viii.2013, 1(♀); 1.vii.2014, 4(1♂, 3♀); Jhariya bahara, 23.vi.2014, 4(3♂, 1♀); Basin river, 24.vi.2014, 6 (2♂, 4♀); Mainpur, 25.vi.2014, 4(2♂, 2♀); Udanti village, 27.vi.2014, 6(2♂, 4♀); Gwarund, 29.vi.2014, 5(2♂, 3♀); Baji Nala, 30.vi.2014, 6(2♂, 3♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh: Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Subfamily Spathosterninae

Genus *Spathosternum* Krauss, 187724. *Spathosternum prasiniferum prasiniferum* (Walker, 1871)

1871. *Heteracris* (?) *prasiniferum* Walker, *Cat. Derm. Salt. Brit. Mus.*, 5: 65.

2010. *Spathosternum prasiniferum prasiniferum*, Shishodia *et al., Rec. zool. Surv. India*, Occ. Paper No., 314 : 114.

Material examined: Chhattisgarh; Gariyaband, Udanti WLS, Kodhomali Forest, 8.x.2011, 2(♀); Jugad, 17.x.2011, 9(5♂, 4♀); Torenga, 23.viii.2013, 3(♀); 1.vii.2014, 7(2♂, 5♀); Jhariya bahara, 23.vi.2014, 4(3♂, 1♀); Basin river, 24.vi.2014, 6 (2♂, 4♀); Mainpur, 25.vi.2014, 5(2♂, 3♀); Ganga Jamuna village, 28.vi.2014, 9(2♂, 7♀); Gwarund, 29.vi.2014, 10 (4♂, 6♀); Baji Nala, 30.vi.2014, 8(2♂, 6♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh: Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Superfamily PYRGOMORPHOIDEA

Family PYRGOMORPHIDAE

Subfamily Pyrgomorphinae

Genus *Atractomorpha* Saussure, 186225. *Atractomorpha crenulata* (Fabricius, 1793)

1793. *Truxalis crenulatus* Fabricius, *Ent. Syst. II* : 28.

1914. *Atractomorpha crenulata*, Kirby, *Fauna Brit. India, Orth.*, : 181.

Material examined: Chhattisgarh; Gariyaband, Udanti WLS, Kodhomali Forest, 8.x.2011, 6(4♂, 2♀); Jugad, 17.x.2011, 6(♂); 26.vi.2014, 5(2♂, 3♀); Torenga, 23.viii.2013, 1(♀); Jhariya bahara, 23.vi.2014, 4(3♂, 1♀); Basin river, 24.vi.2014, 6 (2♂, 4♀); Udanti village, 27.vi.2014, 6(2♂, 4♀); Baji Nala, 30.vi.2014, 6(2♂, 3♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh: Bastar, Bilaspur, Gariyaband and Kabirdham.

Genus *Chrotogonus* Serville, 1838**Subgenus *Chrotogonus* Serville, 1838****26. *Chrotogonus (Chrotogonus) trachypterus trachypterus* (Blanchard, 1836)**

1836. *Ommexecha trachypterus* Blanchard, *Ann. Soc. ent. France*, 5 : 618.

2010. *Chrotogonus (Chrotogonus) trachypterus trachypterus*, Shishodia et al., *Rec. zool. Surv. India*, Occ. Paper No. 314 : 134.

Material examined: Chhattisgarh; Gariyaband, Udanti WLS, Kodhomali Forest, 8.x.2011, 1(♀); Jugad 17.x.2011, 10(♀); 26.vi.2014, 8(6♀, 2♂); Torenga Rest House, 23.viii.2013, 6(2♂, 4♀); Ganga Jamuna village, 28.vi.2014, 8(2♂, 6♀); Gwarund, 29.vi.2014, 6(2♂, 4♀); Baji Nala, 30.vi.2014, 6(2♂, 3♀); Udanti village, 27.vi.2014, 6(2♂, 4♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh: Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Genus *Poeciloceris* Serville, 1831**27. *Poeciloceris pictus* (Fabricius, 1775)**

1775. *Gryllus pictus* Fabricius, *Systema entomologica sistens Insectorum classes, ordines, genera, species, adjectis synonymis, locies. Flensburg et Leipzig*,: 289.

2000. *Poeciloceris pictus*, Shishodia, *Rec. zool. Surv. India*, 98 (1): 41.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jugad 17.x.2011, 2(♂, ♀) coll. S.K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Gariyaband, Kabirdham and Raipur.

Superfamily TETRIGOIDEA**Family TETRIGIDAE****Subfamily Scelimeninae****Genus *Eucriotettix* Hebard, 1929****28. *Eucriotettix* sp.**

1929. *Eucriotettix* Hebard, *Revue Suisse Zool.*, 36 : 537.

1991. *Eucriotettix*: Shishodia, *Rec. Zool. Surv. India*, Occ. Pap. No.140: 38.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Torenga Rest House, 23.viii.2013, 2(1♂, 1♀); Udanti village, 27.vi.2014, 3(1♂, 2♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bilaspur, Gariyaband and Raipur.

Genus *Euscelimena* Günther, 1938**29. *Euscelimena harpago* (Serville, 1839)**

1839. *Tetrix harpago* Serville, *Orthopteres*,: 763.

2005. *Euscelimena harpago*, Kulkarni & Shishodia, *Conservation Area Series*, 24: *Fauna of Melghat Tiger Reserve*, Zool. Surv. India,: 326.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Mainpur, 25.vi.2014, 4(2♂, 2♀); Ganga Jamuna village, 28.vi.2014, 6(2♂, 4♀); Gwarund, 29.vi.2014, 5(2♂, 3♀); Baji Nala, 30.vi.2014, 6(2♂, 3♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Subfamily Tetriginae

Genus *Ergatettix* Kirby, 1914

30. *Ergatettix dorsiferus* (Walker, 1871)

1871. *Tettix dorsifera* Walker, *Cat. Derm. Salt. Brit. Mus.*, 5: 825.

2010. *Ergatettix dorsiferus*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314 : 165.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Torenga RH, 23.viii.2013, 3(1♂, 2♀); Mainpur, 25.vi.2014, 4(2♂, 2♀); Udanti village, 27.vi.2014, 6(2♂, 4♀); Ganga Jamuna village, 28.vi.2014, 10(4♂, 6♀); Gwarund, 29.vi.2014, 5(2♂, 3♀); Baji Nala, 30.vi.2014, 6(2♂, 3♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Genus *Hedotettix* Bolivar, 1887

31. *Hedotettix attenuatus* Hancock, 1904

1904. *Hedotettix attenuatus* Hancock, *Spolia zeylan*, 2 : 151.

2010. *Hedotettix attenuatus*, Shishodia *et al.* *Rec. zool. Surv. India*, Occ. Paper No. 314: 167.

Material examined : Chhattisgarh, Gariyaband, Udanti village, 27.vi.2014, 6(2♂, 4♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Gariyaband and Raipur.

32. *Hedotettix gracilis* (Haan, 1843)

1842. *Acridium gracile* Haan, *Gesch. Ned. Overszee*. Bezitt, 2 : 169.

2010. *Hedotettix gracilis*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314 : 169.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Kodhomali Forest, 8.x.2011, 6(4♂, 2♀); Jugad, 17.x.2011, 6(♂); 26.vi.2014, 6(3♂, 3♀); Jhariya bahara, 23.vi.2014, 6(3♂, 3♀); Basin river, 24.vi.2014, 6(2♂, 4♀); Baji Nala, 30.vi.2014, 5(2♂, 3♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband and Raipur.

Superfamily TRIDACTYLOIDEA

Family TRIDACTYLIDAE

Subfamily Tridactylinae

Genus *Tridactylus* Olivier, 1789

33. *Tridactylus thoracicus* Guérin, 1844

1844. *Tridactylus thoracicus* Guérin, *Iconogr. R. Anim., Ins.*, : 336.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jhariya bhara, 23.vi.2014, 2(♂, ♀); Basin river, 24.vi.2014, 4(2♂, 2♀); Gwarund, 29.vi.2014, 5(2♂, 3♀); Baji Nala, 30.vi.2014, 3(1♂, 2♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bilaspur, Gariyaband, Kabirdham and Raipur.

SUBORDER ENSIFERA

Superfamily GRYLLOIDEA

Family GRYLLIDAE

Subfamily Gryllinae

Genus *Gryllodes* Saussure, 1874

34. *Gryllodes sigillatus* (Walker, 1869)

1869. *Gryllus sigillatus* Walker, *Cat. Derm. Salt. Brit. Mus.*, : 46.

2000. *Gryllodes sigillatus*, Shishodia, *Rec. zool. Surv. India*. 98 (1) : 67.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Baji Nala, 30.vi.2014, 3(1♂, 2♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Gariyaband, Kabirdham and Raipur.

Genus *Gryllus* Linnaeus, 1758

Subgenus *Gryllus* Linnaeus, 1758

35. *Gryllus (Gryllus) bimaculatus* De Geer, 1773

1773. *Gryllus bimaculatus* De Geer, *Mem. Ins.*, 3 : 521.

2010. *Gryllus (Gryllus) bimaculatus*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314 : 192.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Torenga Rest House, 23.viii.2013, 1(♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Genus *Modicogryllus* Chopard, 1961

Subgenus *Modicogryllus* Chopard, 1961

36. *Modicogryllus (Modicogryllus) confirmatus* (Walker, 1859)

1859. *Acheta confirmata* Walker, *Ann. Mag. nat. Hist.*, 4 (3): 221.

2010. *Modicogryllus (Modicogryllus) confirmatus*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314 : 220.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Torenga Rest House, 23.viii.2013, 5(♀); Jhariya bahara, 23.vi.2014, 3(1♂, 2♀); Basin river, 24.vi.2014, 2(♂, ♀); Mainpur, 25.vi.2014, 4(2♂, 2♀); Ganga Jamuna village, 28.vi.2014, 3(1♂, 2♀); Gwarund, 29.vi.2014, 2(2♀); Baji Nala, 30.vi.2014, 6(2♂, 3♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Genus *Phonarellus* Gorochov, 1983

Subgenus *Phonarellus* Gorochov, 1983

37. *Phonarellus (Phonarellus) minor* Chopard, 1959

1959. *Gymnogryllus minor* Chopard, *Stuttg. Beitr. z. Naturk.*: 1.

1967. *Gymnogryllus minor* Chopard, *Orth. Cat.*, 10: 19.

2010. *Phonarellus (Phonarellus) minor*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314 : 202.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jugad, 29.vi.2014, 2(♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband and Raipur.

Genus *Teleogryllus* Chopard, 1961

Subgenus *Macroteleogryllus* Gorochov, 1988

38. *Teleogryllus (Macroteleogryllus) mitratus* (Burmeister, 1838)

1838. *Gryllus mitratus* Burmeister, *Handb. Ent.*, 2 : 34.

2010. *Teleogryllus (Macroteleogryllus) mitratus*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314 : 209

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Udanti village, 27.vi.2014, 3(1♂, 2♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bilaspur and Gariyaband.

Subgenus *Brachyteleogryllus* Gorochov, 1988

39. *Teleogryllus (Brachyteleogryllus) occipitalis occipitalis* (Serville, 1838)

1838. *Gryllus occipitalis* Serville, *Ins. Orth.*: 339.

2010. *Teleogryllus (Brachyteleogryllus) occipitalis*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314 : 208.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jhariya bahara, 23.vi.2014, 4(3♂,1♀) coll. S.K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Gariyaband, Kabirdham and Raipur.

Subfamily Nemobiinae

Genus *Dianemobius* Vickery, 1973

40. *Dianemobius fascipes* (Walker, 1869)

1869. *Eneoptera fascipes* Walker, *Cat. Derm. Salt. Brit. Mus.*, : 67.

2010. *Dianemobius fascipes*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314: 240.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Torenga Rest House, 23.viii.2013, 2(♀); Jhariya bahara, 23.vi.2014, 4(2♂,2♀); Basin river, 24.vi.2014, 2(♂,♀); Baji Nala, 30.vi.2014, 6(2♂,3♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar and Gariyaband.

Subfamily Oecanthinae

Genus *Oecanthus* Serville, 1831

41. *Oecanthus indicus* Saussure, 1878

1878. *Oecanthus indicus* Saussure, *Mem. Soc. Phys. Hist. nat. Geneve*, 25: 454.

2010. *Oecanthus indicus*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314: 247.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Torenga RH, 23.viii.2013, 1(♀) coll. S.K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband and Raipur.

Family TRIGONIDIIDAE

Genus *Homoeoxipha* Saussure, 1874

42. *Homoeoxipha lycoides* (Walker, 1869)

1869. *Phyllopalpus lycoides* Walker, *Cat. Derm. Salt. Brit. Mus.*,: 71.

2000. *Homoeoxipha lycoides*, Shishodia, *Rec. zool. Surv. India*, 98 (1): 73.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Kulhadi Ghat, 28.vi.2014, 2(♂) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar and Gariyaband.

Genus *Trigonidium* Rambur, 1838

Subgenus *Trigonidium* Rambur, 1839

43. *Trigonidium (Trigonidium) cicindeloides* Rambur, 1839

1839. *Trigonidium cicindeloides* Rambur, *Faune Andal*, 2 : 39.

2010. *Trigonidium (Trigonidium) cicindeloides*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314 : 258.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jhariya bahara, 23.vi.2014, 3(1♂,2♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar and Gariyaband.

Family GRYLLOTALPIDAE**Genus Gryllotalpa Latreille, 1802****44. Gryllotalpa africana Beauvois, 1805**

1805. *Gryllotalpa africana* Beauvois, *Ins. Afr. Amer.*, : 229.

2010. *Gryllotalpa africana*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314: 260.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Mainpur, 25.vi.2014, 1(♂); Ganga Jamuna village, 28.vi.2014, 2(♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Superfamily TETTIGONIOIDEA**Family TETTIGONIIDAE****Subfamily Conocephalinae****Genus Conocephalus Thunberg, 1815****Subgenus Anisoptera Latreille, 1829****45. Conocephalus (Anisoptera) maculatus (Le Guillou, 1841)**

1841. *Xiphidion maculatum* Le Guillou, *Revue Zool.*, 4 : 294.

2010. *Conocephalus (Anisoptera) maculatus*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314 : 284.

Material examined: Chhattisgarh; Gariyaband, Udanti WLS, Jugad, 17.x.2011, 1(♂); Mainpur, 25.vi.2014, 4(2♂, 2♀); Ganga Jamuna village, 28.vi.2014, 4(2♂, 2♀); Gwarund, 29.vi.2014, 5(2♂, 3♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh: Bastar, Bilaspur, Gariyaband, Kabirdham and Raipur.

Subfamily Phaneropterinae**Genus Elimaea Stål, 1874****Subgenus Elimaea Stål, 1874****46. Elimaea (Elimaea) securigera Brunner von wattenwyl, 1878**

1878. *Elimaea (Elimaea) securigera* Brunner von Wattenwyl, *Monographie der Phaneropteriden* : 93.

2010. *Elimaea (Elimaea) securigera*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No. 314 : 306.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Torenga, 23.viii.2013, 1(♂); Mainpur, 25.vi.2014, 2(♂, ♀) coll. S.K. Gupta & party.

Distribution in Chhattisgarh : Bilaspur, Gariyaband, Kabirdham and Raipur.

Genus Letana Walker, 1869**47. Letana intermedia Ingrisch, 1990**

1990. *Letana intermedia* Ingrisch, *Entomologica Scandinavica*, 21(3): 260.

2005. *Letana intermedia*, Kulkarni & Shishodia, *Conservation Area Series*, 24: *Fauna of Melghat Tiger Reserve*, Zool. Surv. India, : 321.

Material examined: Chhattisgarh; Gariyaband, Udanti WLS, Torenga Rest House, 26.vi.2014, 1(♀); Ganga Jamuna village, 28.vi.2014, 4(1♂, 3♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh: Bilaspur, Gariyaband, Kabirdham and Raipur.

Subfamily Hexacentrinae**Genus Hexacentrus Serville, 1831****48. Hexacentrus unicolor Serville, 1831**

1831. *Hexacentrus unicolor* Serville, *Ann. Sci. nat. (Zool.)*, Paris, 22 : 146.

2000. *Hexacentrus unicolor* Shishodia, *Rec. zool. Surv. India*. **98** (1) : 13.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Torenga, 23.viii.2013, 1(♂); coll. S.K. Gupta & party.

Distribution in Chhattisgarh : Gariyaband, Kabirdham and Raipur.

Subfamily Mecopodinae

Genus *Mecopoda* Serville, 1831

49. *Mecopoda elongata elongata* (Linnaeus, 1758)

1758. *Gryllus* / *Tettigonia elongata* Linnaeus, *Systema Naturae per Regna Tria naturae*, (10th ed.) : 429.

1993. *Mecopoda elongata*, Barman, *State Fauna Series 3: Fauna of West Bengal*, Zool. Surv. India, (4): 363.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Torenga, 23.viii.2013, 1(♂) coll. S.K. Gupta & party.

Distribution in Chhattisgarh : Gariyaband, Kabirdham and Raipur.

Subfamily Pseudophyllinae

Genus *Sathrophyllia* Stål, 1874

50. *Sathrophyllia rugosa* (Linnaeus, 1758)

1758. *Gryllus* (*Tettigonia*) *rugosa* Linnaeus, *Systema Naturae per Regna Tria naturae*, (10th ed.) : 430.

1906. *Sathrophyllia rugosa*, Kirby, *Syn. Cata. Orth.*,: 306.

2010. *Sathrophyllia rugosa*, Shishodia *et al.*, *Rec. zool. Surv. India*, Occ. Paper No., **314**: 299.

Material examined : Chhattisgarh; Gariyaband, Udanti WLS, Jugad, 29.vi.2014, 1(♀) coll. S. K. Gupta & party.

Distribution in Chhattisgarh : Bilaspur, Gariyaband, Kabirdham and Raipur.

Abbreviation: WLS: Wildlife Sanctuary; RH: Rest House.

Summary : A total of 50 species and subspecies under 45 genera belonging 8 families of Orthopteran fauna have been reported from Udanti Wildlife Sanctuary, Gariyaband, Chhattisgarh.

ACKNOWLEDGEMENT

The first author is grateful to Dr. Kailash Chandra, Director, Zoological Survey of India, Kolkata, for providing necessary facilities and encouragement. Thanks are also due to CAMPA, (Compensatory Afforestation Fund Management and Planning Authority) for funding the project. Thanks are also due to Chhattisgarh Forest Department for providing necessary permission and support to carry out the present work.

REFERENCES

- DWIVEDI, K.P. 1978. Energy flow of the grasshopper *Conocephalus pallidus* Redt. (Tettigonidae Orthoptera) population in Mohan-Bhata grassland, M. P. *Indian J. Eco.* **5** (2) : 222-228.
- DWIVEDI, K.P. 1990. Bioenergetics of the grasshopper *Catantops pinguis innotabilis* Walker Acrididae: Orthoptera) population in Mohanbhata grassland. *Environment and Ecology*. **8**(4) : 1095-1100.
- Dwivedi, K.P. & Chattoraj, A.N. 1985. Energy budget of grasshoppers *Acrida exaltata* population in MohanBhata grassland, (Bilaspur). *Environment & Ecology*. **3**(1) : 1-5.

- CHANDRA, K. & GUPTA, S.K. 2011. Insecta : Orthoptera. Editor : Director, Zool. Surv. India, *Fauna of Madhya Pradesh (including Chhattisgarh): State Fauna Series 15(Part)* : 105-150.
- CHANDRA, K., GUPTA, S.K. & SHISHODIA, M. S. 2007. A checklist of Orthoptera of Madhya Pradesh and Chhattisgarh. *Zoos' Print Journal*. **22**(5) : 2683-2687.
- GUPTA, S.K. & CHANDRA, K. 2010. Diversity of Orthoptera in Achanakmar Wildlife Sanctuary, Chhattisgarh, India. *Indian J. Trop. Biodiv.* **18**(2) : 211-217.
- GUPTA, S.K. & CHANDRA, K. 2013. On a Collection of Orthoptera (Insecta) from Barnawapara Wildlife Sanctuary, Chhattisgarh, India. *Uttar Pradesh J. Zool.* **33**(3) : 221-248.
- GUPTA, S.K. & SHISHODIA, M.S. 2014. Insecta : Orthoptera. *Fauna of Achanakmar Amarkantak Biosphere Reserve, Conservation Area Series* (Zool. Surv. India), **49** : 27-82.
- GUPTA, S.K., DUBE, K.K. & CHANDRA, K. 2008. On a collection of Orthoptera from Achanakmar Wildlife Sanctuary, Chhattisgarh. *Natl. J. Life Sci.* **5**(1) : 117-126.
- SHISHODIA, M.S. 2000. Short and long horned grasshoppers and crickets of Bastar district, Chhattisgarh, India. *Rec. zool. Surv. India*, **98**(1) : 27-80.
- SHISHODIA, M S., CHANDRA, KAILASH & GUPTA, SUNIL KUMAR 2010. An Annotated checklist of Orthoptera (Insecta) from India. *Rec. zool. Surv. India*, Occ. Paper No. **314**.: 1-366. (Published by the Director, Zool. Surv. India, Kolkata)
- Sinha, K.M. & Agrawal, S.M. 1973. Diagnosis of a cave-gryllid *Kempiella shankari* n. sp. (Orthoptera : Phalangopsidae). *Bull. Ent.* **14** : 97-100.

(Manuscript Received : February 2016)