



On a collection of Orthoptera fauna from Veerangana Durgavati Wildlife Sanctuary, Madhya Pradesh, India

Kailash Chandra and Sunil Kumar Gupta
Zoological Survey of India, Jabalpur (M.P.)

ABSTRACT

The paper deals with the collection of Orthoptera of Veerangana Durgavati Wildlife Sanctuary, Madhya Pradesh, which includes the study of 18 species pertaining to 18 genera under 6 families.

Keywords: Orthoptera, Veerangana Durgavati Wildlife Sanctuary, Madhya Pradesh

INTRODUCTION

Veerangana Durgavati Wildlife Sanctuary (VDWLS) is situated in Damoh district of Madhya Pradesh. The area of the sanctuary is 24 sq. km., which lies between latitudes 23° 30' to 23° 35' N and longitudes 79° 40' to 79° 50' E. The area is situated on both sides of Jabalpur-Damoh State highway. The Sanctuary has a variety of natural assets and wonderful settings of Archeological monuments of Singoragarh. The vegetation of the sanctuary area is mainly tropical mixed dry deciduous forest. The most common species are Bija (*Pterocarpus marsupium*), Saja (*Terminalia alata*), Tendu (*Pterocarpus marsupium*) Dhaora (*Anogeisus latifolia*), Mahua (*Madhuca indica*), Palas (*Butea monosperma*) and Lendia (*Lagerstroemia parviflora*).

A stray account of Orthoptera fauna of Madhya Pradesh has been done by Kirby (1914), Hancock (1915), Chopard (1969), Tandon *et al.* (1976, 1995), Roonwal (1981), Shishodia (1988, 1991, 1999, 2006), Chandra (2003), Joshi *et al.* (2004), Gupta (2008). Recently, Chandra *et al.* (2007) reported 139 species of Orthoptera from Madhya Pradesh and Chhattisgarh, of which 94 species are found in Madhya Pradesh.

During the recent survey in 2009, total 18 species pertaining to 18 genera under 6 families viz. Tettigoniidae (03), Gryllidae (01), Trigonidiidae (01), Acrididae (11), Pyrgomorphidae (01) and Tridactylidae (01) were collected from different localities of

Veerangana Durgavati Wildlife Sanctuary by the survey team of Zoological Survey of India, Jabalpur. The systematic account, details of material collected, and their geographic distribution are also incorporated.

SYSTEMATIC ACCOUNT

Order : Orthoptera

Suborder : Ensifera

Superfamily : Tettigonoidea

Family : Tettigoniidae

Subfamily : Phaneropterinae

Genus : *Letana* Walker, 1869

***Letana intermedia* Ingrisch, 1990**

1990. *Letana intermedia* Ingrisch, *Ent. Scand.*, **21**(3): 260.

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

Material examined : Damoh, Veerangana Durgavati Wildlife Sanctuary (VDWLS); Dani Tal, 20.i.09 (3♂), coll. J. Thilak.

Distribution : India: Chhattisgarh, Madhya Pradesh (Damoh), Delhi and Maharashtra.

Genus : *Phanoptera* Serville, 1831

***Phanoptera* sp.**

1831. *Phanoptera* Serville, *Ann. Sci. nat.*, **22** : 158.

1956. *Phaneroptera* : Ragge, *Proc. zool. Soc. Lond.*, **127** : 211.
2000d. *Phaneroptera*, Shishodia, *Rec. zool. Surv. India*, **98**(3) : 8.

Material examined : Damoh, VDWLS , Dani Tal, 01.ii.09 (2♂), coll. K. Chandra.

Distribution : India : Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Himachal Pradesh, Madhya Pradesh (Chhindwara, Damoh and Seoni), Sikkim, Tamil Nadu, Uttar Pradesh and West Bengal. *Elsewhere*: Africa, Australia, China, Europe, Indo-China, Malaysia, Myanmar, Solomon Islands, Sulawesi, Sumatra and Thailand.

Subfamily : Conocephalinae

Genus : Conocephalus Thunberg, 1815

***Conocephalus maculatus* (Le Guillou, 1841)**
1841. *Xiphidion maculatum* Le Guillou, *Revue. suisse Zool.*, **4** : 294.
1922. *Conocephalus (Xiphidion) maculatus* (Le Guillou), *Proc. Acad. Nat. Sci. Philad.*, **74** : 243.
1980. *Conocephalus maculatus*, Pitkin, *Bull. Br. Mus. nat. Hist. (Ent.)*, **41**(5) : 344.

Material examined : Damoh, VDWLS , Dani Tal, 20.i.09 (1♀); Bhaisa ghat, 21..i.09 (3♂, 1♀), coll. J. Thilak.

Distribution: India: Andaman & Nicobar Islands, Arunachal Pradesh, Chhattisgarh, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh (Chhindwara, Damoh and Seoni), Manipur, Mizoram, Orissa, Sikkim, Tripura, Tamil Nadu and West Bengal. *Elsewhere* : Africa, Australia, Hong-Kong, Indonesia, Java, New Guinea, Nepal, Papua, Philippines, Singapore and Sulawesi.

Superfamily : Grylloidea

Family : Gryllidae

Subfamily : Gryllinae

Genus : Teleogryllus Chopard, 1961

***Teleogryllus mitratus* (Burmeister, 1838)**
1838. *Gryllus mitratus* Burmeister, *Handb. Ent.*, **2** : 734.

1964. *Teleogryllus mitratus* : Randell, *Can. Ent.*, **96** (12) : 1596.

1993. *Teleogryllus mitratus*, Vasanth, *Rec. zool. Surv. India*, Occ. Pap. No. **132** : 77.

Material examined : Damoh, VDWLS , Dani Tal, 20.i.09 (2♀), coll. J. Thilak.

Distribution : India : Andaman & Nicobar Islands, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Karnataka, Kerala, Madhya Pradesh (Chhindwara, Damoh, Mandla, and Seoni), Manipur, Meghalaya, Orissa, Sikkim, Tamil Nadu, Uttar Pradesh and West Bengal. *Elsewhere* : Bhutan, Borneo, China, Indochina, Indonesia, Japan, Malaya Archipelago, Malaysia, Myanmar, Nepal, Pinang, Philippines, Singapore, Sri Lanka, Tenasserin, Thailand, Tibet and Vietnam.

Family : Trigonidiidae

Genus : Trigonidium Rambur, 1839

***Trigonidium* sp.**

1839. *Trigonidium Rambur*, *Faune Andal.*, **2** : 31.
1968. *Trigonidium*, Chopard, *Orth. Cat.*, **12** : 340.
1969. *Trigonidium*, Chopard, *Fauna of India, Orth.*, **2 Grylloidea**, : 303.

Material examined : Damoh, Veerangana Durgavati WLS; Dani Tal, 20.i.09 (1ex.), coll. J. Thilak.

Distribution : India : Andaman & Nicobar Islands, Arunachal Pradesh, Assam, Bihar, Chandigarh, Chhattisgarh, Delhi, Goa, Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh (Chhindwara, Damoh and Seoni), Manipur, Meghalaya, Mizoram, Orissa, Tamil Nadu, Tripura and West Bengal. *Elsewhere*: Africa, Australia, Myanmar, Madagascar, Malaysia, Nepal, New Zealand, South Europe and Sri Lanka.

Suborder : Caelifera

Superfamily : Acridoidea

Family : Acrididae

Subfamily : Gomphocerinae

Genus : Dnopherula Karsch, 1896

Dnopherula (Aulacobothrus) sp.

1896. *Dnopherula* Karsch, *Ent. Zeit. Stettin*.57: 259.

1902. *Aulacobothrus* Bolivar, *Annl. Soc. ent. Fr.*,70 : 57.

1971. *Dnopherula (Aulacobothrus)*: Jago, *Proc. Acad. Sci. nat. Philad.*, 123(8) : 245-246.

Material examined : Damoh, VDWLS , Bhaisa ghat, 21.i.09 (1♀) coll. J. Thilak; 01.ii.09 (1♂, 3♀), coll. K. Chandra.

Distribution : India : Assam, Bihar, Chhattisgarh, Delhi, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh (Chhindwara, Damoh, Mandla, Sahdol and Seoni), Maharashtra, Meghalaya, Orissa, Sikkim, Tamil Nadu, Uttar Pradesh and West Bengal. Elsewhere : Indonesia, Nepal, Sri Lanka and South America.

Subfamily Acridinae

Genus *Acrida* Linnaeus, 1758

***Acrida exaltata* (Walker, 1859)**

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

1914. *Acrida exaltata*, Kirby, *Fauna Brit. India*, *Orth.* : 99.

1954. *Acrida exaltata*, Dirsh, *Bull. Soc. Found. Ent.*, 38 : 149.

2000. *Acrida exaltata*, Shishodia, *Rec. zool. Surv. India*, 98(1) : 46.

Material examined : Damoh, VDWLS ; Dani Tal, 20.i.09 (1♀), coll. J. Thilak.

Distribution : India : Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh (Chhindwara, Damoh, Mandla, Sahdol, Seoni and Sidhi), Maharashtra, Manipur, Meghalaya, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal. Elsewhere : Afghanistan, Bangladesh, Iran, Nepal, Pakistan, Saudi Arabia, South East China, South East Tibet, Sri Lanka, Yemen and West Eden.

Subfamily Oedipodinae

Genus *Aiolopus* Fieber, 1853

***Aiolopus thalassinus tamulus* (Fabricius, 1798)**

1798. *Gryllus tamulus* Fabricius, *Ent. Sys. Suppl.*, : 195.

1838. *Gomphocerus tricoloripes* Burmeister, *Handb. Ent.*, 2 : 649.

1888. *Epacromia rufostriatus* Kirby, *Proc. zool. Soc. Lond.*, : 550.

1914. *Aeolopus tamulus*, Kirby, *Fauna Brit. India*, *Orth.*,:121.

1968. *Aiolopus thalassinus tamulus* : Hollis, *Bull. Br. Mus. nat. Hist. (Ent.)*, 22(7): 347-350.

Material examined : Damoh, VDWLS , Dani Tal, 20.i.09 (1♂,1♀), coll. J. Thilak.

Distribution : India : Andaman & Nicobar Islands, Bihar, Chhattisgarh, Delhi, Haryana, Himachal Pradesh, Karnataka, Madhya Pradesh (Chhindwara, Damoh, Mandla, Rewa and Seoni), Maharashtra, Manipur, Meghalaya, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal. Elsewhere : Australia, Bangladesh, Borneo, Brunei, China, Hainan, Hong Kong, Java, Lombok, Malaya, Myanmar, New Guinea, Pakistan, Philippines, Papua, Singapore, Sri Lanka, Sulawesi, Sumatra, Taiwan, Timor and Thailand.

Genus *Gastrimargus* Saussure, 1884

***Gastrimargus africanus africanus* (Saussure, 1888)**

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

1910. *Gastrimargus africanus* : Kirby, *Syn. Cat. Orth.*, 3 : 227.

1928. *Gastrimargus africanus* var. *zebrata* Sjostedt, *Svenska Akad. Handl.*, 6 (3) No. 1 : 41.

1982. *Gastrimargus africanus africanus*, Ritchie, *Bull. Br. Mus. nat. Hist. (Ent.)*, 44 (4): 248.

Material examined : Damoh, VDWLS, Bhaisa ghat, 21.i.09 (1♂,3♀), coll. J. Thilak.

Distribution : India : Andhra Pradesh, Arunachal Pradesh, Assam, Bihar,

Chhattisgarh, Delhi, Goa, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh (Chhindwara, Damoh, Mandla, Rewa, Sahdol and Seoni), Maharashtra, Orissa, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh and West Bengal. *Elsewhere*: Africa, Myanmar, Nepal, Pakistan, Saudi Arabia, Sri Lanka, Thailand, Tibet and Yemen.

Subfamily Hemiaceridinae

Genus *Spathosternum* Krauss, 1877

Spathosternum prasiniferum prasiniferum (Walker, 1871)

1871. *Heteracris prasinifera* Walker, *Cat. Derm. Salt. Brit. Mus.*, **5** : 65.

1914. *Spathosternum prasiniferum* : Kirby, *Fauna Brit. India, Orth.*, : 208.

1936. *Spathosternum prasiniferum prasiniferum* : Tinkham, *Lingn. Sci. J.*, **15** : 51.

Material examined : Damoh, VDWS ; Dani Tal, 20.i.09 (2♂) coll. J. Thilak.

Distribution : India: Andaman & Nicobar Islands, Andhra Pradesh, Arunachal Pradesh, Bihar, Chhattisgarh, Goa, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh (Chhindwara, Damoh, Mandla, Rewa, Sahdol, Seoni and Sidhi), Maharashtra, Meghalaya, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal. *Elsewhere*: Bangladesh, China, Hainan, Myanmar, Nepal, Sri Lanka, Thailand, Vietnam and West Malaysia.

Subfamily Coptacridinae

Genus *Eucoptacra* Bolivar, 1902

Eucoptacra saturata (Walker, 1870)

1870. *Acridium saturatum* Walker, *Cat. Derm. Salt. Brit. Mus.*, **4** : 628.

1921b. *Eucoptacra saturata* : Uvarov, *Ann. Mag. nat. Hist.*, **7** (9) : 503.

1976. *Eucoptacra saturata*, Tandon, *Rec. zool. Surv. India*, Occ. Pap. No. **3** : 10.

Material examined : Damoh, VDWS, Bhaisa ghat, 01.ii.09 (3♀), coll. K. Chandra.

Distribution : India : Assam, Chhattisgarh, Himachal Pradesh, Maharashtra, Madhya

Pradesh (Chhindwara, Damoh and Seoni), Manipur, Meghalaya, Orissa, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal.

Subfamily Cyrtacanthacridinae

Genus *Pachyacris* Uvarov, 1923

Pachyacris vinosa (Walker, 1870)

1870. *Acridium vinosum* Walker, *Cat. Derm. Salt. Brit. Mus.*, **3** : 588.

1914. *Orthacanthacris vinosa*, Kirby, *Fauna Brit. India, Orth.*, : 228.

1923. *Pachyacris vinosa* : Uvarov, *Ann. Mag. nat. Hist.*, **11**(9) : 478.

Material examined : Damoh, VDWS, Bhaisa ghat, 01.i.09 (1♂, 2♀), coll. K. Chandra.

Distribution : India : Assam, Bihar, Chhattisgarh, Goa, Himachal Pradesh, Karnataka, Madhya Pradesh (Damoh, Hoshangabad and Panna), Maharashtra, Manipur, Meghalaya, Mizoram, Orissa, Tripura, Uttar Pradesh and West Bengal. *Elsewhere* : China, Myanmar, Nepal, Thailand and Tongking.

Genus *Cyrtacanthacris* Walker, 1870

Cyrtacanthacris tatarica (Linnaeus, 1758)

1758. *Gryllus locusta tataricus* Linnaeus, *Syst. Nat.* (10th ed.) : 432.

1923. *Cyrtacanthacris tatarica* : Uvarov, *Bull. Ent. Res.*, **14** : 39.

1976. *Cyrtacanthacris tatarica*, Tandon, *Rec. zool. Surv. India*, Occ. Pap. No. **3** : 21.

Material examined : Damoh, VDWS, Bhaisa ghat, 01.i.09 (1♀), coll. K. Chandra.

Distribution : India : Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Delhi, Himachal Pradesh, Haryana, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh (Chhindwara, Damos, Mandla and Seoni), Orissa, Rajasthan, Uttar Pradesh and West Bengal. *Elsewhere*: Africa, Bangladesh, Hainan, Madagascar, Myanmar, Nepal, Philippines,

Pakistan, Red-Sea, Sahara, Saudi Arabia, Seychelles, Sri Lanka, Sumatra and Thailand.

Subfamily Eypreocnemidinae

Genus *Tylotropidius* Stål, 1873

***Tylotropidius varicornis* (Walker, 1870)**

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

1914. *Tylotropidius varicornis* : Kirby, *Fauna Brit. India, Orth.*, : 265.

1976. *Tylotropidius varicornis*, Tandon, *Rec. zool. Surv. India, Occ. Pap. No. 3* : 14.

Material examined : Damoh, VDWLS, Bhaisa ghat, 01.i.09 (2♂, 3♀), coll. K. Chandra.

Distribution : India : Andhra Pradesh, Chhattisgarh, Goa, Haryana, Himachal Pradesh, Karnataka, Madhya Pradesh (Damoh and Panna), Maharashtra, Meghalaya, Orissa, Rajasthan, Tamil Nadu, Madhya Pradesh, Uttar Pradesh and West Bengal. *Elsewhere*: Myanmar and Sri Lanka.

Subfamily Catantopinae

Genus *Xenocatantops* Dirsh, 1953

***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 : Damoh, VDWLS, Bhaisa ghat, 01.i.09 (3♂) coll. K. Chandra.

Distribution : India : Andaman and Nicobar Islands, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Himachal Pradesh, Kerala, Madhya Pradesh (Chhindwara, Damoh and Seoni), Maharashtra, Manipur, Meghalaya, Mizoram, Tamil Nadu, Uttar Pradesh and West Bengal. *Elsewhere* : Bangladesh, Borneo, Indo-China, Java, Malaya, Myanmar, New Guinea, Philippines, Sri Lanka, Sumatra, South Tibet, Thailand, Vietnam and Yunnan.

Genus *Catantops* Schaum, 1853

***Catantops pinguis innotabilis* (Walker, 1870)**

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

1902. *Catantops indicus* I. Bolivar, *Ann. Soc. ent. France*, **70** : 626.

1925. *Catantops innotabilis* Uvarov, *Orth. Acrid.*, :30.

1956. *Catantops pinguis innotabilis* : Dirsh, *Comp. Diam. Angola. Publ. Cult.*, **28** : 105.

Material examined : Damoh, VDWLS, Dani Tal, 20.i.09 (1♂); Bhaisa ghat, 21.i.09 (2♀) coll. J. Thilak; 01.i.09 (1♂, 2♀), coll. K. Chandra.

Distribution : India: Assam, Andhra Pradesh, Arunachal Pradesh, Bihar, Chhattisgarh, Delhi, Goa, Himachal Pradesh, Jammu & Kashmir, Kerala, Madhya Pradesh (Chhindwara, Damoh, Seoni and Sidhi), Maharashtra, Meghalaya, Orissa, Sikkim, Tamil Nadu, Uttar Pradesh and West Bengal. *Elsewhere* : Afganistan, Bangladesh, Borneo, Hong-Kong, Indo-China, Java, Japan, Kambodia, Korea, Malaysia, Malaya, Maldive Islands, Myanmar, New Guinea, Pakistan, Philippines, Sri Lanka, Sumatra, South Tibet, Thailand and Yunnan.

Family Pyrgomorphidae

Genus *Atractomorpha* Saussure, 1861

***Atractomorpha crenulata* (Fabricius, 1793)**

1793. *Truxalis crenulata* Fabricius, *Ent. Syst.*, **2** : 28.

1861. *Atractomorpha crenulata* : Saussure, *Annl. Soc. ent. Fr.*, **4** : 475.

Material examined : Damoh, VDWLS, Bhaisa ghat, 01.i.09 (1♀) coll. K. Chandra.

Distribution : India : Andaman & Nicobar Islands, Andhra Pradesh, Bihar, Chhattisgarh, Goa, Jammu & Kashmir, Madhya Pradesh (Chhindwara, Damoh, Mandla, Rewa, Sahdol, Seoni and Sidhi), Rajasthan, Tamil Nadu and West Bengal. *Elsewhere*: Bangladesh, Lower Myanmar, Malaysia, Sri Lanka, South Vietnam and Thailand.

Superfamily Tridactyloidea**Family Tridactylidae****Genus *Tridactylus* Olivier, 1789*****Tridactylus thoracicus* Guer, 1844**

1844. *Tridactylus thoracicus* Guer, *Icon. R. An.*, **3** : 336.

1925. *Tridactylus thoracicus* : Chopard, *Ann. Mag. nat. Hist.*, **15**(9) : 506.

1987. *Tridactylus thoracicus*, Shishodia & Tandon, *State Fauna Series 1: Fauna of Orissa*, Zool. Surv. India, (1) : 128.

Material examined : Damoh, VDWLS, Dani TAL, 20.i.09 (1♀), coll. J. Thilak.

Distribution : India : Bihar, Chhattisgarh, Goa, Himachal Pradesh, Madhya Pradesh (Damoh and Seoni), Orissa and West Bengal. *Elsewhere*: Java, Myanmar, Malay Archipelago, Nepal, Sri Lanka and Sumatra.

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- Tandon, S.K., Shishodia, M.S. and Dey, A. 1995. Insecta: Orthoptera. Fauna of Conservation areas Fauna of Kanha Tiger Reserve, *Zool. Surv. India*, **7**: 19-25.