

**ORTHOPTERA FAUNA OF PATALKOT CHHINDWARA,  
MADHYA PRADESH, INDIA**

M. S. SHISHODIA

*Zoological Survey of India, M-Block, New Alipore, Calcutta 700 053*

**INTRODUCTION**

Patalkot is situated about 75 kms. away from Chhindwara city of Madhya Pradesh, towards north-west. It is a long, wide and deep place, surrounded by very high hills. The average depth of Patalkot is about 360 m., and to reach at the bottom of this place, one has to walk down on 850 stairs by the help of branches of Mahua and Pálas trees. There are about 12 villages in Patalkot area, and one cave known as Raghu Raja Cave. Waterfall is situated nearby the cave, and its water fall from a height of about 20-30m. Nearly two-third of the total land of Patalkot is covered with forests of Bamboo, Mahua, Mango, Kusum, Tendu, Amla, Dhokara, Sarai, Jamun, Sal, Semar, Umar, many medicinal plants, and other thorny plants. A good type of white marble stone is found there.

The collection of Orthoptera is brought by the Survey parties of Zoological Survey of India, Jabalpur. This collection was done mostly by R. K. Singh, otherwise stated. There are 22 species under 20 genera and 8 families. All the species are new records for Patalkot, as well as to the District Chhindwara. However, 6 species marked with an asterisk (\*) are new records to Madhya Pradesh.

A list of all the localities which come under Patalkot are listed below with their code numbers; P1, Patalkot, 14.ix.1991 ; P2, Around Amamai, 12.x.1992 ; P3, Near origin place of Gayeni river, 13.x.1992 ; P4, Near cave of Raghu Raja, 14.x.1992 ; P5, Around Chitawalmata, 15.x.1992 ; P6, Near Dauri Patha village, 16.x.1992 ; P7, Around Lohasur, 17.x.1992 ; P8, Around Jeetham, Rater village, 18.x.1992 ; P9, Around Mahuakhera, Rater village, 19.x.1992 ; P10, Around Semar Jheel, Rater village, 20.x.1992.

**SYSTEMATIC ACCOUNT**

Order	Orthoptera
Superfamily	GRYLLOIDEA
Family	GRYLLIDAE
Subfamily	GRYLLINAE
Genus	<i>Grylodes</i> Saussure, 1874

### 1. *Grylloides sigillatus* (Walker)

1869. *Gryllus sigillatus* Walker, *Cat. Derm. Salt. Brit. Mus.*, 1 : 45.

1969. *Grylloides sigillatus* : Chopard, *Fauna of India*, 2 Grylloidea : 85.

*Material examined* : 1M, P2 ; 1F, P4.

*Distribution* : Cosmopolitan. In India, it is recorded from Andaman & Nicobar Islands, Andhra Pradesh, Assam, Bihar, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

*Remarks* : This species is very common in houses or bungalows, and produce sound of high velocity during night or when it is dark. Frontal rostrum of head very narrow, and with a wide yellow transverse band above and a narrow curved one between the ocelli ; tegmina in male reaching upto the middle of abdomen, truncated at apex, female tegmina short and widely separated at apex ; wings absent.

Genus *Plebeiogryllus* Chopard, 1964

### 2. *Plebeiogryllus guttiventris* (Walker)

1871. *Gryllus guttiventris* Walker, *Cat. Derm. Salt. Brit. Mus.*, 5 Suppl. : 6.

1964. *Plebeiogryllus guttiventris* : Randell, *Can. Ent.*, 96(12) : 1593.

*Material examined* : 1M, P8.

*Distribution* : India : Bihar, Goa, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Orissa, Pondicherry, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal ; Myanmar and Sri Lanka.

*Remarks* : A common species found in India. Head with light lines on the occiput ; posterior femora short and thick, feebly striated with brown ; lateral field of tegmina with close veins.

Subfamily NEMOBIINAE

Genus *Pteronemobius* Jacobson & Bianchi, 1905

### 3. *Pteronemobius fascipes* (Walker)

1869. *Eneoptera fascipes* Walker, *Cat. Derm. Salt. Brit. Mus.*, 1 : 67.

1969. *Pteronemobius fascipes* : Chopard, *Fauna of India*, 2 Grylloidea : 164.

*Material examined* : 1F, P4 ; 1M, P8.

*Distribution* : India : Arunachal Pradesh, Assam, Bihar, Goa, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Orissa, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal ; China ; Malaysia ; Myanmar ; Philippines and Taiwan.

**Remarks :** Size small ; maxillary palpi blackish at base, 4th and 5th joints white ; anterior and middle femora whitish in their basal half, brownish in the apical half ; posterior femora testaceous, adorned with three blackish bands.

Family OECANTHIDAE

Genus *Oecanthus* Serville, 1831

#### 4. *Oecanthus indicus* Saussure

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

1969. *Oecanthus indicus* : Chopard, *Fauna of India*, **2** Grylloidea : 267.

**Material examined :** 1F, P5 ; 1M, 1F, P9.

**Distribution :** India : Andaman & Nicobar Islands, Arunachal Pradesh, Assam, Bihar, Karnataka, Madhya Pradesh, Maharashtra, Meghalaya, Orissa, Tamil Nadu, Tripura and West Bengal ; Amboina ; China ; Japan ; Malaysia ; Philippines and Sumba.

**Remarks :** Body slender and glabrous ; anterior tibiae strongly dilated in basal half, with very large, oval tympana.

Family TRIGONIDIIDAE

Genus *Trigonidium* Rambur, 1839

#### 5. *Trigonidium humbertianum* (Saussure)

1878. *Homoeoxiphus humbertianus* Saussure, *Mem. Soc. Phys. Hist. nat. Geneve*, **25** : 468.

1969. *Trigonidium humbertianum* : Chopard, *Fauna of India*, **2** Grylloidea : 305.

**Material examined :** 1F, P4.

**Distribution :** India : Arunachal Pradesh, Assam, Bihar, Gujarat, Kerala, Madhya Pradesh, Manipur, Meghalaya, Orissa, Tamil Nadu, Tripura and West Bengal ; Malaya and Sri Lanka.

**Remarks :** Body size small ; anterior tibiae perforated ; tegmina caudate and wings also long.

#### 5. \**Trigonidium cicindeloides* Rambur

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

1969. *Trigonidium cicindeloides* : Chopard, *Fauna of India*, **2** Grylloidea : 304.

**Material examined :** 1F, P9.

**Distribution :** Andaman & Nicobar Islands, Arunachal Pradesh, Assam, Bihar, Goa, Himachal Pradesh, Karnataka, Maharashtra, Manipur, Meghalaya, Mizoram, Orissa, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal ; Africa ; Asia ; Madagascar ; Mauritius Island ; Mediterranean region.

*Remarks* : Small in size ; anterior tibiae unperforated ; tegmina strongly convex and short ; wings also short.

Superfamily TETTIGONIOIDEA

Family CONOCEPHALIDAE

Genus *Conocephalus* Thunberg, 1815

7. *Conocephalus maculatus* (Le Guillou)

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

1980. *Conocephalus maculatus* : Pitkin, *Bull. Br. Mus. nat. Hist. (Ent.)*, 41(5) : 344.

*Material examined* : 1M, P2 ; 1M, P9.

*Distribution* : India : Himachal Pradesh, Madhya Pradesh (Bastar) ; Africa ; Australia ; Hong Kong ; Indonesia ; Jawa ; West Malagasien Region ; Philippines ; Sulawesi and Nepal.

Family PHANEROPTERIDAE

Genus *Letana* Walker, 1869

8. \**Letana infurcata* Ingrisch, 1990

1990. *Letana infurcata* Ingrisch, *Ent. Scand.*, 21(3) : 249.

*Material examined* : 1M, P8.

*Distribution* : India : Tamil Nadu.

*Remarks* : This species is characterised by the tegmina which is surpassing hind knees, and radial sector unforked.

9. \**Letana pyrifera* Bey-Bienko

1956. *Letana pyrifera* Bey-Bienko, *Entomol. Obozr.*, 35 : 650.

1990. *Letana pyrifera* : Ingrisch, *Ent. Scand.*, 21(3) : 263.

*Material examined* : 1M, P9.

*Distribution* : India : North-West to South-West India.

*Remarks* : Tegmina surpassing hind knees ; radial sector forked ; cerci with base-internal elevation protruding, expansion on internal margin distinctly longer than half the length of cercus.

Genus *Phaneroptera* Serville, 1831

10. \**Phaneroptera gracilis* Burmeister

1838. *Phaneroptera gracilis* Burmeister, *Handb. Ent.*, : 690.

1955. *Phaneroptera gracilis* : Ragge, *Proc. zool. Soc. Lond.*, **127** : 250.

*Material examined* : 3M, 1F, P5 ; 1M, P8 ; 1F, P10.

*Distribution* : India : Arunachal Pradesh, Assam, Bihar, Himachal Pradesh, Maldiv Island, Sikkim, Tamil Nadu, Uttar Pradesh and West Bengal ; Africa ; Annam ; Australia ; China ; Duke of York ; Indo-china ; Kali Island ; Malaya ; Myanmar ; Solomon ; Sumatera and Sumba.

*Remarks* : Lateral pronotal lobes longer than deep ; hind femora very slender ; cerci very long ; supra-anal plate slightly convex posteriorly ; subgenital plate elongate and bifurcate at apex.

Genus *Elimaea* Stål, 1874

11. \**Elimaea (Orthelimaea) securigera* Brunner

1878. *Elimaea securigera* Brunner, *Monogr. Phaneropt.*, : 93.

1990. *Elimaea (Orthelimaea) securigera* : Ingrisch, *Spixiana*, **13**(2) : 157.

*Material examined* : 1M, P6.

*Distribution* : India : Andaman & Nicobar Islands, Assam, Himachal Pradesh, Meghalaya and West Bengal ; Indonesia ; Nepal and Sri Lanka.

*Remarks* : Tegmina slender ; stridulatory file with a break shortly before posterior end ; cerci securiform ; lobes of subgenital plate widely separated in the middle.

Superfamily ACRIDOIDEA

Family PYRGOMORPHIDAE

Genus *Atractomorpha* Saussure, 1861

12. *Atractomorpha crenulata* (Fabricius)

1793. *T(ruxalis) crenulatus* Fabricius, *Ent. Syst.*, **2** : 28.

1969. *Atractomorpha crenulata* : Kevan & Chen, *Zool. J. Linn. Soc.*, **48** : 187.

*Material examined* : 1M, P5.

*Distribution* : India : Andaman & Nicobar Islands, Andhra Pradesh, Bihar, Goa, Jammu & Kashmir, Karnataka, Kerala, Lakshadweep and Maldiv Island, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal ; Bangladesh ; Kambodia ; Laos ; Malaya ; Myanmar ; Nepal ; Pakistan ; Sri Lanka ; N. W. Sumatera ; Thailand and Veitnam.

*Remarks* : Body slender ; eyes oval ; lateral lobes of pronotum with a distinct membraneous area ; hind femora not strongly keeled on outer face. Both adults and hoppers are serious pest of young plants.

Family ACRIDIDAE

Subfamily GOMPHOCERINAE

Genus *Dnopherula* Karsch, 1896

Subgenus *Aulacobothrus* Bolivar, 1902

13. *Dnopherula (Aulacobothrus) luteipes luteipes* (Walker)

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

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

*Material examined* : 1M, P4.

*Distribution* : India : Assam, Bihar, Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Sikkim, Tamil Nadu and West Bengal ; Bangladesh ; China ; Japan ; Myanmar ; Nepal ; Pakistan ; Sri Lanka ; Taiwan and Thailand.

*Remarks* : Antennae longer or distinctly longer than head and pronotum together ; lateral carinae of pronotum faintly diverging anteriorly before second or third sulcus, and also diverging posteriorly behind 3rd sulcus.

Genus *Leva* Bolivar, 1909

14. \**Leva indica* (Bolivar)

1907. *Gymnobothrus indica* Bolivar, *Annl. Soc. ent. Fr.*, 70 : 596.

1914. *Leva indica* : Bolivar, *Trab. Mus. nac. Cienc. nat. madr.*, (Ser. Zool.), No. 20 : 64.

*Material examined* : 3M, 1F, P4.

*Distribution* : India : Bihar, Delhi, Orissa, Tamil Nadu, Tripura and West Bengal ; Sri Lanka.

*Remarks* : The specimens of the species are small in size, and generally occur in association with *Leva cruciata*. Lateral carinae of pronotum on prozona nearly parallel, divergent in metazona.

Subfamily Oedipodinae

Genus *Gastrimargus* Saussure, 1884

15. *Gastrimargus africanus africanus* (Saussure)

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

1992. *Gastrimargus africanus africanus* : Ritchie, *Bull. Br. Mus. nat. Hist. (Ent.)*, 44 (4) : 248.

*Material examined* : 1F, P6.

*Distribution* : India : Andhra Pradesh, Bihar, Delhi, Goa, Himachal Pradesh, Madhya Pradesh, Orissa, Sikkim, Uttar Pradesh and West Bengal ; Africa ; Myanmar ; Nepal ; Pakistan ; Saudi Arabia ; Sri Lanka ; Thailand ; Tibet and Yemen A.R.

*Remarks* : Body large ; pronotum tectiform with high, sharp median carinae ; wings with dark brown or black fasciae, basal area bright yellow, apex influmate.

Genus *Oedaleus* Fieber, 1853

16. *Oedaleus abruptus* (Thunberg)

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

1981. *Oedaleus abruptus* : Ritchie, *Bull. Br. Mus. nat. Hist. (Ent.)*, 42(3) : 104.

*Material examined* : 1F, P2 ; 1F, P4 ; 1F, P9.

*Distribution* : India : Andhra Pradesh, Bihar, Delhi, Goa, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal ; Bangladesh ; China ; Indo-china ; Hawaiian Islands ; Myanmar ; Nepal ; Pakistan ; Sri Lanka and Thailand.

*Remarks* : This species is commonly found in short grasslands and is of minor importance of non-graminaceous crops. Pronotum short, with incomplete white cruciform marks.

Genus *Trilophidia* Stål, 1873

17. *Trilophidia annulata* (Thunberg)

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

1965. *Trilophidia annulata* : Hollis, *Trans. R. ent. Soc. Lond.*, 117(8) : 251.

*Material examined* : 1M, 1F, P1 ; 1F, P6.

*Distribution* : India : Andhra Pradesh, Arunachal Pradesh, Bihar, Delhi, Goa, Karnataka, Kerala, Himachal Pradesh, Madhya Pradesh, Orissa, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal ; Afghanistan ; Bangladesh ; Borneo ; Hong Kong ; Japan ; Jawa ; Korea ; Malaya ; Mongolia ; Myanmar ; Nepal ; Pakistan ; Thailand and Veitnam.

*Remarks* : Major pest of pastures throughout the year in India. Pronotum rugose, with a high median carina forming two teeth in front, and with lateral carinae.

Subfamily HEMIACRIDINAE

Genus *Parahieroglyphus* Carl, 1916

18. *Parahieroglyphus bilineatus* (Bolivar)

1912. *Hieroceryx bilineatus* Bolivar, *Trab. Mus. nac. Cienc. nat. Madr.*, (Ser. zool.) No. 6 : 60.

1916. *Parahieroglyphus bilineatus* : Carl, *Revue suisse Zool.*, 24 : 483.

*Material examined* : 1M, P9.

*Distribution* : India : Himachal Pradesh, Madhya Pradesh, Maharashtra, Uttar Pradesh and West Bengal ; Bangladesh.

*Remarks* : This species is reported to occur upto 2000m in N. India, and is plentiful in bamboo areas. Both hoppers and adults feed entirely on green foliage, preferring maize, rice and various

grasses. Frontal ridge of head parallel-sided or may diverge just below median ocellus ; cercus very large. divided into 3 lobes.

Genus *Spathosternum* Karsch, 1877

19. *Spathosternum prasiniferum prasiniferum* (Walker).

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

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

*Material examined* : 3M, 1F, P1.

*Distribution* : India : Andaman & Nicobar Islands, Arunachal Pradesh, Andhra Pradesh, Bihar, Delhi, Goa, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamil Nadu, Tripura and West Bengal ; Bangladesh ; S.E. China; Hainan ; W. Malaysia ; Myanmar ; Nepal ; Pakistan ; Sri Lanka ; Thailand and Veitnam.

*Remarks* : Widely distributed species throughout in India. Generally, found in and around short grasses of plains, in pastures and cultivated fields. It is a major pest of crops in Punjab and Uttar Pradesh.

Subfamily CATANTOPINAE

Genus *Catantops* Schaum, 1853

20. *Catantops pinguis innotabilis* (Walker)

1870. *Acridium innotabile* Walker, *Cat. Derm. Salt. Brit. Mus.*, 4 : 529.

1956. *Catantops pinguis inntoabilis* : Dirsh, *Publcoes cult Co. Diam. Angola*, 28 : 105.

*Material examined* : 2M, P4 ; 1M, P5 ; 3F, P9.

*Distribution* : India : Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Delhi, Goa, Haryana, Himachal Pradesh, Jammu & Kashmir, Kerala, Lakshadweep, Madhya Pradesh, Maldiv Island, Meghalaya, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh and West Bengal ; Afghanistan ; Bangladesh ; China ; Hong Kong ; Indo-china ; Japan ; kambodia ; Korea ; Malaya ; Myanmar ; Nepal ; New Guinea ; Pakistan ; Philippines ; Sri Lanka ; Sumatera ; Thailand; Tibet and Yunnan.

*Remarks* : Pronotum flat or subcylindrical ; prosternal tubercle cylindrical and rounded at apex; lateral lobe of pronotum without coloured pattern ; external disc of hind femur without black median spot below the upper carinula. This species is very minor crop pest.

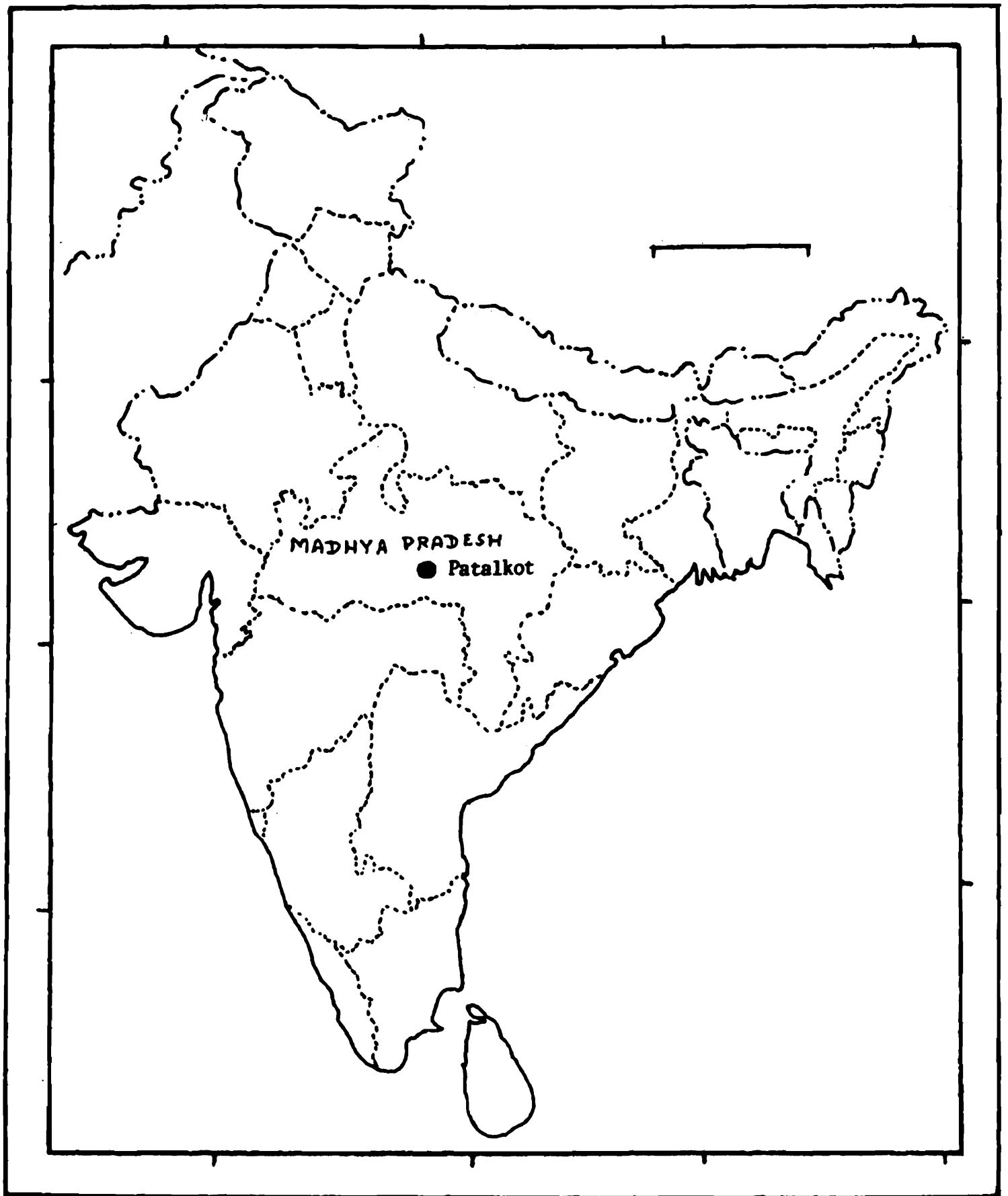
Subfamily EYPREPOCNEMIDINAE

Genus *Eyprepocnemis* Fieber, 1853

21. *Eyprepocnemis rosea* Uvarov

1942. *Eyprepocnemis rosea* Uvarov, *Ann. Mag. nat. Hist.*, (11) 9 : 597.





Map of India showing Patalkot

*Material examined* : 1M, P9.

*Distribution* : India ; Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Meghalaya and Uttar Pradesh ; Bangladesh ; Myanmar ; Pakistan and Thailand.

*Remarks* : It is, generally, found in forest at high altitudes. Tegmina reach upto the apex of abdomen ; wings rose colour at base.

Family TETRIGIDAE

Genus *Ergatettix* kirby, 1914

### 22. *Ergatettix dorsifera* (Walker)

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

1929. *Ergatettix dorsifera* : Hebard, *Revue suisse Zool.*, 36 : 588.

*Material examined* : 2F, P1 ; 1M, P4.

*Distribution* : India : Arunachal Pradesh, Assam, Bihar, Delhi, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Orissa, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal ; Bangladesh ; Central Asia ; Greater Sunda Island and S. China ; Myanmar ; Sri Lanka ; Sumatera and Taiwan.

*Remarks* : Median carina of pronotum indistinctly undulate, lateral carinae without dilated lobes on the hind process of pronotum ; hind femora with less protuberant tubercles on external surface.

### SUMMARY

Twenty-two species are studied herewith, of which 6 are new records for Madhya Pradesh. *Eyprepocnemis rosea*, generally, found on high altitude is recorded here. *Parahieroglyphus bilineatus* though has been recorded earlier from Madhya Pradesh, but its record from Patalkot is interesting.

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