

NEW RECORDS OF ROVE BEETLES (COLEOPTERA: STAPHYLINIDAE: PAEDERINAE) FROM MIZORAM, INDIA

ABHA SAR AND K. ILANGO

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

Zoological Survey of India, Southdern Regional Centre, 100, Southern High Road, Chennai-44.

Corresponding Author: Smt. Abha Sar, E-mail : abhasar@gmail.com

ABSTRACT

In the family Staphylinidae under subfamily Paederinae all the 21 species of rove beetles belonging to 10 genera distributed in different districts are recorded for the first time from Mizoram. It is clear that further study of this group from the study area would explore more interesting species.

INTRODUCTION

Mizoram is one of the states of Northeast India, with Aizawl as its capital. The name is derived from Mi, Zo and Ram, and thus Mizoram implies “land of the hill people” Mizoram is located between 23.1645° N and 92.9376° E. The tropic of Cancer passes near the capital, Aizawl town. Mizoram occupies the north east corner of India. It is bounded by the state of Assam on the north and the state of Manipur, on the east and south by Chin Hills and Arakan (Myanmar), and on the west by the Chittagong hill tracts of Bangladesh and the state of Tripura. Mizoram borders three states of India - Assam, Manipur and Tripura. Its geographical borders are with Assam, Manipur and Tripura extended over 123 km, 95 km and 66 km, respectively. Mizoram is a land of hills. The hills run in ridges from north to south. They have an average height of 900 meters, the highest point being the Blue Mountain 2165 meter. Mizoram is a land of unending natural beauty with a variety of flora and fauna. Mizoram can boast of a variety of wild life famous Wildlife National Parks and sanctuaries like animal population is accumulated mostly in the Dampa Sanctuary, established in 1976 at the north-western tip of Mizo hills.

The members of the family Staphylinidae are commonly known as rove beetles and one of the largest family of the superfamily Staphyloidea distributing throughout the world. 30,000 species are known from the world of which more than 3000 species are recorded so far from India. The pioneer workers who dealt the group are Motschulsky (1858), Kraatz (1859), Fauvel (1895) and Bernhauer (1915) etc. Prior to Camerons work on the fauna of British India Series (1930,1931, 1932). Since the work of Cameron (1930-45), no comprehensive work on Indian fauna of Staphylinidae have been done by any author.

The present work on the family Staphylinidae: Paederinae is based on the collections brought from different districts of Mizoram by various survey parties of Zoological Survey of India, and other oldest collectios present in the National Zoological collection. Materials of some species recorded from Mizoram were not available for study, however for the sake of completeness, these species are also included in this work. This study is based on examples comprising 21 species under 10 genera and 1 subfamily of which 21 species are first time recorded from Mizoram and two species viz; *Paederus variceps* Kr. and *Scopaeus*

orbiceps Cam. is recorded for the first time from India (Mizoram : Chhimtuipui and Aizwal).

MATERIALS AND METHODS

The present study on the family Staphylinidae : Paederinae is based on the collection brought from different parts of Mizoram state by S.K.Saha and party from Zoological Survey of India in the year 1994. The specimens are mainly collected in the forests by hand picking, dusting and light trapping method was used during night. The materials collected are sorted out set-pinned, studied and identified. The identification is mainly based on the differences in the morphological characters and the structure of the male genitalia. All the identified collections are deposited in National Zoological Collection of Zoological Survey of India, Kolkata.

SYSTEMATICS LIST

Family STAPHYLINIDAE

Subfamily PAEDERINAE

(* denotes new records from Mizoram and ** new records from India)

Genus (1) *Paederus*: Fab.

- *1. *nigricornis* Bermh.
- *2. *birmanus* Fauv.
- *3. *pilifer* Motsch.
- **4. *variceps* Kr.

Genus (2) *Stilicus* Latr.

- *5. *velutinus* Fauv.

Genus (3) *Acanthoglossa* Kr.

- *6. *testaceipennis* Kr.

Genus (4) *Medon*; Steph.

- *7. *umbilicatus* Cam.
- *8. *opacellus* Fauv.

- *9. (*Hypomedon*) *championi* Cam.

Genus (5) *Lithocharis* Boisd.

- *10. *vilis* Kr.

Genus (6) *Scopaeus* Er.

- **11. *orbiceps* Cam.

Genus (7) *Stiliderus* Motsch.

- *12. *feae* Fauv.

*13. *umbratus* Fauv.

*14. *discalis* Fauv.

Genus (8) *Charichirus* Shp.

*15. *chinensis* Boh

*16. *ceylonicus* Cam.

Genus (9) *Lobochilus* Bernh.

*17. *fortepunctatus* Cam.

*18. *granulicollis* Cam.

Genus (10) *Cryptobium* Mannerh.

*19. *bengalense* Cameron

*20. *marginatum* Motsch

*21. *ceylanense* Kr.

SYSTEMATIC ACCOUNT

Genus *Paederus*:

1. *Paederus nigricornis* Bernh (Fig. 1)

1911. *Paederus nigricornis* Bernhauer, *Ent. Blatt.*, 7: 61
 1931. *Paederus nigricornis* : Cameron, *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, 2: 47-48.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Tuipui, 19.i.1994, Coll. S.K. Saha & party, ex."on sand".

Distribution: India: Mizoram, Himachal Pradesh, Uttarakhand, Sikkim, Uttar pradesh and West Bengal. *Elsewhere:* Nepal.

Remarks: In the present study this species is recorded for the first time from Mizoram

2. *Paederus birmanus* Fauv. (Fig. 2)

1895. *Paederus birmanus* Fauvel, *Rev. d'Ent.*, 14: 233.
 1931. *Paederus birmanus* Cameron, : *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, 2: 46-47.

Material examined: 3exs., India: Mizoram: Chhimtuipui, Khawnaus, 1ex., 18.i.1994, Coll. S.K. Saha, ex."Under stone"; Chhimtuipui, tuipui, 1ex., 19.i.1994, Coll. S.K. Saha, ex."on sand"; Chhimtuipui, Zeropoint, 1ex., 15.i.1994, Coll. S.K. Saha & party, ex."Under stone".

Distribution: India: Mizoram, Himachal Pradesh, West Bengal, Nagaland, *Elsewhere:* Myanmar.

Remarks: In the present study this species is recorded for the first time from Mizoram

3. *Paederus pilifer* Motsch. (Fig. 3)

1859. *Paederus pilifer* Motsch., *Etud. Ent.*, **viii**: 74.
 1931. *Paederus pilifer* Cameron, *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 44.

Material examined: 2exs., India: Mizoram: Chhimtuipui, Tuipui, 1ex., 19.i.1994, Coll. S.K. Saha & party, ex."on sand"; Chhimtuipui, Khawnaus, 1ex., 18.i.1994, Coll. S.K. Saha, ex."Under stone".

Distribution: India: Mizoram (Chhimtuipui, Tuipui), : Uttar Pradesh, Uttarakhand, Tranquebar.

Remarks: In the present study this species is recorded for the first time from Mizoram.

4. *Paederus variceps* Kr. (Fig. 4)

1859. *Paederus variceps* Kr., *Arch. Naturg.*, **i**: 152.
 1931. *Paederus variceps* Cameron. *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 53.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Khawnaus, 18.i.1994, Coll. S.K. Saha & party, ex."Under stone".

Distribution: India: Mizoram (Chhimtuipui, Khawnaus), *Elsewhere:* Sri lanka.

Remarks: In the present study this species is recorded for the first time from Mizoram.

Genus *Stilicus*

5. *Stilicus velutinus* Fauv. (Fig. 5)

1895. *Stilicus velutinus* Fauv., *Rev. d'Ent.*, **14**: 226.
 1931. *Stilicus velutinus* Cameron, *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 103-104.

Material examined: 1ex, India: Mizoram: Chhimtuipui, Tuipui, 1ex., coll. S.K. Saha & party, ex."Under banana sheath".

Distribution: India: Mizoram (Chhimtuipui, Tuipui), Uttar Pradesh, Uttarakhand, West Bengal, Tripura. *Elsewhere:* Myanmar.

Remarks: In the present study this species is recorded for the first time from Mizoram

Genus *Acanthoglossa*

6. *Acanthoglossa testaceipennis* Kr. (Fig. 6)

1859. *Acanthoglossa testaceipennis* Kr., *Arch. Naturg.*, **25,I**,145.
 1931. *Acanthoglossa testaceipennis* Cameron. *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 121-122.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Khawnaus, 18.i.1994, Coll. S.K. Saha & party, ex." In sand".

Distribution: India: Mizoram (Chhimtuipui, Khawnaus), Meghalaya, Tripura, Sikkim, West Bengal, Tamil Nadu, Uttarakhand.

Remarks: In the present study this species is recorded for the first time from Mizoram.

Genus *Medon*

7. *Medon umbilicatus* Cam. (Fig. 7)

1924. *Medon umbilicatus* Cameron, *Trans. Ent. Soc. London*, : 184.
 1931. *Medon umbilicatus*: Cameron, *The Fauna of British India, including Ceylon and Burma (Coleoptera: Staphylinidae)*, **2**: 146-147.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Tuipui, 19.i.1994, Coll. S.K. Saha & party, ex."Under stone".

Distribution: India: Mizoram (Chhimtuipui, Tuipui), Himachal Prodes, Uttarakhand.

Remarks: In the present study this species is recorded for the first time from Mizoram

8. *Medon opacellus* Fauv. (Fig. 8)

1895. *Medon opacellus* Fauv., *Rev. d'Ent.*, : 231
 1931. *Medon opacellus* Cameron., *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 134-135.

Material examined: 1ex., India: Mizoram: Longtwalai, 19.i.1994. Coll. S.K. Saha & party, ex."Under stone."

Distribution: India: Mizoram (Longtwalai), West Bengal. *Elsewhere:* Myanmar, Singapore, Sumatra and Annam.

Remarks: In the present study this species is recorded for the first time from Mizoram.

9. *Medon (Hypomedon) championi* Cam.
(Fig. 9)

1919. *Medon championi* Cam., E.M.M. **50**: 251.
1931. *Medon championi* Cam., *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 150.

Material reexamined: India: Mizoram: Chhimtuipui, Tuipui, 2exs., 19.i.1994, Coll. S.K. Saha & party, ex."One under bark,& one under banana sheath".

Distribution: India: Mizoram (Chhimtuipui, Tuipui), *Elsewhere:* Sri Lanka.

Remarks: In the present study this species is recorded for the first time from Mizoram.

Genus *Lithocharis*

10. *Lithocharis vilis* Kr. (Fig. 10)

1859. *Lithocharis vilis* Kr., Arch. Naturg. **25**, I: 139
1931. *Lithocharis vilis* Cameron, *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 162-163.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Tuipui, 19.i.1994, Coll. S.K. Saha & party, ex."Under banana sheath".

Distribution: Distribution: India: Mizoram (Chimtuipui, Tuipui), Tamil Nadu. *Elsewhere:* Sri Lanka, Singapore, Penang and Samoa.

Remarks: In the present study this species is recorded for the first time from Mizoram.

Genus *Scopaeus*

11. *Scopaeus orbiceps* Cam. (Fig. 11)

1931. *Scopaeus orbiceps* Cameron, *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 182-183.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Aizwal, sher khan, 9.i.1994, Coll. S.K. Saha & party, ex."Under stone".

Distribution: Distribution: India: Mizoram (Aizwal, Sherkhan), *Elsewhere:* Sri lanka.

Remarks: In the present study this species is recorded for the first time from Mizoram.

Genus *Stiliderus*

12. *Stiliderus feae* Fauv. (Fig. 12)

1895. *Stiliderus feae* Fauv., *Rev. d'Ent.*, **14**: 224.

1931. *Stiliderus feae* Cameron, *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 110-112.

Material examined: 4exs., India: Mizoram: Chhimtuipui, Khawnaus, 18.i.1994, Coll. S.K. Saha & party, ex."under Banana sheath".

Distribution: India: Mizoram (Chhimtuipui, Khawnaus), West Bengal, Uttar Pradesh. *Elsewhere:* Myanmar, Thailand, Nepal.

Remarks: In the present study this species is recorded for the first time from Mizoram.

13. *Stiliderus umbratus* Fauv. (Fig. 13)

1904. *Stiliderus umbratus* Fauv., *Rev. d'Ent.*, **23**: 52.
1931. *Stiliderus umbratus* Cameron, *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 114.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Khawnaus, 18.i.1994, Coll. S.K. Saha & party, ex."Banana sheath".

Distribution: India: Mizoram (Chhimtuipui, Khawnaus), West Bengal, Tamil Nadu.

Remarks: In the present study this species is recorded for the first time from Mizoram.

14. *Stiliderus discalis* Fauv. (Fig. 14)

1895. *Stiliderus discalis* Fauv., *Rev. d'Ent.*, **14**: 225.
1931. *Stiliderus discalis* Cameron, *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 112.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Khawnaus, 18.i.1994, Coll. SK. Saha & party, ex."Banana sheath."

Distribution: Distribution: India: Mizoram (Chimtuipui, Khawnaus). *Elsewhere:* Myanmar.

Remarks: In the present study this species is recorded for the first time from Mizoram.

Genus *Charichirus*

15. *Charichirus chinensis* Bho. (Fig. 15)

1858. *Lathrobium chinensis* Boh., *Resa Eugen.*: 32.
1931. *Charichirus chinensis* Cameron, *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 167-168.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Khawnaus, 18.i.1994, Coll. SK. Saha & party, ex."under Banana sheath."

Distribution: Distribution: India: Mizoram (Chhimtuipui, Khawnaus), West Bengal, *Elsewhere:* Sri Lanka and Japan.

Remarks: In the present study this species is recorded for the first time from Mizoram.

16. *Charichirus ceylonicus* Cam. (Fig. 16)

- 1919. *Medon (Charichirus) ceylonicus* Cam., *E.M.M.*, **55**: 228.
- 1931. *Charichirus ceylonicus* Cameron, *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 168.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Khawnaus, 18.i.1994, Coll. SK. Saha & party ex."Banana sheath."

Distribution: India: Mizoram (Chhimtuipui, Khawnaus), Chattisgarh and West Bengal. *Elsewhere:* Sri Lanka.

Remarks: In the present study this species is recorded for the first time from Mizoram.

Genus: *Lobochilus*

17. *Lobochilus fortepunctatus* Cam. (Fig. 17)

- 1024. *Neos clerus fortepunctatus* Cam., *Trans. Ent. Soc. Lond.*: 189.
- 1931. *Lobochilus fortepunctatus* Cam., *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 124.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Khawnaus, 18.i.1994, Coll. SK. Saha & party, ex."Banana sheath."

Distribution: India: Mizoram (Chhimtuipui, Khawnaus), West Bengal, Assam and Uttar Pradesh.

Remarks: In the present study this species is recorded for the first time from Mizoram.

18. *Lobochilus granulicollis* Cam. (Fig. 18)

- 1924. *Neosclerus granulicollis* Cam., *Trans. Ent. Soc. Lond.*: 190.
- 1931. *Lobochilus granulicollis* Cam., *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 125.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Tuipui, 19.i.1994, Coll. S.K. Saha & party, ex."Banana sheath."

Distribution: India: Mizoram (Chhimtuipui, Tuipui), West Bengal and Uttar Pradesh.

Remarks: In the present study this species is recorded for the first time from Mizoram.

Genus *Cryptobium*

19. *Cryptobium bengalense* Cameron (Fig. 19)

- 1931. *Cryptobium bengalense* Cam., *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 244-245.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Zeropoint, 15.i.1994, Coll. S.K. Saha & party, ex."Under stone".

Distribution: India: Mizoram (Chhimtuipui, Zeropoint), Bengal?

Remarks: In the present study this species is recorded for the first time from Mizoram.

20. *Cryptobium marginatum* Motsch (Fig. 20)

- 1858. *Cryptobium marginatum* Motsch., *Bull. Mosc.*, **31**: 652.
- 1931. *Cryptobium marginatum* Cam., *The fauna of British India, incl. Ceylon & Burma (Col.: Staphylinidae)*, **2**: 240-241.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Zeropoint, 15.i.1994, Coll. S.K. Saha & party, ex."Under stone".

Distribution: India: Mizoram (Chhimtuipui, Zeropoint), West Bengal, Tamil Nadu, Uttar Pradesh. *Elsewhere:* Sri Lanka.

Remarks: In the present study this species is recorded for the first time from Mizoram.

21. *Cryptobium ceylanense* Kr. (Fig. 21)

- 1859. *Cryptobium ceylenense* Kraatz, *Arch. Naturg.*, **25**(i): 119.
- 1895. *Cryptobium ceylenense* Eppelsheim, *D.E.Z.*,: 401.
- 1931. *Cryptobium ceylenense* Cameron, *The Fauna of British India, including Ceylon and Burma (Coleoptera: Staphylinidae)*, **2**: 247.

Material examined: 1ex., India: Mizoram: Chhimtuipui, Zeropoint, 15.i.1994, Coll. S.K. Saha & party, ex."Under stone".

Distribution: India: Mizoram (Chhimtuipui, Zeropoint), Himachal Pradesh, *Elsewhere:* Sri Lanka.

Remarks: In the present study this species is recorded for the first time from Mizoram.

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PLATE-1



Fig. 1. *Paederus nigricornis* Bernh.



Fig. 2. *Paederus birmanus* Fauv.



Fig. 3. *Paederus pilifer* Motsch Fig.

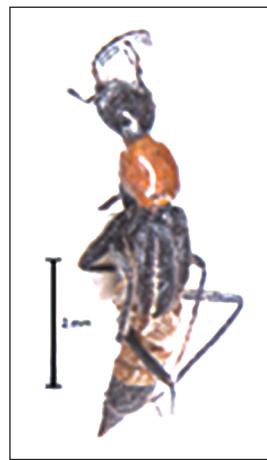


Fig. 4. *Paederus variceps* Kr.



Fig. 5. *Stilicus velutinus* Fauv.



Fig. 6. *Acanthoglossa testaceipennis* Kr.

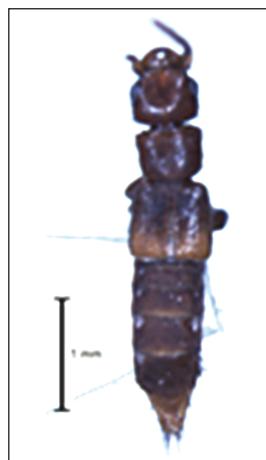


Fig. 7. *Medon umbilicatus* Cam



Fig. 8. *Medon opacellus* Fauv.

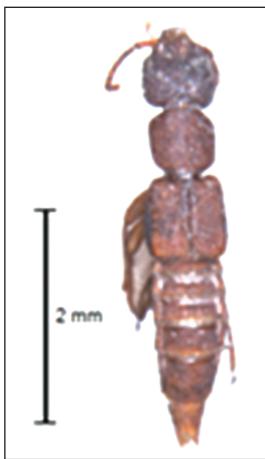


Fig. 9. *Medon (H) championi* Cam



Fig. 10. *Lathrobium vilis* Kr

PLATE-2

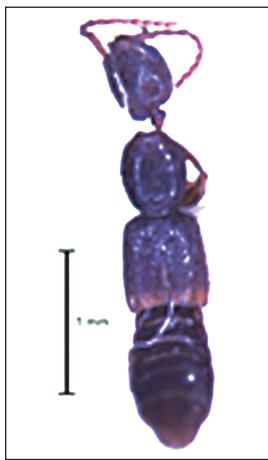


Fig. 11. *Scopaeus orbiceps* Cam.



Fig. 12. *Stiliderus feae* Fauv.



Fig. 13. *Stiliderus umbratus* Fauv.



Fig. 14. *Stiliderus discalis* Fauv.



Fig. 15. *C. chinensis* Boh.

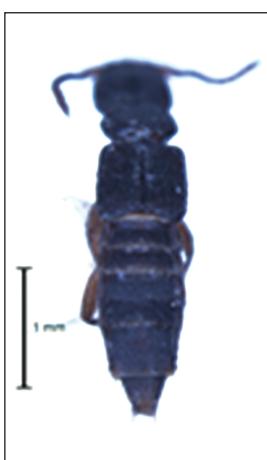


Fig. 16. *C. ceylonicus* Cam.



Fig. 17. *Lobochilus fortепunctatus* Cam.



Fig. 18. *Lobochilus granulicollis* Cam.

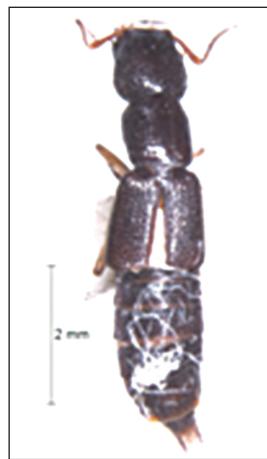


Fig. 19. *Cryptobium bengalense* Cameron

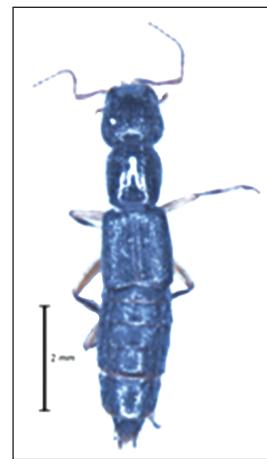


Fig. 20. *Cryptobium marginatum* Motsch

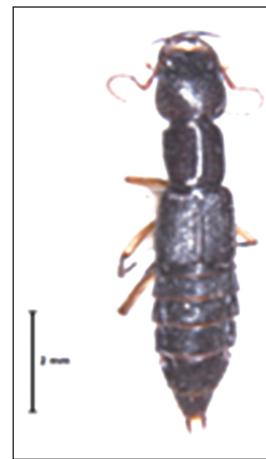


Fig. 21. *Cryptobium ceylanense* Kr.