

INSECTA : COLEOPTERA  
CARABIDAE & CICINDELIDAE ( PART I )

*By*

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(With 1 Figure)

INTRODUCTION

This is the first part of the result of study on the Carabid fauna of the Namdhapa National Park, Tirap District of Arunachal Pradesh (India). This is also the first record of the Carabid fauna from this area. The material consists of 60 examples belonging to 22 species under 16 genera, 9 tribes and 2 subfamilies.

The carabidae fauna recorded from this area is very similar to that of Burma. Out of 22 species recorded from here 17 species are known from Burma.

Taxonomic list has been prepared according to present understanding of classification e. g. Ball (1960), Lindorth (1961-69) and Kryzhanovsky (1976). Divisions of 'Ball' and Supertribes of Kryzhanovsky are not considered. However one Cicindelid dealt here is considered as belonging to the family Cicindelidae because of tradition (Ball 1960). Tribes previously belonging to the subfamily Harpalinae are placed under Carabinae (s. l.) and all the tribes are arranged according to Sloane (1920) and Andrewes (1930). Genera and species arranged alphabetically under the tribes and genera respectively to which they belong.

TAXONOMIC ACCOUNT

Family : CICINDELIDAE

Subfamily : COLLYRINAE

1. *Tricondyla macrodera* Chaudoir

1860. *Tricondyla macrodera* Chaudoir, *Bull. Soc. Imp. Nat. Moscou*, 1 : 300.

*Material examined* : 1 ex., Deban North, 28.iv.1981, S. Biswas coll,

*Distribution* : India : W. Bengal : Darjeeling, Mungphu ; Sikkim : Gopaldhara ; Assam : Gauhati, Sibsagar, Cachar ; Arunachal Pradesh : Namdhapa ; Bhutan, Tonkin.

This species is first time recorded from Arunachal Pradesh.

*Remarks* : This is rather a common species in north eastern India. It varies considerably in length, gibosity and sculpture of elytra. The apical part of elytra in the specimen before us is rather distinctly punctured to the apex.

Family : CARABIDAE

Subfamily : CARABINAE

Tribe : SCARTINI

2. *Clivina arunachalensis* sp. nov.

(Fig. 1a and b)

Length 7.5 mm.

Colour black ; palpi, antennae, middle and hind legs dark red. *Head* wide ; labrum 6-setose, mandibles short and stout, mentum, shallowly sinuate with a cup-shaped median tooth shorter than lateral lobes ; clypeus truncate, bordered, median part fused with the wings, the latter extend a little forwards and obtusely angulate in front ; frontal plates separated from the clypeal wings by a notch, surface convex, margin rounded ; clypeal ridge slight, suture prominent ; frontal impression deep, fascial carinae short, ending far below frontal plates, fascial sulcus insignificant in front ; surface of head almost smooth and impunctate, a shallow horse shoe shaped impression on the middle of vertex and some fine punctures on sides behind ; neck constriction obsolete ; antennae short and moniliform, joint 2 distinctly longer than ; eyes small and depressed, greatly covered by the clypeal wings and genae.

*Prothorax* (1.7 × 2.0 mm.) convex, subquadrate, slightly transverse and narrowed in front with the angles a little advanced, median line joining the front transverse sulcus which is uninterrupted and not reaching the margin at extremities, surface with a few faint transverse striations across the median line before middle and near base.

*Elytra* (3.5 × 2.0 mm.) convex, parallel, somewhat pointed at apex, less than twice as long as wide and as wide as prothorax ; striae deep, finely crenulate, scutellary striole obsolete, striae 1-3 free at base, 4, 5 and 6 joining together, and 7 ending behind shoulder ; intervals convex,

3 without pore and 8 without forming any carina. *Sternum* ; prosternal ridge narrow, not sulcate. *Venter* shallowly rugose-punctate on sides, last segment with two pores widely distant. *Legs* with protibae finely sulcate, 4-dentienlate, mesotibae rather densely fringed with bristles.

*Holotype*, India : Arunachal Pradesh : Tirap district, Namdhapa, 21.iv, 1981, S. Biswas coll. Reg. No. 10050/84A.

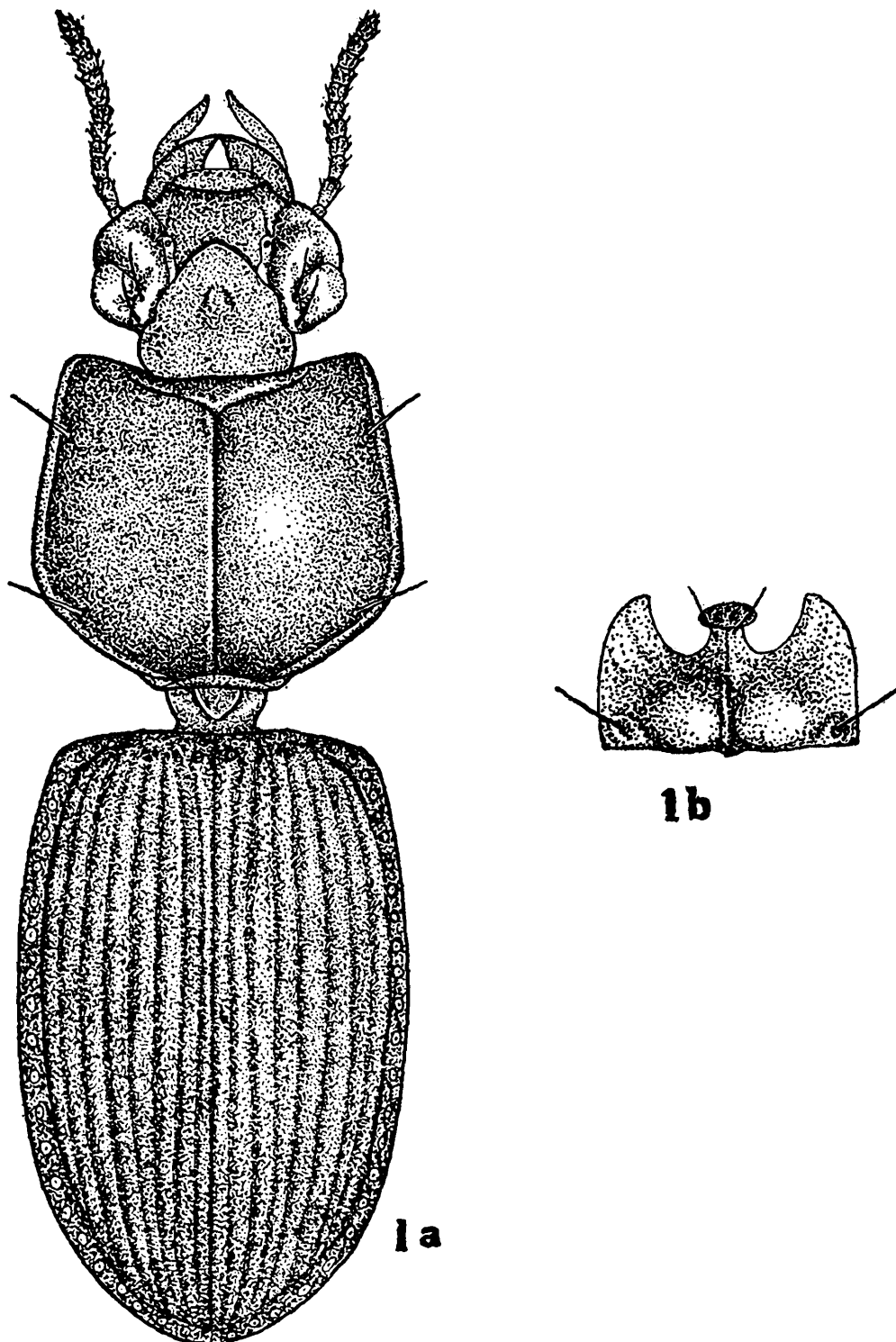


Fig. 1. a. Dorsal view and b. mentum of *Clivina arunacha lensis* sp. nov.

*Paratype* 1 ex, same data as holotype, Reg. No. 1051/84A. Both deposited in the National Zoological Collection, Zoological Survey of India, Calcutta.

*Discussion* : This species is close to both *memnonia* Dejean and *assamensis* Putz. by its general body form, by the clypeus with its wings fused with median part by and the elytra with interval 3 without pore. It approaches more to *assamensis* by the cup-shaped median tooth of mentum and smooth head but this species can easily be distinguished from both of the above species by the (i) small eyes, (ii) absence of neck constriction and scutellary striole, (lii) by the posternal ridge without sulcus and (iv) uninterupted transverse sulcus of the prothorax.

### 3. *Clivina memnonia* Dejean

1831. *Clivina memnonia* Dejean, *Sp. Gen. Col.*, 5 : 503 ; 1929. *Andr. Fauna Brit. India*, 1 : 354 and 362, fig. 53.  
 1846. *Clivina indica* Putz., *Mem. Liege*, 2 : 588.  
 1856. *Clivina rugosifrons* Nietn., *J. Asiat. Soc. Beng.*, 25 : 390.  
 1858. *Clivina recta* Walk., *Ann. Mag. nat. Hist. Soc.*, (3)2 : 203.

*Material examined* : 2 exs., Namdhapa, 21.iv.1981, S Biswas coll.

*Distribution* : India, Srilanka, Burma, Indo-China, Sumatra, Java and Borneo.

### 4. *Clivina westwoodi* Putz.

1863. *Clivina castanea* Putz., (not Westwood) *Mem. Liege*, 18 : 35 (part).  
 1867. *Clivina westwoodi* Putz. *Ann. Soc. ent. Belgique*, 10 : 109.

*Material examined* : 1 ex., Namdhapa, 21.iv.1981, S. Biswas coll.

*Distribution* : India : U. P. : Dehra Dun ; Maharashtra : Belgaum, Nagpur ; Arunachal Pradesh : as above. Srilanka : Colombo ; Japan.

This species is first time recorded from North-East India.

### 5. *Scarites indus* Oliver

1795. *Scarites indus* Oliv. *Ent. Hist.:Insect.*, 3 : 39. tab. 1, fig. 2 ; 1929. *Andr., Fauna Brit. India*, Carabidae 1, Carabinae, 29, fig. 8b, 232 and 260, fig. 42.  
 1813. *Scarites mancus* Bonelli, *Obs. Ent. ii, Mem. Acad. Sci. Turin.* 20 : 473.  
 1921. *Scarites terricola*, Andr. (not Bonelli), *Rec. Indian Mus.*, 22 : 339.

*Material examined* : 1 ex., Deban, 24.iv.1981, S. Biswas coll.

## Tribe : PTEROSTICHINI

6. *Caelostomus inermis* (Bates)

1892. *Stomonaxus inermis* Bates, *Ann. Mus. Civ. Nat. Genova* 32 : 351.

1930. *Caelostomus innermis*, Andr. *Catalogue of Indian Insects*. Part 18-Carabidae : 56.

*Material examined* : 1 ex., Namdhapa, Firm base, 18.iv.1981, S. Biswas coll.

*Distribution* : India : Arunachal Pradesh : Namdhapa. Burma : Tenasserim : Teinzo, Thagata, Patkai Hills.

This species is first time recorded from India.

7. *Morion orientale* Dejean

1825. *Morion orientale* Dejean, *Sp. Gen. Col.*, 1 : 432 ; 1880. Chaudoir, *Bull. Soc. Imp. Nat. Moscou*, 1 : 338 ; 1924. Andr. *Ann. Mag. Nat. Hist. Soc.*, 16(9) : 591.

1873. *Morion walkeri* Putz., *Ann. Mus. Civ. Nat. Genova* : 216.

1880. *Morion subconvexum* Chaud., *Bull. Soc. Imp. Nat. Moscou*, 1 : 340.

*Material examined* : 1 ex., Namdhapa, 19.iv.1981, S. Biswas coll.

*Distribution* : Throughout South East Asia.

## Tribe : HARPALINI

8. *Dioryche torta* Macleay

1825. *Dioryche torta* Macleay, *Ann. Jav.* : 21 ; 1935. Hope, *Col. Man.*, tab. 2, fig. 4 ; 1926. Andr., *Ent. month. Mag.* : 68.

1829. *Platymetopus amoena* Dejean, *Sp. Gen. Col.*, 4 : 73 ; 1924. Andr. *Ann. Mag. Nat. Hist. Soc.* (9)15 : 59.

1889. *Platymelopus laetula* Bates, *Ann. Soc. Ent. France* : 270 ; 1921. Andr. *Trans. ent. Soc. London* : 177.

*Material examined* : 3 exs., Gibbonland, 29.iv.1981, S. Biswas coll. ; 1 ex., Zero Camp, 8.iv.1981.

*Distribution* : India, Srilanka, Burma, Malay Peninsula, Java, Sumatra, Borneo, Indo-China and Formosa.

9. *Harpalus (Perdileus) indicus* Bates

1891. *Harpalus indicus* Bates, *Comp. Soc. Ent. Belgique* : 332. 1926. Andr. *Ent. month. Mag.* : 68.

1930. *Ophonus (Perdilens) indicus*, Andr., *Cat. Ind. Insects*. Part 18.—Carabidae : 244.

*Material examined* : 1 ex., Namdhapa, 19.iv.1981, S. Biswas coll.

*Distribution* : Andrewes (1930) recorded its distribution as throughout Himalayan tract from Kashmir to Bhutan. This species is first time recorded from Arunachal Pradesh and with this record its distribution is extended to the remote east of India.

*Remarks* : Andrewes (1930) placed this species under the genus *Ophonus* with the subgenus *Perdileus*. Habu (1973) placed the subgenus *Perdilens* under *Harpalus* and considers, [as also Ball & Anderson 1962] *Ophonus*, which is characterised by the ciliate labrum, mandibles and eyes, as the subgenus of *Harpalus*.

### 9. *Harpalus* (? *Harpalus*) *karenius* Bates

1892. *Harpalus karenius* Bates, *Ann. Mus. Civ. Nat. Genova*, 32 : 341 ; 1930. Andr. *Cat. Indian Insects*. Part 18.—Carabidae : 197.

*Material examined* : 2 exs., Gibbon land, 29.ix.1981, S. Biswas coll ; 7 exs., Namdhapa, 22.iv.1981, S. Biswas coll. ; 1 ex., Deban, 6.iv.1931, S. Biswas coll.

*Distribution* : India : Meghalaya : Shillong, Khasi Hills ; Arunachal Pradesh : Rotung, Yambung and as above ; Himachal Pradesh : Simla. Burma : Karen Hills, Ruby Mines ; Tonken, Cambodia.

*Remarks* : Bates (1892) placed this species under the genus *Harpalus* with doubt. Andrewes (*in lit.*) placed this species under *Harpalus s. str.* But this species appears to belong to some unknown subgenus by having extended frontal impression and glabrous pasaglossae. The generic status of this species will be dealt will in some other paper.

### 10. *Stenolophus* (*Egadroma*) *smaragdulus* (F.)

1798. *Carabus smaragdulus* Fabricius, *Suppl. Ent. Syst.* : 60.

1829. *Stenolophus smaragdulus*, Dejean, *Sp. Gen. Col.*, 14 : 418.

1930. *Stenolophus smaragdulus*, Andr., *Cat. Indian Insects*, Part 18,—Carabidae : 318.

1973. *Stenolophus* (*Egadroma*) *smaragdulus*, Habu, *Fauna Japonica, Carabidae ; Harpilini* : 377.

*Material examined* ; 2 exs., Miao, 5.v.1981, S. Biswas coll.

*Distribution* : Throughout the whole of South East Asia, extending from Japan in the North to Queensland in the South.

*Remarks* : This is very common and widely distributed species. Many names have been assigned to it by different authors which will be seen in Andrewes' (1930) Catalogue and are not repeated here.

Tribe : PANAGAEINI

12. *Craspedophorus gracilipes* Bates1892. *Epicosmus gracilipes* Bates, *Ann. Mus. Civ. Nat. Genova*, 32 : 302.1930. *Craspedophorus gracilipes* Andrewes, *Cat. Indian Insects*. Part 18.—*Carabidae* : 135.*Material examined* : 1 ex., Zero Camp, 8.ix.1981, S. Biswas coll.*Distribution* : India : Assam : Sadiya ; Arunachal Pradesh : Noa Dehing and Namdhapa. Burma : Bhamo ; Yunnan.

Tribe : CHLAENIINI

13. *Chlaenius (Chlaenioctenus) eneides* Bates1892. *Chlaenius (Chlaenioctenus) eneides* Bates, *Ann. Mus. Civ. Nat. Genova*, 32 : 310 (note).1930. *Chlaenius (chlaenioctenus) eneides*, Andrewes, *Cat. Indian Insects*., Part 18.—*Carabidae* : 91.*Material examined* : 1 ex., Zero Camp, 8.iv.1981, S. Biswas coll.*Distribution* : India : 'Assam' ; Arunachal Pradesh : Namdhapa.*Remarks* : This species is first time recorded after its description.

Tribe : LEBIINI

14. *Catascopus elegans* Weber1801. *Elarphus elegans* Weber, *Obs. Ent.* : 45.1801. *Carabus elegans* F., *Syst. Eleuth.*, 1 : 184.1938. *Catascopus elegans*, Hope, *Col. Man.* 2 : 78.*Material examined* : 1 ex., Gibbon land, 3.v.1981, S. Biswas coll.*Distribution* : India : Meghalaya : Khasi Hills ; West Bengal : Sundarbans ; Andaman and Nicobar Islands ; Arunachal Pradesh : as above and Sikkim : Rajabhat Kawa. Indo-China, Thailand, Malaya, Australia, Solomon Is., Burma (Thagata).

This is a new record from Arunachal Pradesh.

15. *Catascopus facialis* Wiedmann1819. *Carabus facialis* Wied., *Zool. Mag.*, 1 : 165.1825. *Catascopus facialis*, Dejean, *Sp. Gen. Col.*, 1 : 329.1846. *Catascopus facialis*, Schm. Goeb., *Faun. Col. Birm.* : 81.*Material examined* : 1 ex., Zero Camp, 8.iv.1981, S. Biswas coll.

*Distribution* : India : Throughout North East India and Andaman Is. Malaya, Thailand, Yunnan, Sarawaw, Malacca, and Indo-China.

*Remarks* : This is a widely spread species and many name including some varieties have been assigned to it by different authors which will be seen in Andrewes' (1930) Catalogue and are not repeated here.

### 16. *Catascopus regalis* Schm. Goeb.

1846. *Catascopus regalis* Schm. Goeb. *Faun. Col. Birm.* : 84.

1923. *Catascopus regalis*, Andr., *Trans. ent. Soc. London* : 49 ; 1930. *Ibid, Catalogue of Indian Insects. Part 18.—Carabidae* : 79.

*Material examined* : 5 exs., Hornbill, 16.iv.1981, S. Biswas coll.

*Distribution* : India : Meghalaya : Khasi Hills ; Nagaland : Naga Hills ; Arunachal Pradesh : Dikrang, Silonibari, Dejeo, Rotung, Kobo. Bengal : Lower Tondu ; Sikkim : Gopaldhara ; Andaman and Nicobar Is. Bangladesh : Sylhet ; Burma : Karen Hills, Tharrawddy, Thagata, Tavoy ; Laos and Tonkin.

### 17. *Catascopus violaceus* Schm. Goeb.

1846. *Catascopus violaceus* Schm. Goeb., *Faun. Col. Birm.* : 82.

1854. *Catascopus cyanipennis* Chaudoir, *Bull. Soc. Imp. Nat. Moscou*, 1 : 30.

*Material examined* : 2 exs., Zero camp, 8.iv.1981, S. Biswas coll. ; 1 ex., Gibbon land, 3.v.1981, S. Biswas coll.

*Distribution* : India : W. B. : Rajabhatkawa ; Sikkim and Assam. Throughout Burma and Malay Peninsula.

### 18. *Coptodera ? interrupta*, Schm. Goeb.

1846. *Coptodera interrupta* Schm. Goeb., *Fauna Col. Birm.* : 53 ; 1892. Bates, *Ann. Mus. Civ. Nat. Genova*, 32 : 411.

1846. *Coptodera elegantula* Schm. Goeb. *Fauna Col. Birm.* : 54 ; 1923. Andr. *Trans. ent. Soc. London* : 30.

*Material examined* : 13 exs., Hornbill, 14.iv.1981, S. Biswas coll.

*Distribution* : India : W. B. : Darjeeling dist., Pashok, Nomsoo, Nurbong, Mirik ; U. P. : Dehra Dun, Kali valley (Almora) ; Tamilnadu Nilgiri Hills ; Arunachal Pradesh : Namdapha. S. Srilanka : Matale : Anuradhapura, Horawupotana. Burma : Teinzo, Shwegu, Palon, Pinwe, Tharrawaddy, Kawkareik ; Malay Pen., Laos, Tonkin and Sarawak.



This is a new record from Arunachal Pradesh.

*Remarks* : The specimens before us quite agree with the description of Schmidt-Goebel (1846) and provisionally placed under *interrupta* with some hesitation. As we have not yet seen any specimen of *interrupta* this determination could not be confirmed.

### 19. *Mochtherus tetraspilosus* Macleay

1825. *Dromius tetraspilosus* Macleay, *Ann. Jav.* : 25.

1869. *Mochtherus tetraspilosus*, chandoir, *Ann. Soc. ent. Belgique*, 12 : 241.

*Material examined* : 1 ex., Hornbill, 14.iv.1981, S. Biswas coll.

*Distribution* : Throughout India (including Andaman Is.), Ceylon and Burma. This is also recorded from Malay Peninsula and Archipelago, Philippine Is. Java, Sumatra, Tonkin, Laos and Formosa.

*Remarks* : This is a widely spread species. Other names attributed to this species are not repeated here.

### 20. *Peripristus ater* (Cast.)

1835. *Thyreopterus ater* Cast, *Etud. Ent.* : 149 ; 1846. Schm. Gaeb., *Fauna Col. Birm.* : 79.

1869. *Peripristus ater*, Chaudoir, *Ann. Soc. ent. Belgique*, 12 : 136.

*Material examined* : 1 ex., Namdhapa, 21.iv.1981, S. Biswas coll.

*Distribution* : India : Arunachal Pradesh : Kobo and above W. B. : Kalimpong, Poshok ; Sikkim : Gopaldhara, Tamilnadu, Nilgiri and Anaimalai Hills ; Kerala : Cochin, Parombikulam ; Nicobar Is. Burma : Bhamo, Katha, Shwegu, Shwegyin, Malewoon, Karen Hills, Thagata, Tena Serrim. Malay Penin, Thailand, Vietnam, Sumatra, Java and Borneo.

### Tribe : HELLIJONINI

### 21. *Macrocheilus trimaculatus* (Oliver)

1790. *Carabus 3-maculatus* Oliv., *Enc. Meth.* : 347, tab. 179, fig. 11.

1919. *Macrocheilus trimaculatus*, Andrewes, *Trans. ent. Soc. London* : 129.

*Material examined* : 2 exs., Zero Camp, 8.iv.1981, S. Biswas coll.

*Distribution* : Throughout India, Ceylon and Burma. Laos, Tonkin, Philippine Is., Hong Kong.

*Remarks* : This is also common and widely distributed species.

Longlist of synonyms given in Andrewes' (1930) Catalogue are not repeated here.

Tribe : ORTHOGONINI

22. *Hexachaetus angulatus* (Schm. Goeb.)

1846. *Orthogonius angulatus* Schm. Goeb. *Fauna Col. Birm.* : 58 ; Bates, *Ann. Mus. Civ. Nat. Genova*, 32 : 401.  
 1871. *Hexachaetus angulatus*, Chaudoir, *Ann. Soc. ent. Belgique*, 16 : 110.

*Material examined* : 1 ex., Gibbon land, 2-5.v.1981, S. Biswas coll.

*Distribution* : India : Arunachal Pradesh : Namdhapa. Burma : Karen Hills, Maymyo, Tenasserim, Derak, Penang ; Laos, Tonkin.  
 This species and genus is first time recorded from India.

SUMMARY

All the 22 species of Carabidae (incl. Cicindelidae) are first time recorded from Namdhapa (Arunachal Pradesh). *Clivina arunachalensis* is described as new to science. Genus *Hexachaetus* Chaudoir with the species *H. angulatus* (Schm. Goeb.) and the species *Caelostomus innermis* (Bates) are first time recorded from India. The species *Tricondyla macrodera* Chaudoir, *Clivina Westwoodi* Dejean, *Harpalus* (Perdileus) *indicus* Bates, *Catascopus elegans* (F.) and *Coptodera interrupta* are first time recorded from Arunachal Pradesh.

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