

INDIAN SPECIES OF GENUS *SCOLOPENDRA* LINN, (CHILOPODA :
SCOLOPENDRIDAE) WITH DESCRIPTION OF A NEW SPECIES

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INTRODUCTION

In India genus *Scolopendra* is, at present, represented by twenty species, including the new species dealt in the present communication. It may be mentioned that Lewis (1986) has synonymised the genus *Trachycormocephalus* Kraepelin with *Scolopendra* Linn. Accordingly the present authors treat the known Indian species of the genus *Trachycormocephalus* as new combinations with the genus *Scolopendra*. Out of the twenty species reported *Scolopendra clypeata* Fabricius, *S. dorsalis* Fabricius and *S. indica* Meinert are *nomen nudum*. While *S. cingulata* and *S. heros* were recorded by Sundara Rajulu (1965, 1967) from South India and by Ahmed (1980) from Andaman. These records remain doubtful since the former is found exclusively in Europe and the latter in America. Therefore, a key to the identification of 15 Indian species, in good standing, has only been presented.

SYSTEMATIC ACCOUNT

1. *Scolopendra morsitans* Linn., 1758

1758. *S. morsitans*, Linnaeus, *Syst. nat.*, 10 : 638.

Distribution: Assam, Andhra Pradesh, Arunachal Pradesh, A. & N. Is., Bihar, West Bengal, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Manipur, Meghalaya, Mizoram, Maharashtra, Madhya Pradesh, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura and Uttar Pradesh (Attems, 1930 ; Jangi and Dass, 1984 ; Khanna, 1987, 1994 and 1995).

2. *Scolopendra subspinipes de haani* Brandt, 1840

1840. *S. de haani*, Brandt, *Bull. Ac. Sci.*, 7 : 159.

Distribution : Assam, A. & N. Is., Karnataka, Kerala, Madhya Pradesh, Tamil Nadu, Uttar Pradesh and West Bengal (Attems, 1930 ; Jangi and Dass, 1984).

3. *Scolopendra hardwickei* Newport, 1844

1844. *S. hardwickei* Newport, *Ann. nat. Hist.*, 13 : 97.

Distribution : Andhra Pradesh, A. & N. Is., Karnataka, Maharashtra, Tamil Nadu and West Bengal [Attems, 1930 ; Ahmed, 1980 ; Jangi and Dass, 1984 and Khanna (unpublished record)].

4. *Scolopendra amazonica* Bücherl, 1946

1946. *Scolopendra morsitans amazonica*, Bücherl, W., *Mem. Inst. Butantan*, 19 : 135-137.

Distribution : A. & N. Is., Madhya Pradesh, Maharashtra, Gujarat and Uttar Pradesh. [Jangi, 1955 ; Jangi and Dass, 1984 ; Ahmed 1980, 1983 ; Khanna and Tripathi, 1985 and Khanna (unpublished record)].

5. *Scolopendra valida* Lucas, 1840

1840. *S. valida*+*angusta*, Lucas, *Webb & Berthelot Canar*, 211 ent : 49.

Distribution : Rajasthan (Attems, 1930 and Khanna, 1977).

6. *Scolopendra mazbii* Gravely, 1912

1912. *S. mazbii* Gravely, *Rec. Indian Mus.*, 7 (4) : 415-417.

Distribution : Himachal Pradesh (Gravely, 1912).

7. *Scolopendra clypeata* Fabricius, 1793 (Nomen nudum)

1793. *S. clypeata*, Fabricius, *Ent. Syst.*, 2 : 391.

Distribution : Tamil Nadu (Tranquebar) (Attems, 1930).

8. *Scolopendra dorsalis* Fabricius, 1793 (Nomen nudum)

1793. *S. dorsalis*, Fabricius, *Ent. syst.*, 2 : 390.

Distribution : Tamil Nadu (Tranquebar) (Attems, 1930).

9. *Scolopendra cingulata* Latreille, 1789

1789. *S. morsitans*, Latreille, *Linn. ent.*, 4 : 1.

Distribution : S. India (?) ; A. & N. Is. (Ahmed, 1980 and Sundara Rajulu 1965).

10. *Scolopendra andhrens* Jangi and Dass, 1984

1984. *S. andhrens*, Jangi and Dass, *J. Scient. Ind. Res.*, 43 : 30-31.

Distribution : Andhra Pradesh, Maharashtra (Jangi and Dass, 1984).

11. *Scolopendra heros* Girard, 1853

1853. *S. heros*, Girard, *Nat. Hist. Red River*, 27 : 18.

Distribution : South India (?) (Sundara Rajulu, 1965).

12. *Scolopendra ellorens* Jangi and Dass, 1984

1984. *S. ellorens*, Jangi and Dass, *J. Scient. Ind. Res.*, 43 : 31-32.

Distribution : Maharashtra (Jangi and Dass, 1984).

13. *Scolopendra punensis* Jangi and Dass, 1984

1984. *Scolopendra punensis*, Jangi and Dass, *J. Scient. Ind. Res.*, 43 : 32.

Distribution : Maharashtra (Jangi and Dass, 1984).

14. *Scolopendra indica* Meinert, 1886 (Nomen nudum)

1886. *S. Indica*, Meinert, *P. Amer. phil. Soc.*, 23 : 204.

Distribution : Haryana, Himachal Pradesh (Attems, 1930).

15. *Scolopendra indiae* (Chamberlin) 1914 new comb.

1914. *Trachycormocephalus indiae*, Chamberlin, *Ent. News., Philad.*, 25 : 390.

Distribution : Orissa, Rajasthan and Maharashtra (Attems, 1930 ; Vazirani and Khanna, 1977 ; Khanna, 1977 and Jangi and Dass, 1984).

16. *Scolopendra occidentalis* (Attems, 1909) new comb.

1909. *Trachycormocephalus occidentalis*, Attems, *Denk. Ges., Jena*, 14 : 14.

Distribution : Bihar (Attems, 1930 and Jangi, 1955).

17. *Scolopendra mirabilis* (Porath), 1876, new comb.

1876. *Cormocephalus mirabilis*, Porath, *Bih. Svensk. Ak.*, 4 (7) : 18.

1903. *Trachycormocephalus mirabilis*, Kraepelin, *Mitt. Mus.*, Hamburg, 20 : 219.

Distribution : Rajasthan and Maharashtra (Khanna, 1977 and Yadav, in press).

18. *Scolopendra nudus* (Jangi and Dass), 1980 new comb.

1980. *Trachycormocephalus nudus*, Jangi and Dass, *Ent. Mon. Mag.* 116 : 67-70.

Distribution : Delhi (Jangi and Dass, 1980 ; Khanna, 1997).

19. *Scolopendra paranudus* (Khanna and Tripathi), 1987, new comb.

1987. *Trachycormocephalus paranudus*, Khanna and Tripathi, *Boll. Soc. ent. ital.*, 119 (2) : 91-93.

Distribution : Haryana (Khanna and Tripathi, 1987).

20. *Scolopendra jangii* sp. nov. (Fig. 1—9)

Description :

Body length : 60 mm. (adult male)

Colour : Antennae, head and tergite olive green with purple tinge. Legs and sternites brownish yellow.

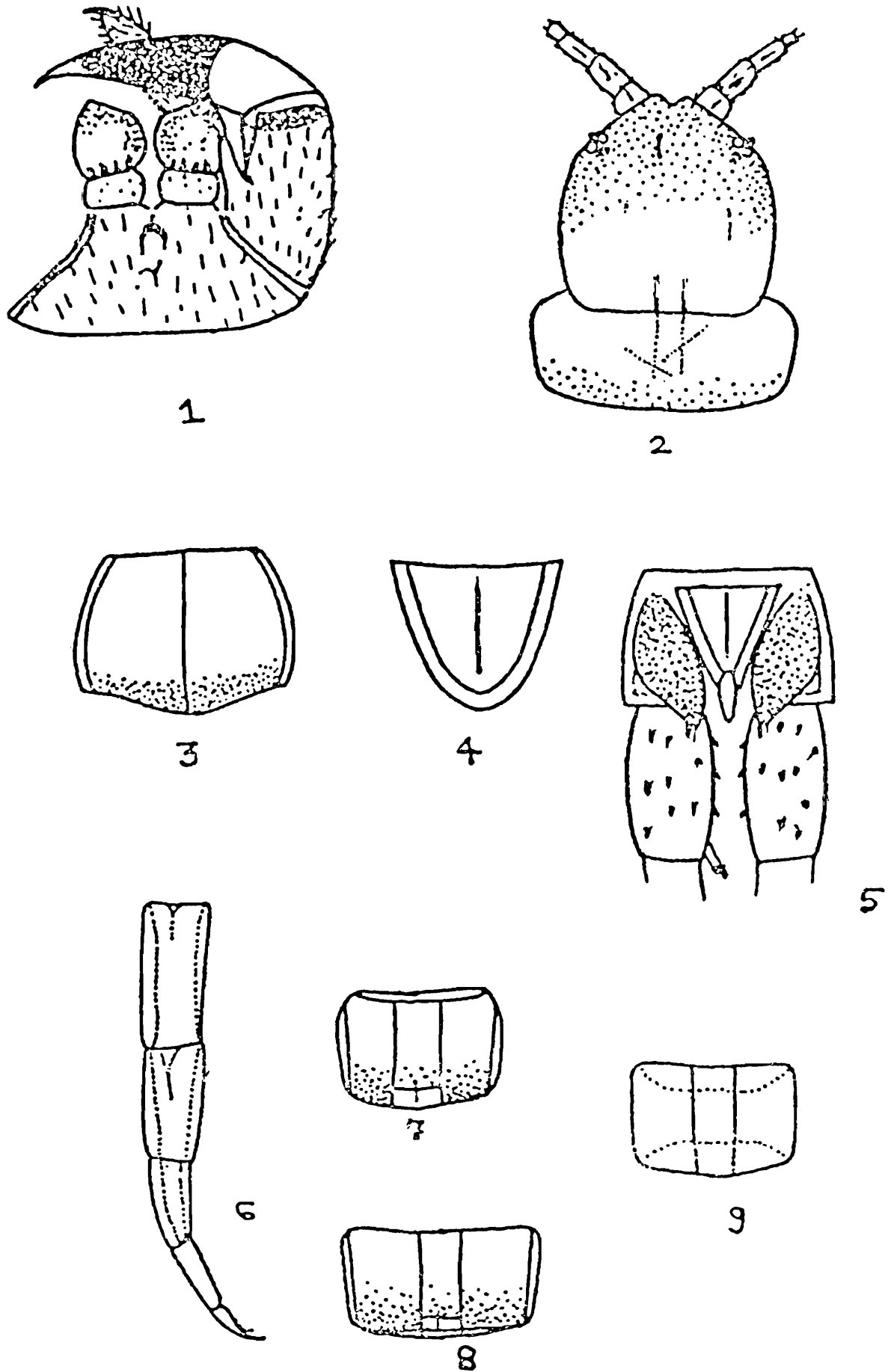
Antennae : Composed of 19 segments with its five basal segments glabrous, flat and wide, remaining pilose and cylindrical. Reflexed antennae reaching back to the IIIrd tergal segment.

Cephalic Plate : Slightly longer than wide and flat ; anteriorly granulose ; feeble median longitudinal furrows visible ; posteriorly the plate bears paramedian longitudinal groove but lacks basal plates. The cephalic plate slightly overlapping Ist tergal segment.

Tergites : Smooth anteriorly but granulose on posterior body segments ; Ist tergite raised with paramedian sutures irregular ; 2-20 with complete sutures, slightly divergent posteriorly on segment 10-14th. Endtergite with a median suture and convexed posteriorly. Emargination of segments begins from 16th tergite.

Sternites : 3-20 with complete paramedian longitudinal furrows ; endsternite longer than wide, triangular in shape ; lateral margins tapering, posteriorly rounded and has a median sulcus also.

Maxillipedes : Coxosternal plate hirsute, broader than long ; prefemur hirsute ; dental plate with 4+4 conical teeth ; median dental plate broader than long ; base of the dental plate with a small median groove ; prefemoral process short and dentate.



Scolopendra jangii sp. nov. Fig. 1 : Coxosternum ; Fig. 2 : Cephalic plate and Ist Tergum-Dorsal View ; Fig. 3 : Endtergite ; Fig. 4 : Endsternite ; Fig. 5 : Endsternite, Coxopleurae and anal legs prefemur ; Fig. 6 : Anal leg—Dorsal View ; Fig. 7 : 17th Tergite ; Fig. 8 : 20th Tergite ; Fig. 9 : Sternal segment showing furrows.

Coxoplurae : Short coxopleural process sparsely punctate with 4 spines at its apex.

Walking legs : 1-20 pair of walking legs with 2 spurs to the claw ; 2-19 with one spur to the 1st tarsal segment ; prefemur of the endlegs ventrally with 3, 3, 2 spines on the left leg and 1, 3, 4, 1 spines on the right leg with 4 dorsal spines. Prefemoral process with 3 spines. Prefemur, femur and tibia flat dorsally and emarginate as in the males of *Scolopendra morsitans*.

Material examined : **Holotype** : India : Maharashtra, Pune Distt., Singhad Fort, Ca. 20 Kms SW of Pune (Lat. 18°22' N and 73°46' E Long.) ; Alt. 1440m above MSL. ; 16.xi.1979, 1 ex., K. Mathew.

The holotype will be deposited in the National Zoological Collection of Zoological Survey of India.

Affinities : *Scolopendra jangii* sp. nov. resembles *S. amazonica* Bücherl in lacking a tarsal spur on 20th pair of legs and also to some extent in the arrangement of spines on the anal leg prefemurs. However, it differs from *amazonica*, in having paramedian longitudinal sutures posteriorly on the cephalic plate, the raised 1st tergal segment with irregular sutures and absence of tarsal spur on 1st pair of legs.

Note : The species has been named after late Dr. B. S. Jangi, a pioneer worker on Indian Myriapodology.

Key to the known Indian species of the genus *Scolopendra* Linn

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|--|-----|---------------------------------------|----|
| 1. 1st tergite with a deeply dissected curved furrow present anteriorly | ... | | |
| | | <i>Scolopendra valida</i> Lucas | |
| None of the tergite with such furrow | ... | ... | 2. |
| 2. Alternate dark green and brownish yellow tergal segments giving remarkably a banded appearance to the trunk | ... | <i>Scolopendra hardwickei</i> Newport | |
| No such colour pattern on tergites | ... | ... | 3. |
| 3. Anal leg prefemur, femur and tibia in adult males dorsally flat and emarginate ; prefemur generally bears 9 spines in 3 rows of 3 spines each | ... | | 4. |
| No such secondary sexual character visible | ... | ... | 6. |
| 4. 20th pair of walking legs with a tarsal spur | ... | <i>Scolopendra morsitans</i> Linn. | |
| 20th pair or walking legs without tarsal spur | ... | ... | 5. |
| 5. Cephalic plate without any sutures or furrows | ... | <i>Scolopendra amazonica</i> Bücherl | |
| Cephalic plate with a posterior median sutures | ... | <i>Scolopendra jangii</i> sp. nov. | |

6. 21st tergite with a median sulcus 7.
 21st tergite without median sulcus 11.
7. Emargination of tergites begins earlier than endtergite 8.
 Only endtergite laterally emarginate ... *Scolopendra indiae* (Chamb.)
8. Cephalic plate without paramedian longitudinal furrows but with a distinctly visible median furrow reaching up to the middle or base of antennae ; Ist pair of legs with 2, 2-19th with 1 tarsal spur ... *Scolopendra occidentalis* (Attems)
 Cephalic plate with or without paramedian longitudinal furrows but never with a median sulcus ; 1-19th pair of legs with 1 tarsal spur 9.
9. 21st pair of legs without spurs to the terminal claws....*Scolopendra mirabilis* (Porath)
 21st pair of legs with single spur present laterally 10.
10. Cephalic plate granulose, without longitudinal furrows ; Ist tarsus of anal legs sparsely plumose ... *Scolopendra paranudus* (Khanna and Tripathi)
 Cephalic plate smooth with a pair of longitudinal furrows ; Ist tarsus of anal legs smooth *Scolopendra nudus* (Jangi and Dass)
11. Process of coxopleura at the apex with 0-2 spines ; anal leg prefemur with 1-6 spines 12.
 Process of coxopleura with 5-7 spines ; anal leg prefemur with as many as 26 spines *Scolopendra ellorensis* Jangi and Dass
12. Process of coxopleura at the apex with 0-1 spine 13.
 Process of coxopleura at the apex with 2 spines 14.
13. No spine at the apex of coxopleura ... *Scolopendra mazbii* Gravely
 Only one spine at the apex of coxopleura ... *Scolopendra punensis* Jangi and Dass.
14. Emargination of tergites begins from 18th segment
 *Scolopendra andhrensis* Jangi and Dass
 Emargination of tergites begins from 7th segment ; 2-20 sternal segments with complete paramedian longitudinal furrows
 *Scolopendra subspinipes dehanni* Brandt

SUMMARY

The present paper deals with a new species, *Scolopendra jangii* sp. nov. collected from Pune, Maharashtra, India. A brief account of the species of genus *Scolopendra* Linnaeus in India has been given, besides a key.

ACKNOWLEDGEMENTS

The authors are thankful to the Director, Zoological Survey of India, Calcutta, for his kind permission to undertake the studies. They are also thankful to the Officer-in Charge(s) of Northern Regional Station, Dehra Dun and Western Regional Station, Pune for providing various facilities.

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