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FURTHER RECORDS OF EARTHWORMS FROM THE ANDAMAN AND NICOBAR ISLANDS, INDIA

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(With 2 Tables)

INTRODUCTION

Soota and Julka (1970) and Julka and Halder (1975) dealt with some earthworms from the Andaman and Nicobar Islands. Since then some more material comprising ten species belonging to nine genera spread over five families has been examined. The present paper supplements the information given in the earlier paper. Six among the ten species reported here are recorded for the first time from these islands. Additional data about interesting variations in these species have also been furnished along with descriptive notes where necessary. The classification followed here is after Jamieson (1971), Sims and Easton (1972); Gates (1972) and Easton (1976).

Family MONILIGASTRIDAE

Drawida nepalensis Michaelsen, 1907

Material : 5 exs., Z. S. I. reg. no. An 652/1, locality — Govt. Agriculture garden, Camorta Is., Nicobars, 5.x.1972, Coll. *K. Reddiah* · 2 exs., Z. S. I. reg. no. An 653/1, locality — Govt. rest house compound, Camorta Is., Nicobars, 5.x.1972, Coll. *K. Reddiah* ; 1 ex. ; Z. S. I. reg. no. An 654/1, Nancowry village, Nancowry Is., Nicobars, 5.x.1972, Coll. *K. Reddiah* ; 3 exs., Z. S. I. reg. no. An 655/1 locality — garden nr. Civil Hospital, Camorta Is., Nicobars, 11.x.1972 ; 1 ex, Z. S. I. reg. no. An 656/1, locality — Bara balu village nr. Chiria Tapu, S. Andamans, 27.x.1972, Coll. *K. Reddiah* ; 1 ex., Z. S. I. reg. no. An 657/1, locality — Govt. rest house compound, Delanipur, Port Blair, S. Andamans, 1.xi. 1972, Coll. *K. Reddiah*. 3 exs., Z. S. I. reg. no. An 1059/1, locality — Mathura, S. Andamans, 20.v.1978, Coll. *M. Sil*.

Remarks : The following morphological variations were noted in these specimens. The single specimen from Chiria Tapu is well clitellate ; genital markings as two broad transversely oval midventral cushions on ix and x, the anterior cushion smaller than the posterior. The single specimen from Nancowry Is. is also clitellate ; genital markings as 2 pairs of half moon — shaped ventral cushions on x and xi, the anterior pair larger than the posterior.

This species is recorded for the first time from the Nicobar Islands.

Family MEGASCOLECIDAE

Pontodrilus bermudensis Beddard, 1891

Material : 1 ex., Z. S. I. reg. no. An 651/1, locality—Passa Bridge, Car Nicobar, 26.iii.1959, Coll. *K. K. Tiwari* ; 4 exs., Z. S. I. reg. no. An 659/1, locality — East Katchal Is., Nicobars ; 28.i.1976, Coll. *G. Ramakrishna*.

Lampito mauritii Kinberg, 1867

Material : 21 exs., Z. S. I. reg. no. An 660/1, locality — Nancowry village, Nancowry Is., Nicobars, 6.x.1972, Coll. *K. Reddiah* ; 37 exs., Z. S. I. reg. no. An 661/1, locality — nr. Camorta jetty, Camorta Is., Nicobars, 7.x.1972, Coll. *K. Reddiah*. 40 exs., Z. S. I. reg. no. An 662/1, locality — Andaman forest rest house compound, Chiria Tapu, S. Andamans, 26.x.1972, Coll. *K. Reddiah*. 1 ex., Z. S. I. reg. no. An 663/1, locality — Bara balu village nr. Chiria Tapu, S. Andamans, 27.x.1972, Coll. *K. Reddiah* ; 27 exs., Z. S. I. reg. no. An 664/1, locality - nr. Govt. rest house, Delanipur, Port Blair, S. Andamans, 1.xi.1972, Coll. *K. Reddiah*.

Remarks : This species is recorded for the first time from the Nicobar Islands.

Amynthas alexandri Beddard, 1900

Material : 3 exs., Z.S.I. reg. no. An 665/1, locality—Thobang village, Nancowry Is., Nicobars, 9. iii. 1972, Coll. *A. G. K. Menon*. 14 exs., Z.S.I. reg. no. An 1057/1, locality—Mathura, S. Andamans, 30. v. 1978, Coll.—*M. Sil*. The following data is of specimens from Nicobars.

Remarks : Genital markings as a pair of large circular discs with smooth surface, placed between papillae of male pores ; 6-8 setae intervene between discs (In one specimen there is also a seta in inner wall of each disc) ; faint ridges present laterally on both sides ; prostates much cut up in to lobes in xvii-xix ; cushions corresponding to discs present internal to prostates ; intestinal caecae originate from xxvi and extend up to xxiv ; spermathecal ampulla bulbous.

This species is recorded for the first time from the Nicobar Islands.

Amynthas osmastoni (Michaelsen, 1907)

Material : 1 ex., Z.S.I. reg. no. An 669/1, locality-Horticulture

and Zoological garden, Port Blair, S. Andamans, 27. xii. 1974, Coll. S. K. Bhattacharya. 1 ex., Z.S.I. reg. no. An 670/1, locality-Port Blair, 30. xii. 1974, Coll. S. K. Bhattacharya. 3 exs., Z.S.I. reg. no. An 1058/1, locality-Aniket, S. Andamans, 8. xii. 1977, Coll. M. Sil.

Remarks : The following morphological variations were noted in both the specimens from Port Blair. In one specimen, genital markings are as a pair of broad ventral cushions in *a* to *h*, postsetal on *x*, each covering $\frac{3}{5}$ of the segment. The cushions are rectangular with rounded angles, the right cushion with 125 porophores and the left with 140 porophores. There is also a porophore presetal on the right side of *x*. In the other specimen, the genital markings are as a pair of broad, transversely oval cushions in *c* to *h*, postsetal on *x*, each covering $\frac{2}{3}$ of the segment with 95 porophores on the right cushion and 90 on the left one.

***Metaphire peguana* (Rosa, 1890)**

Material : 2 ex., Z.S.I. reg. no. An 671/1, locality-Horticulture and Zoological garden, Port Blair, S. Andamans, 27. xii. 1974, Coll. S. K. Bhattacharya.

Remarks : This species is recorded for the first time from the Andaman Islands.

***Metapheretima elongata* (Perrier, 1872)**

Material : 9 exs., Z.S.I. reg. no. An 666/1, locality-Govt. rest house compound, Camorta Is., Nicobars, 5. x. 1972, Coll. K. Reddiah. 4 exs., Z.S.I. reg. no. An 667/1, locality-Govt. Agriculture garden, Camorta Is., Nicobars, 5. x. 1972 ; 7 exs., Z.S.I. reg. no. An 668/1, locality-Chiria Tapu village, S. Andamans, 28. x. 1972, Coll. K. Reddiah.

Remarks : The following abnormal variations in the number of spermathecae (Table 1) and the location of genital markings (Table 2) were noted in these specimens.

Table 1.—Variations in the number of spermathecae in *Metapheretima elongata* from the Andaman and Nicobar Islands.

Left side	Segment V		Left side	Segment VI		No. of specimens
	—	Right side		—	Right side	
0		0	0		0	9
1		2	2		0	1
2		0	0		0	1
0		1	0		0	1

1	0	0	1	1
3	4	3	4	1
4	4	4	4	1

Table 2.—Location of genital markings in *Metapheretima elongata* from the Andaman and Nicobar Islands.

Segment No.	No. of specimens
xix—xxii	1
xix—xxiii	9
xix—xxiii, absent on left side of xix.	1
xix—xxiii, absent on left side of xxi.	1
xix—xxiii, absent on right side of xxiii.	2
xix—xxiv, absent on right side of xix and on left side of xxiii and xxiv.	1

This species is recorded for the first time from the Nicobar Islands.

***Perionyx excavatus* Perrier, 1872**

Material : 16 exs., Z.S.I. reg. no. An 672/1, locality-Cowriaghat, S. Andamans, 11. iv. 1964, Coll. *B. S. Lamba*.

***Dichogaster bolau* (Michaelsen, 1891)**

Material : 1 ex., Z.S.I. reg. no. An 673/1, locality-Nancowry village, Nancowry Is., Nicobars, 6. x. 1972, Coll. *K. Reddiah*.

Family GLOSSOSCOLECIDAE

***Pontoscolex corethrurus* (Fr. Muller, 1857)**

Material : 12 exs., Z.S.I. reg. no. An 674/1, locality-Wright Myo, S. Andamans, 30. vii. 1972, Coll. *A. K. Mardal*. 7 exs., Z.S.I. reg. no. An 675/1, locality-Malacca village, Car Nicobar, 26. ix. 1972, Coll. *K. Reddiah*. 3 exs., Z.S.I. reg. no. An 676/1, locality-garden nr. Civil hospital, Camorta Is., Nicobars, 11. x. 1972, Coll. *K. Reddiah*.

Remarks : This species is recorded for the first time from the Nicobar Islands.