

ON A NEW GENUS *SPORONCHULOIDES* WITH NOTES ON  
*SPORONCHULUS* (COBB, 1917) PENNAK, 1953  
(MONONCHIDA : NEMATODA)\*

By

C. MOHANDAS† AND N. R. PRABHOO  
Department of Zoology, University of Kerala,  
Kariavattom, Kerala

(With 1 Text-figure)

A new genus *Sporonchuloides* allied to the genera *Actus* Baqri and Jairajpuri, 1973 and *Prionchulus* (Cobb, 1916) Wu & Hoeppli, 1929 is proposed to accommodate *Sporonchulus ibitensis* (Carvalho, 1951) Andrassy, 1958 and *S. coronatus* (Carvalho, 1956) Andrassy, 1958. The generic diagnosis of *Sporonchulus* (Cobb, 1917) Pennak, 1953 is emended.

A survey undertaken to bring to light various predatory nematodes inhabiting the soils of Kerala yielded among others *Sporonchulus ibitensis* (Carvalho, 1951) Andrassy, 1958. Study of the material revealed that this species differed significantly from other species of the genus *Sporonchulus* (Cobb, 1917) Pennak, 1953. Jairajpuri (1971) pointed out this difference and removed *S. ibitensis* and *S. coronatus* from the genus and remarked that these two species should be grouped under a separate genus. A new genus *Sporonchuloides* is proposed to accommodate *S. ibitensis* and *S. coronatus*, where two rows of denticles on subventral wall of stoma are arranged in longitudinal ribs, based on the studies of *S. ibitensis* from Kerala (Mohandas, 1972). The identity of the species has been confirmed by R. H. Mulvey (Personal communication) after examination of specimens from Sri Lanka from where *S. ibitensis* had been originally described. Baqri and Jairajpuri (1973) proposed a new genus *Actus* to accommodate those species of *Sporonchulus* in which denticles are arranged longitudinally on subventral wall of stoma, but without ribs. Due to these changes the genus *Sporonchulus* (*Sens. str.*)

---

\*Part of the Ph. D. thesis of the senior author approved by the University of Kerala.

† Present Address : Scientist S1 (Nematology) CPCRI Regional Station,  
Calicut 673 012 (Kerala).

is at present represented only by the type species *S. dentatus* and two others. Hence the generic diagnosis of the genus has been emended.

### **Sporonchulus** (*Sens. str.*)

#### *Emended diagnosis*

Dorsal tooth midway or anterior in buccal cavity opposed by numerous denticles which are irregularly arranged. Caudal glands and terminal opening present or absent. Tail conoid, ventrally arcuate. Male unknown.

Type species : *Sporonchulus dentatus* (Cobb, 1917) Andr ssy, 1958

Other species : *S. recessus* (Cobb, 1917) Mulvey, 1963

*S. vagabundus* Jairajpuri, 1971

### **Sporonchuloides** Gen. Nov.

*Diagnosis* : Dorsal tooth in anterior half of buccal cavity, opposed by numerous denticles arranged in longitudinal rows among which at least two are arranged in longitudinal ribs. Caudal glands and terminal opening present or absent. Tail conoid, ventrally arcuate. Male known only for the type species.

*Differential diagnosis* : This genus comes close to the genera *Prionchulus* in the presence of denticulate ribs and *Actus* in the presence of longitudinally arranged rows of denticles on sub ventral walls of stoma. From the former it could be distinguished by the additional row of longitudinally arranged denticles on the subventral wall and from the latter by the presence of longitudinal denticulate ribs.

*Systematic position* : As this genus resembles more to *Prionchulus* than to any other genera, it is being removed from the subfamily Sporonchulinae and family Mylonchulidae and placed under the family Mononchidae, close to the genus *Prionchulus*.

Type species : *Sporonchuloides ibitensis* (Carvalho, 1951) n. comb.

Syn. *Sporonchulus ibitensis* Carvalho, 1951

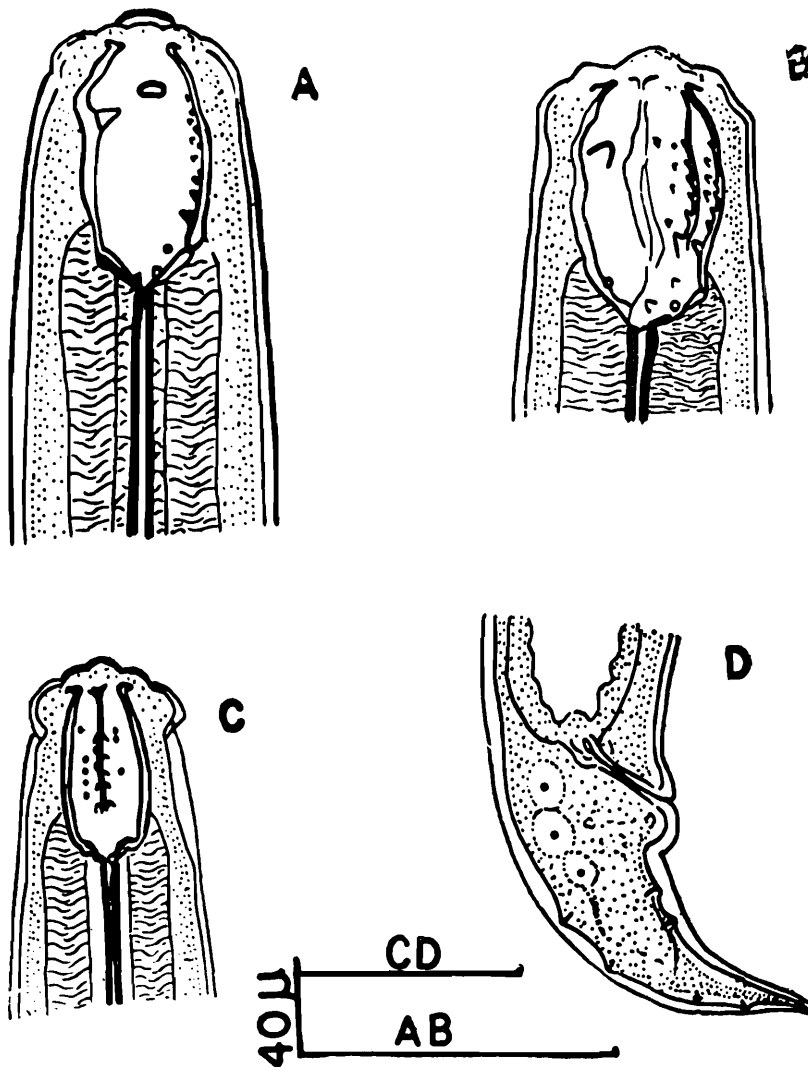
Other species : *Sporonchuloides coronatus* (Carvalho, 1956) n. comb.

Syn. *Sporonchulus coronatus* (Carvalho, 1956) Andr ssy, 1958.

***Sporonchuloides lbitensis* (Carvalho, 1951) N. Comb.**

(Text-fig. 1, A-D)

*Measurements* : 21 ♀♀ : L=1.24–1.43 mm ; a=20–28 ; b=3.9–4.4 ; c=23–28 ; c'=1.7–2.1 ; tail length 47–60  $\mu$ m, 3.6–4.3% of body length ; V=60–63 ; buccal cavity=14–18 $\times$ 28–30  $\mu$ m.



Text-fig. 1. *Sporonchuloides lbitensis* (Carvalho, 1951) N. Comb. A—Anterior end ; B—Dorsolateral view showing denticulate ribs ; C—Dorsoventral view ; D—Posterior end.

4 ♂♂ : L=1.18–1.28 mm ; a=27–30 ; b=3.8–4.0 ; c=23–24 ; c'=1.6–1.7 ; tail length=52–54  $\mu$ m, 4.2–4.4% of body length ; Spicules 30–35  $\mu$ m ; buccal cavity=15–16 $\times$ 30–31  $\mu$ m.

*Description* : Buccal cavity about twice as long as wide, dorsal tooth anterior, 20–21  $\mu$ m from base of stoma, opposed by four longitudinal rows of denticles of which the middle two rows are arranged each on a longitudinal rib. Oesophago-intestinal junction non-tuberculate. Female reproductive system didelphic, amphidelphic. Testes opposed and outstretched. Spicules slender, supplements 11–12, poorly developed. Tail short, elongate conoid and ventrally arcuate.

## ACKNOWLEDGEMENT

Thanks are due to late Prof. K. K. Nayar and to Prof. K. M. Alexander for providing encouragement and facilities and to the University of Kerala for providing financial assistance to the senior author.

## REFERENCES

- BAQRI, S. Z. AND JAIRAJPURI, M. S. 1973. The mononchs of EL Salvader with descriptions of two new genera *Actus* and *Paracrassibucca*. *Nematologica*, **19** : 326-333.
- JAIRAJPURI, M. S. 1971. Studies on Mononchida of India IV. The genera *Sporonchulus*, *Bathyodontus* and *Oionchus* (Nematoda). *Nematologica*, **17** : 407-412.
- MOHANDAS, C. 1972. First report of the males of *Sporonchulus ibitensis* (Carvalho, 1951) Andr assy, 1958 (Nematoda—Mylonchulidae). *Indian J. Nematol.*, **2** : 204-206.