

---

THE TAPEWORM "*CITTOTAENIA SANDGROUNDI*"  
TRANSFERRED TO *DIPLOGYNIA*<sup>1</sup>

HELEN EDITH DAVIS, University of Oklahoma, Norman

*Cittotaenia sandgroundi* was described by the writer (Davis 1944) from material collected in Java by Dr. J. H. Sandground in 1938. The cotype specimens (U. S. Nat. Mus. Helm. Coll., No.36899) comprising a single scolex and fragments of two strobilae had been presented to Professor Hughes.

We are gratefully indebted to Professor Jean G. Baer, Institut de Zoologie, Université de Neuchâtel, Suisse, for a personal communication concerning this worm. The following paragraph (slightly edited) is quoted from his letter.

"Your paper on *Cittotaenia sandgroundi* surprised me somewhat, as this worm does not appear to have the slightest relation to that genus. The presence of an unarmed rostellum, although the latter appears to have lost its hooks, is unknown among the anoplocephalids. On the other hand, the internal anatomy is typically '*Hymenolepis*.' If I may suggest the fact, your new tapeworm belongs to the genus *Diplogynia* Baer 1925, of which the so-far-only species was described by Maplestone in 1922 from the same group of hosts, viz., *Dendrocygna*."

We are compelled to agree with M. Baer's views. In our original study the existence of *Diplogynia* was overlooked, partly because that genus is described by Fuhrmann (1932) as having an armed rostellum, but mainly because we regarded the worm as belonging to the family Anoplocephalidae. In the family Hymenolepididae the genus is unusual in that the reproductive systems are completely double except for a common uterus. In his original diagnosis of the genus, Baer (1925), himself, describes the uterus as "unique et persistant sous forme d'un tube transversal . . ."

---

<sup>1</sup>Contribution No. 128 from the Department of Zoology, Oklahoma Agricultural and Mechanical College; prepared under the direction of E. Chester Hughes.

Specimens of the type species of *Diplogynia*, *D. oligorchis*, were first mentioned by Johnston (1913) who listed them as "*Diploposthe laevis* (Bloch)" from *Dendrocygna arcuata* in Queensland. These and other specimens from the same host species and locality were described by Maplestone (1922) as *Cotugnia oligorchis*; incidentally *Cotugnia* belongs to the family Davaineidae. The material was restudied and redescribed in considerable detail by Baer (1925) who designated the species as the type of a new genus, *Diplogynia*. It may be pointed out that in the hands of different authors *D. oligorchis* has been classified in four different families, three of which have been mentioned above. The fourth family is the Acoleidae to which the genus *Diploposthe* has been assigned by Meggitt (1924) and others.

If the form (*sandgroundi*) under discussion be regarded as distinct from *oligorchis* the genus *Diplogynia* Baer 1925 now contains three known species: *D. oligorchis* (Maplestone 1922) Baer 1925 from *Dendrocygna arcuata* in Australia, *D. americana* Olsen 1940 from *Butorides virescens* in Minnesota, and *Diplogynia sandgroundi* (Davis 1944) *mihi* from *Dendrocygna javanica* in Java.

*D. sandgroundi* resembles *D. oligorchis* closely but is apparently distinct; it differs from the latter as described by Maplestone and by Baer, chiefly, as follows. The strobila is apparently much more slenderly elongate; the rostellum, relatively speaking, is more than four times as large in linear measurements; the suckers are also larger; the rostellum is unarmed, although hooks may have been lost; the external seminal vesicle is very much smaller; the medial internal seminal vesicle is much larger; the ejaculatory duct is more nearly straight; the cirrus is distinctly conical rather than cylindrical; and the base of the everted cirrus is provided with a peculiar collarlike receptacle not mentioned in descriptions of *oligorchis*. *D. americana* is so markedly different from the Old World species that further discussion of it here is unwarranted.

#### LITERATURE CITED

- Baer, J. G. 1925. Quelques cestodes d'oiseaux nouveaux et peu connus. Bull. Soc. Neuchâtel. Sc. Nat. 49: 138-154.
- Davis, H. E. 1944. *Cittotaenia sandgroundi*, a new anoplocephalid cestode from a Javanese tree duck. J. Parasitol. 30: 241-244.
- Johnston, T. H. 1913. Cestoda and Acanthocephala. Rept. Aust. Inst. Trop. Med. 1911: 75-96.
- Fuhrmann, O. 1932. Les ténias des oiseaux. Mém. Univ. Neuchâtel. 8: 1-381.
- Maplestone, P. A. 1922. Notes on Australian cestodes. Ann Trop. Med. and Parasitol. 16: 55-60.
- Meggitt, F. J. 1924. The cestodes of mammals. London: Edw. Goldston.
- Olsen, O. W. 1940. *Diplogynia americana*, a new species of cestode (Hymenolepididae) from the eastern little green heron (*Butorides virescens virescens*) (Linn.). Tr. Am. Micr. Soc. 59: 183-186.