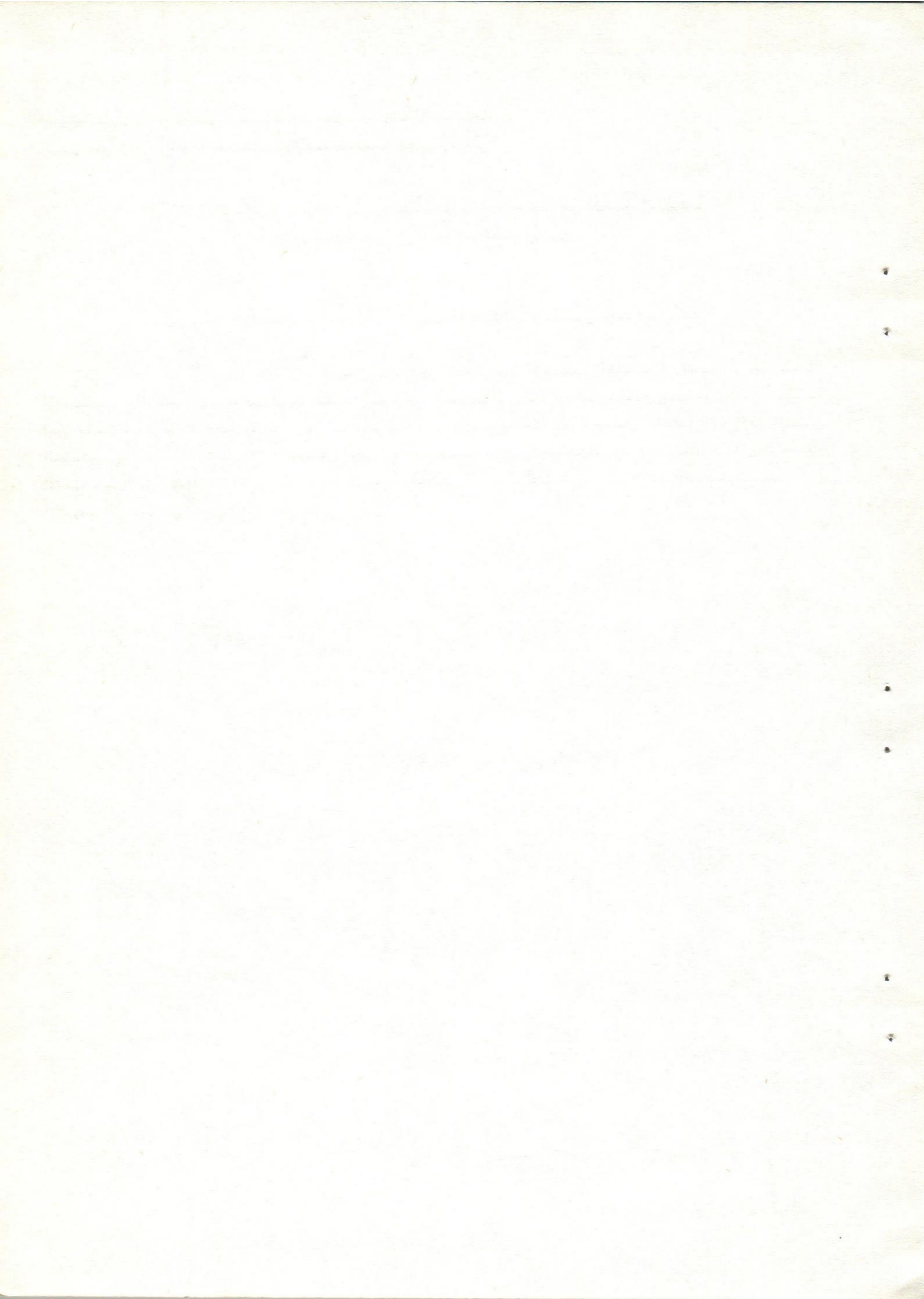


قسم : الطفليات - كلية الطب - جامعة أسيوط .
رئيس القسم : أ. د. / محفوظ عبد المجيد فهمي .

أيوميغاسيتس (أيوميغاسيتس) سبائينوزس (نوع جديد) من الديدان الورقية
في طائر الخضير المصري

محفوظ عبد المجيد ، رفعت خليفة ، عبد الرحمن محمد

وجد الباحثون دودة ورقية من جنس الأيوميغاسيتس في الأمعاء الغليظة (المستقيم) لطائر
الخضير المصري . ومقارنة الدودة الحالية بما سبق وصفه من هذا الجنس وجد
أنها تختلف عنهم جميعا في المقاييس النسبية ووضع وشكل الغدد التناسلية والعوائل
النهائية . وقد أطلق الباحثون اسم أيوميغاسيتس (أيوميغاسيتس) سبائينوزس على الدودة
الجديدة حيث أنها تتميز بأن جليدها مغطى بأشواك قوية تزداد كثافتها على
الثلث الأمامي من الجسم .



EUMEGACETES (EUMEGACETES) SPINOSUS N.SP.
(EUMEGACETIDAE: TREMATODA) FROM THE LITTLE GREEN EGYPTIAN BEE-WATER, MEROPS ORIENTALIS CLEOPATRA
(With One Table and One Figure)

By

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SUMMARY

Eumegacetes (Eumegacetes) spinosus n. sp. is described from the rectum of the little green Egyptian bee-water (Merops orientalis cleopatra). It is similar to Eumegacetes (Eumegacetes) upupae, but differs in certain morphological features. The present species is characterised by the presence of medium-size pointed spines covering the whole cuticle of the body.

INTRODUCTION

According to YAMAGUTI (1958) and JAISWAL and HUMAYN (1978), the genus Eumegacetes includes 26 species. EL-NAFFAR and KHALIFA (in press) added another two new species from Assiut (Upper Egypt) viz. Eumegacetes (Eumegacetes) upupae from the Egyptian hoopoe (Upupa epops major) and Eumegacetes (Eumegacetes) orientalis from the little green Egyptian bee-water (Merops orientalis cleopatra).

The present authors encountered a single specimen of Eumegacetidae Travassos, 1923 in the rectum of Merops orientalis cleopatra trapped from fruit garden near Assiut city. Examination of this worm proved that it belongs to hitherto unknown species. The taxonomic name Eumegacetes (Eumegacetes) spinosus is suggested for the present species.

MATERIAL AND METHODS

Only one specimen of the trematode was found in the rectum of Merops orientalis cleopatra. The worm was washed in saline, fixed in 10% formalin, stained in acetic acid alum carmine and mounted in Canada balsam. Measurements and camera lucida drawing were made from the mounted specimen.

RESULTS

Eumegacetes (Eumegacetes) spinosus n. sp.

Morphology:

Body is oval in shape, with the posterior end more tapering than the anterior. Cuticle is characteristically covered with conspicuous sharp spines which are more dense on the anterior third of the body (Fig.1). Measurements of different parts of the body are shown in Table 1. Oral and ventral suckers are voluminous; the latter is rounded in contour. Globular pharynx is just posterior to the oral sucker and the intestinal caeca are characteristically with club shaped termination. Two oval tests are situated at the level of the junction of the anterior third with the posterior two thirds of the body. They are intracaecal. Ovary is oval and is placed at the beginning of the body lateral to the median line. Genital pore lies lateral to the pharynx, just posterior to the oral sucker. Vitellaria are in the form of small follicles scattered in the lateral fields (partly covering the intestinal caeca). They extend from the level of the mid-testicular region to near the posterior extremity. Eggs are dark brown in colour, thick shelled and operculated. They measure 30-32.1 U in length and 14.5-16.3 U in width.

Host: Merops orientalis cleopatra.

Location: Rectum.

Locality: Assiut, Upper Egypt.

TABLE (1)

Comparison between the adults of *Eumegacetes (Eumegacetes) upupae* and *Eumegacetes (Eumegacetes) spinosus* n. sp.

	<i>E. (E) upupae</i>	<i>E. (E) spinosus</i>
Body cuticle	Smooth	Armed with sharp spines
Body length	2900 - 2954	2000 - 2310
Maximum breadth	1400 - 1500	1110 - 1150
Oral sucker	510 - 518 X 576 - 580	528 - 550 X 603 - 620
Ventral sucker	589 - 594 X 627 - 640	582 - 600 X 582 - 600
Pharynx	290 - 294 X 192 - 195	270 - 275 X 180 - 188
Left testis	380 - 384 X 307 - 310	252 - 260 X 210 - 216
Right testis	396 - 400 X 340 - 341	equal to the left testis
Position of testes	partially covering intestinal caeca	Totally intracacaecal
Ovary	243 - 250 X 210 - 216	150 - 153 X 120 - 127
Shape of intestine	Tubular	Club-shaped
Genital pore	Median, ventral to pharynx	Lateral to pharynx
Eggs	22.4 - 24 X 11.2 - 12.8	30 - 32.1 X 14.5 - 16.3
Host	<i>Upupa epops major</i>	<i>Merops orientalis cleopatra</i>

N. B. All measurements are in microns.

DISCUSSION

The encountered worm shares with *Eumegacetes (Eumegacetes) upupae* recorded by EL-NAFFAR and KHALFA (in press) in many characters. Table 1 shows the differential morphological features between the present species and *Eumegacetes (Eumegacetes) upupae*. The main differentiating points are:

- 1- The present species is covered with strong spines.
- 2- The gonads are smaller in the present species though the length of the two species is more or less equal.
- 3- The testes in the present material are intracaecal while in *E. (E) upupae* they are overlapping the caeca.
- 4- Terminal part of intestinal caeca is club-shaped in the present species.
- 5- The eggs in the present material are larger in size.
- 6- The hosts in the two species are different.

Accordingly, the species under discussion is different from the only very similar species. From all previously described species, it differs in relative measurements, shape and position of gonads as well as final hosts. The present authors, therefore, found it justifiable to create a new species for the present worm, suggesting the taxonomic name *Eumegacetes (Eumegacetes) spinosus* n. sp. for it.

REFERENCES

- El-Naffar, M.K. and Khalifa, R. (in press): On two new species of Eumegacetidae Travassos, 1923 (Trematoda) from wild birds in Assiut Province, Egypt. Acta parasit. Pol., in (press).
- Jaiswal, C.P. and Humayn, M.R.A. (1973): Investigation on the trematode fauna of Hyderabad, A.P. II. Parasites of birds- *Eumegacetes (Anaterovitelum) centropus* sp. n. from a 'Coulcal' the cro-pheasant, *Centropus sinensis*. Proc. Helminth. Soc. Washington, 40, 52-56.
- Yamaguti, S. (1958): Systema Helminthum. I. Digenetic Trematodes of vertebrates. New York. Interscience Publishers; 979 pp.

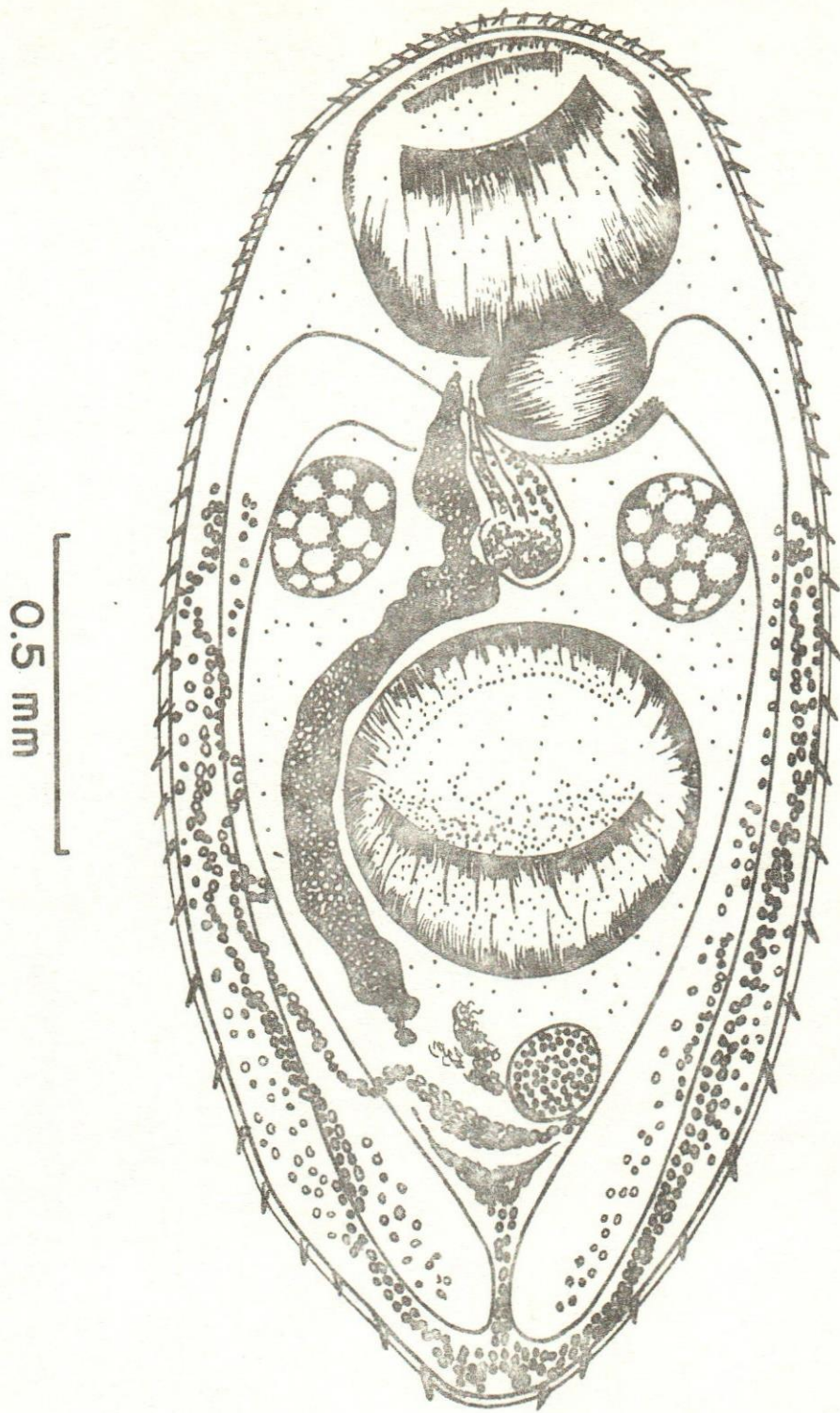


Fig. (1): Camera lucida drawing of the adult worm of Eumegacetes (Eumegacetes) spinosus n. sp.

