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Cestodes of the Genus *Oochoristica* from Iraqi Lizards

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Abstract

Three cestodes were collected from the small intestine of *Agama nupta* in Sidoor, Iraq in May, 1984 and four cestodes were collected from the small intestine of *Uromastix microlepis* in Kerbala, Iraq in September, 1985 by Dr. Mohammad. The specimens were sent to Kugi from Dr. Mohammad on November 1, 1987. The specimens were washed in running water, pressed, fixed, stained and mounted in Canada balsam. The specimens belong to the genus *Oochoristica* Lühe, 1898. The former three specimens resemble *Oochoristica crassiceps* Baylis, 1920; i.e., strobila length 28–88, testes number 20–30., *O. thapari* Johri, 1935; i.e., strobila width 2., *O. theileri* Fuhrmann, 1924; i.e., testes number 26–30 and genital pores opening slightly anterior to the middle of proglottid. However these specimens differ from *O. crassiceps*; i.e., genital pores opening anterior 1/3 of the proglottid, while these specimens genital pores were slightly anterior to the middle of proglottid., *O. thapari*; i.e., genital pores opening anterior 1/3 of proglottid and testes 48–62 in number, arranged lateral to the ovary, while these specimens genital pores opening was slightly anterior of middle to the proglottid, testes 28–30 in number, arranged post ovary., *O. theiler*; i.e., strobila length 4–8, mature proglottid 5–10 fold longer than wide and cirrus has spiny at basal portion, while these specimens, strobila length 48–50, mature proglottid 5–10 fold wider than long, cirrus not spiny. We conclude that this is a new species, *Oochoristica nupta* n. sp.

The latter four specimens were identified with *Oochoristica agama* Baylis, 1919 by the following characteristics; i.e., diameters of the scolex and suckers, the shape of ovary, the number and arrangement of testes, and the size of cirrus pouch, eggs and onchospheres.

Key words: reptilian cestode, *Oochoristica nupta* n. sp., *Oochoristica agama*, morphology

Introductions

Genus *Oochoristica* Lühe, 1898 are parasites of lizards, snakes, and turtles described from many countrys from 1819 to today, but cestodes from Iraqi lizards have not been recorded to date. Dr. Mohammad collected cestodes from 1984 to 1985 from lizards (*Agama nupta* and *Uromastix microlepis*) in Iraq. The specimens were preserved in 70% alcohol and send to Kugi for specific identifications on November 1, 1987. In the present paper, we report on the specific identifications from Iraqi lizards.

Materials and Methods

The specimens were preserved in 70% alcohol for 2–3 years and sent to Kugi. After the specimens were washed in running water for 3 days to remove alcohol, the scolex and egg were examined without staining. The strobilae were fixed in 70% alcohol after being pressed between two glass slides. The specimens were stained with Heidenhain's hematoxylin, destained in 1% hydrochloric acid-alcohol, dehydrated in alcohol series and mounted in Canada balsam. All measurements are given in millimeters.

Results

Oochoristica nupta n. sp.
(Figs. 1–4)

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Description: Strobila 48–50 in length and 2 in maximum width. All proglottids broader than long. Genital pores irregularly alternating and opening into genital atrium situating anterior to middle of proglottid margin. Scolex 0.20 long and 0.25 wide, without rostellum. Suckers ovoid, 0.075–0.088 long and 0.053 wide. Neck absent. Mature proglottids 0.2–0.4 long and 2.0 wide. Cirrus pouch bottle-shaped, 0.076 long and 0.035–0.038 wide. Cirrus 0.013–0.016 long and 0.003–0.004 wide, not spiny. Vas deferens not coiled. Testes 28–30 in number, measuring 0.025–0.030 long and 0.020–0.023 wide, situated behind female genitalia and arranging in two groups; 13–14 on poral side and 15–16 on aporal side. Ovary transversely elongate, lobate, 0.14–0.15 wide, situated in middle field, slightly towards the poral side of the proglottids. Vitelline gland compact, situated posterior to ovary, 0.07 long and 0.05 wide. Gravid proglottids, 1.05 long and 2.0 wide and filled with egg capsules, which are distributed beyond excretory canals and which contain one egg each. Eggs oval in shape, 0.043–0.050 long and 0.037–0.050 wide, onchospheres 0.028–0.035 in diameter; embryonic hooks 0.0175 long.

Discussion

Cestodes of genus *Oochoristica* Lühe, 1898 from lizards total about 23 species recorded in the world. *Oochoristica nunta* n. sp. resembles *O. crassiceps* Baylis, 1920; i.e., strobila length 28–88, testes 20–30 in number (Baylis, 1920., Hughes, 1940., Dollfus, 1954, 1957)., *O. thapari* Johri, 1935; i.e., strobila width 2 (Johri, 1935., Dollfus, 1954., Hughes, 1940)., *O. theileri* Fuhrmann, 1924; i.e., testes 26–30 in number, genital pores opening anterior to the middle of proglottid. However, present species differ from *O. crassiceps*; i.e., genital pores opening anterior 1/3 of the proglottids, while this species genital pores slightly anterior to the middle of the proglottids (Baylis, 1920., Dollfus, 1954, 1957., Hughes, 1940)., *O. thaperi*; i.e., genital pores opening anterior 1/3 of the proglottids and testes 48–62 in number and arranged lateral to the ovary, while this species genital pores opening slightly anterior to the middle of the proglottids, testes 28–30 in number, arrangement post ovary (Johri, 1935., Dollfus, 1954., Hughes, 1940). *O. theileri*; i.e., strobila length 4–8, mature proglottid 5–10 fold longer than wide and cirrus is spiny at basal portion, while this species, strobila length 48–50, mature proglottids 5–10 fold wider than long, cirrus not spiny (Fuhrmann, 1924., Dollfus, 1954., Hughes, 1940). We conclude that this is a new species, *Oochoristica nupta* n. sp.

Host: *Agama nupta.*

Habitat: Small intestine.

Locality and date: Sidoor, Iraq. November, 1984.

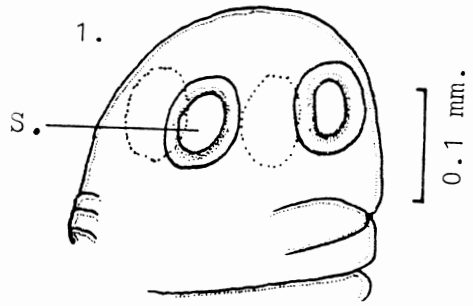
Type specimen: Holotype deposited in the Meguro Parasitological Museum, Japan. MPM Coll. No. 19531.

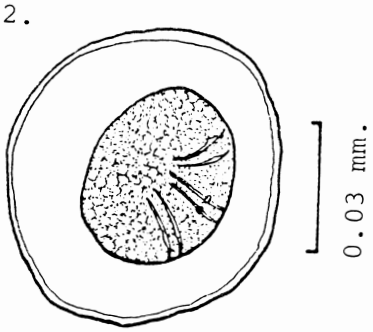
Oochoristica agama Baylis, 1919
(Figs. 5–9)

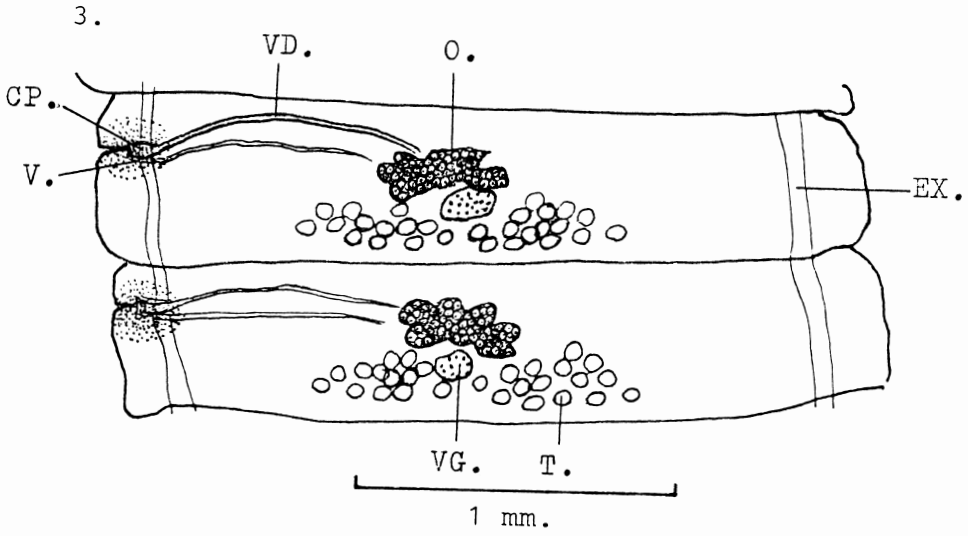
Description: Strobila 60–66 in length and 1.0–1.2 in maximum width, without rostellum. Scolex 0.45–0.50 broad. Suckers 0.14–0.15 in diameter. Neck obscure. Genital pores alternated irregularly and opening in very deep genital atrium, situated anterior to the middle of proglottid margin. Genital atrium composed of protruded radial musculature which disappearing in parenchyma. Cirrus pouch bottle-shaped, 0.18–0.20 long and 0.09–0.10 wide. Vas deferens much coiled. Testes, 42–45 in number and measuring 0.038–0.043 long and 0.030–0.035 wide, situated behind female

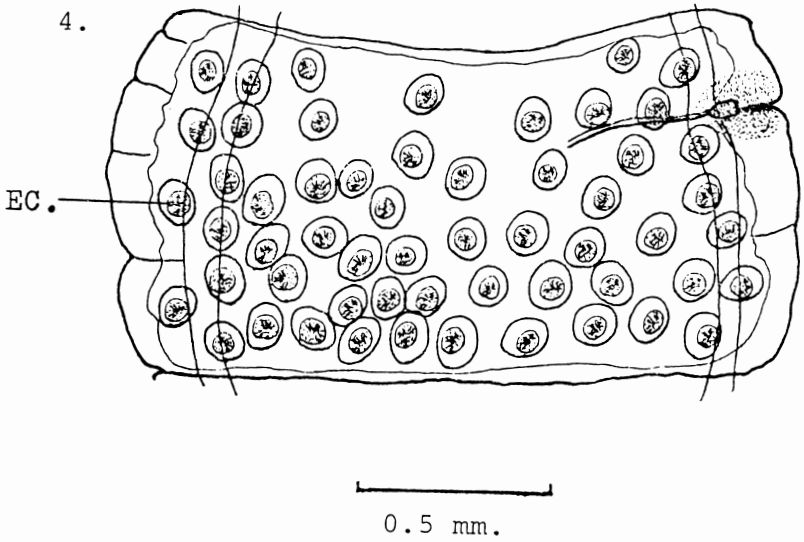
Abbreviations: CP: cirrus pouch, EC: egg capsule, EX: excretory canal, O: ovary, S: sucker, SG: shell gland, T: testis, V: vagina, VD: vas deferens, VG: vitelline gland.

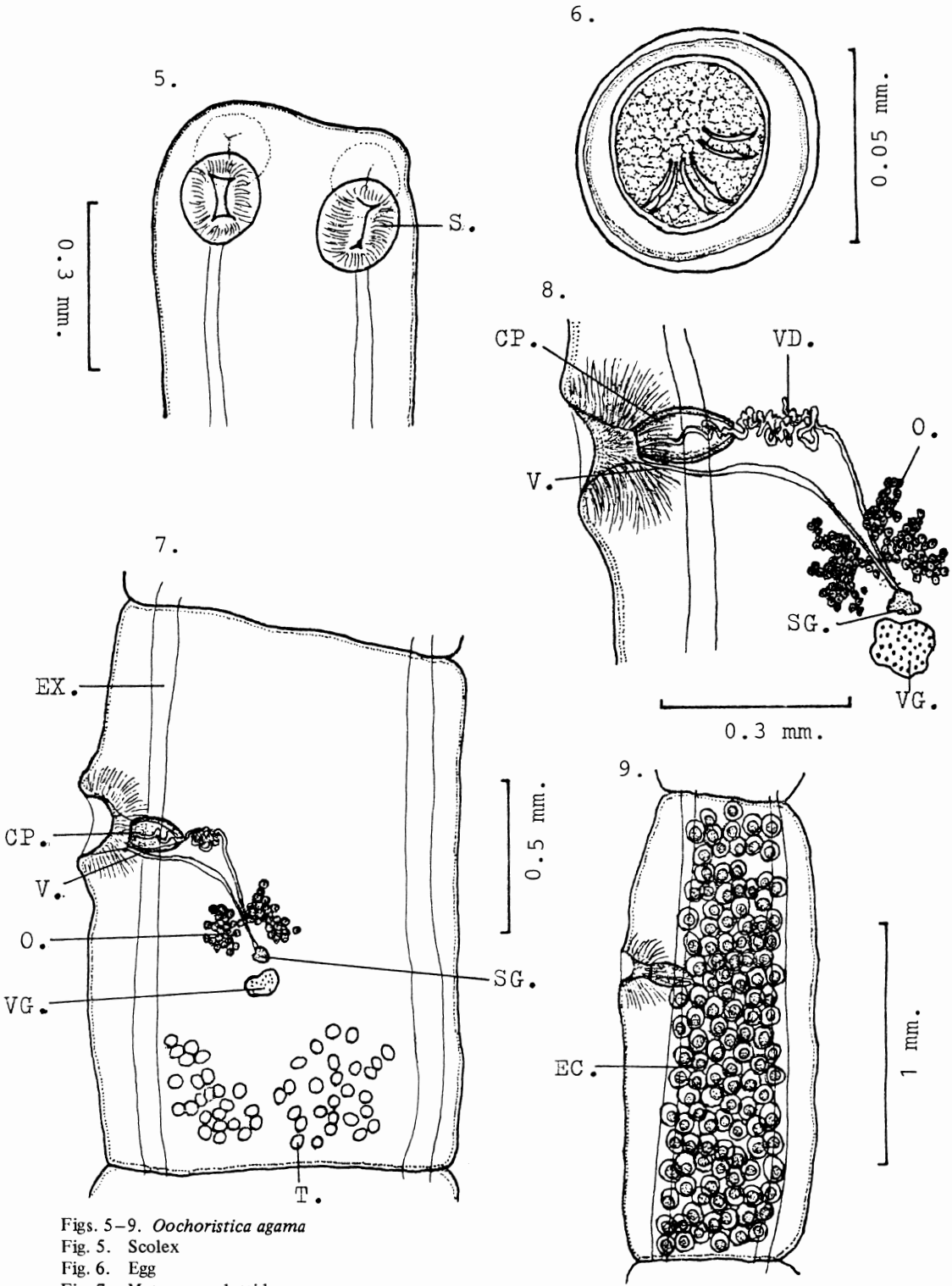
Figs. 1–4. *Oochoristica nupta* n. sp.
Fig. 1. Scolex
Fig. 2. Egg
Fig. 3. Mature proglottid
Fig. 4. Gravid proglottid


1.
S.
0.1 mm.


2.
0.03 mm.


3.
VD.
O.
CP.
V.
EX.
VG.
T.
1 mm.


4.
EC.
0.5 mm.



Figs. 5–9. *Oochoristica agama*
Fig. 5. Scolex
Fig. 6. Egg
Fig. 7. Mature proglottid
Fig. 8. Reproductive organs
Fig. 9. Gravid proglottid

genitalia. Vagina opening in genital atrium behind cirrus pouch opening. Ovary, consisting of 2 wings, 0.20–0.22 broad, slightly towards poral side of proglottid. Vitelline gland spherical, 0.08–0.12 in diameter. Shell gland situated between ovary and vitelline gland. Mature and gravid proglottids longer than wide. Gravid proglottids filled with egg capsules, which are situated between excretory canals, and which contain one egg each. Eggs 0.055 in diameter; onchospheres 0.033 in diameter; embryonic hooks 0.0175 long.

Discussion

Many species of the genus *Oochoristica* have been described from reptiles. The present specimens were identified with *O. agama* Baylis, 1919 in the following morphological characteristics; i.e., diameters of the scolex and suckers, the shape of ovary, the number and arrangement of testes, and the size of cirrus pouch, eggs and onchospheres (Baylis, 1919., Dollfus, 1954, 1957., Hughes, 1940).

Host: *Uromastix microlepis*.

Habitat: Small intestine.

Locality and date: Kerbala, Iraq. September, 1985.

Specimens deposited in the Meguro Parasitological Museum, Japan. MPM Coll. No. 19532.

Acknowledgement

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References

1) Baylis, H. A. (1919): On two new species of the cestode genus *Oochoristica* from lizards. Parasitology, 2, 405–414.
2) Dollfus, R. Ph. (1954): Miscellanea helminthologica maroccana. 18. Quelques cestodes du groupe *Oochoristica* auctorum récoltés du Maroc. Arch. Inst. Past. Maroc., 4, 654–714.
3) Dollfus, R. Ph. (1957): Miscellanea helminthologica maroccana. 19. Nouvelles récoltés d'Oochoristica chez des sauriens du Maroc. Famille Linstwiidae (P. Mola, 1929), Genus *Oochoristica* Max Lühe, 1908, emendatum. Arch. Inst. Past. Maroc., 5, 272–299.
4) Fuhrmann, O. (1924): Two new species of reptilian cestodes. Ann. Trop. Med. Parasitol., 18, 505–513.
5) Hughes, R. C. (1940): The Genus *Oochoristica* Lühe, 1898. Am. Midl. Nat., 23, 368–381.
6) Johri, L. N. (1935): On cestodes from Burma. Parasitology, 27, 476–479.