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FIRST RECORD OF A NEW TAPEWORM, *DOUBLESETINA FOTEDARI* N. G. FROM DOMESTIC FOWL, *GALLUS GALLUS* (LINNAEUS)

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A new cestode, *Doublesetina fotedari* N. G., is described from the poultry bird, *Gallus gallus* (L.).

INTRODUCTION

The proposed new genus has been compared with present two genera *Multicapsiferina* Fuhrmann, 1921 and *Sobolevina* Spassky, 1951 of the subfamily Linstowiinae Fuhrmann, 1907. The present form differs from these genera besides other characters, in the possession of a double set of genitalia.

Description

Amended diagnosis of the subfamily Linstowiinae : Anoplocephalidae

Single or double sets of genitalia per proglottid. Uterus breaking down into egg capsule, each containing one egg.

Generic diagnosis of *Doublesetina* n. g., : Linstowiinae

Double set of reproductive organs. Proglottids craspedote. Testes numerous, posterolateral to female genitalia and never crossing the ventral longitudinal excretory canal. Cirrus pouch club shaped. Ovaries bilobed. Vitelline gland postovarian. Egg single in each egg capsule, scattered throughout the gravid proglottid. Parasites of birds.

Doublesetina fotedari n. g., n. sp.

(Measurements in mm unless stated)

Cestodes measure 45–68 in length and 2.554 in maximum breadth. Proglottids craspedote, broader than long.

Scolex 0.588 — 0.884 × 0.882 — 1.919 (0.713 × 1.012). Suckers unarmed, oval to round, 0 202 — 0.519 × 0.201 — 0 521 (0.421 × 0.398). Rostellum and rostellar hooks absent.

Neck absent. Immature proglottids, 0.58 — 0.137 × 0.798 — 1.215 (0 0821 × 1.021) Mature proglottids, 0.256 — 0.412 × 1.032 — 2.156 (0.281 × 1.982) and gravid proglottids. 0.204 — 0.588 × 1.568— 2.554 (0.421 × 1.881).

Genitalia double. Testes 30 — 60 (45) in number, rounded, distributed in one group within the limits of ventral longitudinal excretory canals. Testes 0.0168 — 0.068 × 0.0168 — 0 068 (0.052 × 0.053) Cirrus pouch 0.136 — 0.274 × 0 029 — 0.088 (0 212 × 0.042), crosses ventral longitudinal excretory canal. Internal and external seminal vesicles absent.

Ovaries two, one on either side, bilobed, 0.038 — 0.095 × 0 112—0.234 (0 073 × 0.154). Vitelline gland, 0.019 — 0.058 × 0.048 — 0 118 (0.039 × 0.092), compact posteromedial to each ovary Vagina 0.006 — 0 026 (0.009) in diameter. It opens posterior to cirrus pouch in the genital atrium. Receptaculum seminis 0.028 — 0.117 × 0.022 — 0.098 (0 082 × 0.61).

Genital atrium 0 024 — 0.058 × 0.022 — 0.069 (0 039 × 0 032) deep and wide respectively. Genital openings bilateral, situated mainly in the middle of the proglottid margin.

Uterus replaced by egg capsules, scattered throughout the gravid p oglottid, extending even beyond the ventral longitudinal excretory canals. Egg capsules 0 031 — 0 068 × 0 032 — 0 068 (0.052 — 0.052). Eaeh egg capsule contains a single egg. Eggs, 0 0201 — 0 049 × 0.022 — 0 049 (0 033 × 0 033). Oncosphere 0 011 — 0.029 × 0.011 — 0.029 (0 19 × 0 019).

Host : *Gallus gallus* (Linnaeus)

Habitat : Small intestine

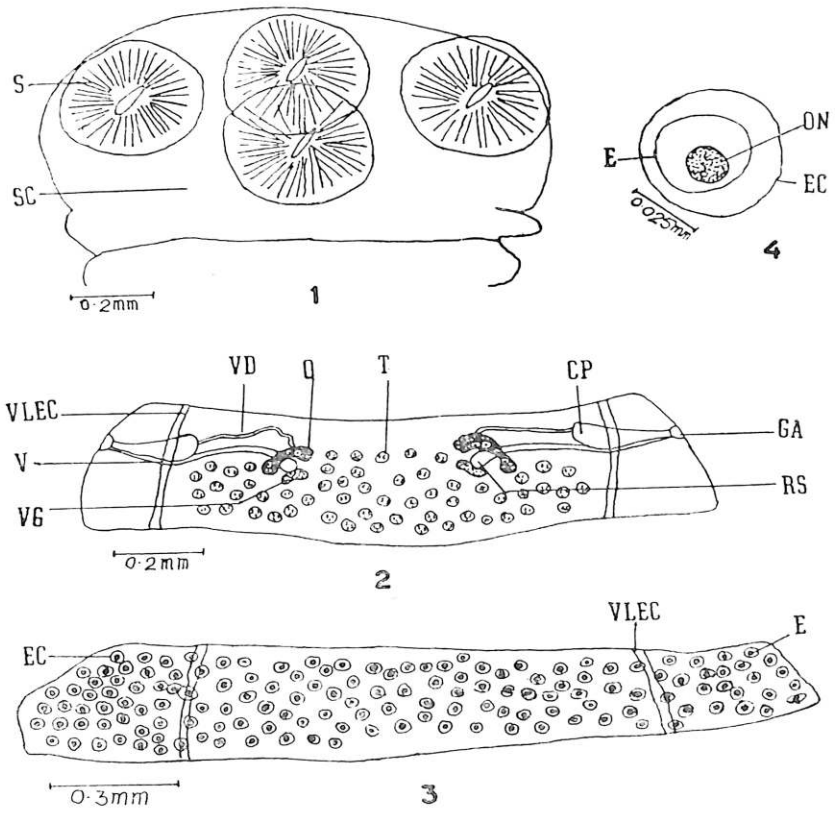
Locality : Jhansi

Holotype : Department of Zoology. Bipin Bihari (PG) College, Jhansi.

DISCUSSION

Yamaguti (1959) has included only two genera *viz.* *Multicapsiferina* Fuhrmann, 1921 and *Sobolevina* Spassky, 1951 in the subfamily Linstowiinae Fuhrmann, 1907, family Anoplocephalidae Cholodkovsky, 1902.

The present form differs from *Multicapsiferina* Fuhrmann, 1921 in having double set of genitalia per proglottid, absence of internal seminal vesicle, bilateral genital pores, bilobed ovaries and uterus never appears as transverse



Figs 1-4. **1.** Scolex (5×10). **2.** Mature proglottid. **3.** Gravid proglottid. **4.** Egg capsule (10×45)

CP, Cirrus pouch; E, Eggs; EC, Egg capsule; GA, Genital atrium; O, Ovary; ON, Oncosphere; RS, Receptaculum seminis; S, Sucker; SC, Scolex; T, Testes; V, Vagina; VD, Vas deferens; VG, Vitelline gland; VLEC, Ventral longitudinal excretory canal.

tube. From *Sobolevina* Spassky, 1951 it differs in having double set of genitalia per proglottid, different arrangement of testes in relation to ovaries, bilateral genital pores, and egg capsule well crossed the excretory canals reaches upto the margin of proglottid.

Thus the proposed new genus *Doublesetina* n. g., differs from the two valid genera included in the subfamily Linstowiinae by Yamaguti (1959). In the light of above discussion the species *Doublesetina fotedari* n. sp., may be provisionally accommodated in the proposed new genus *Doublesetina* n. g.

Key to genera of Linstowiinae

1. Single set of genitalia 2
   Double set of genitalia ..... *Doublesetina* n. g.
2. Genital pore unilateral 3
3. Female gonads between dorsal and ventral excretory stems of pore side ..... *Multicapsiferina*
   Female gonads medial to ventral excretory stems ..... *Sobolevina*

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