

**A NEW CESTODE, *JORDANGRIA CAPRACUS* NG., NSP. FROM *CAPRA HIRCUS*  
JHANSI (U.P.) INDIA**

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**ABSTRACT**

Figure : 05

References : 04

Table : 00

KEY WORDS : *Capra hircus*, *capracus*, cestode, Jhansi, *Jordangria*.

**Introduction**

The new genus has been compared with *Dendrouterina*<sup>1</sup> and *Orthoskrjabinia*<sup>2</sup>.

The present form differs from these genera in presence of well developed rostellum, different disposition of testes, presence of germovitalarium, number and presence of Paruterine organ.

**Material and Method**

Intestine of five goats, *Capra hircus* were examined at Jhansi (U.P.). One was found infected with eight cestodes. These cestodes were present in middle part of intestine of the host.

The intestine of the host was taken from slaughter house and cut open in normal saline water in petridish. They were lightly shaken and the content decanted several times. The intestine and their content containing the parasites were examined thoroughly under binocular microscope for all possible collection.

The mucosa was removed from the body of the cestode by shaking it with a needle in the normal saline water.

The worms were stretched in luke warm water with the help of needle or forceps against the edges of the petridishes repeatedly for several times. The worms were stored in 10% formaline. Whole mount were stained in haemalum and

cleared in xylol.

Only camera lucida drawings were taken. All the measurements were recorded in mm. unless otherwise stated.

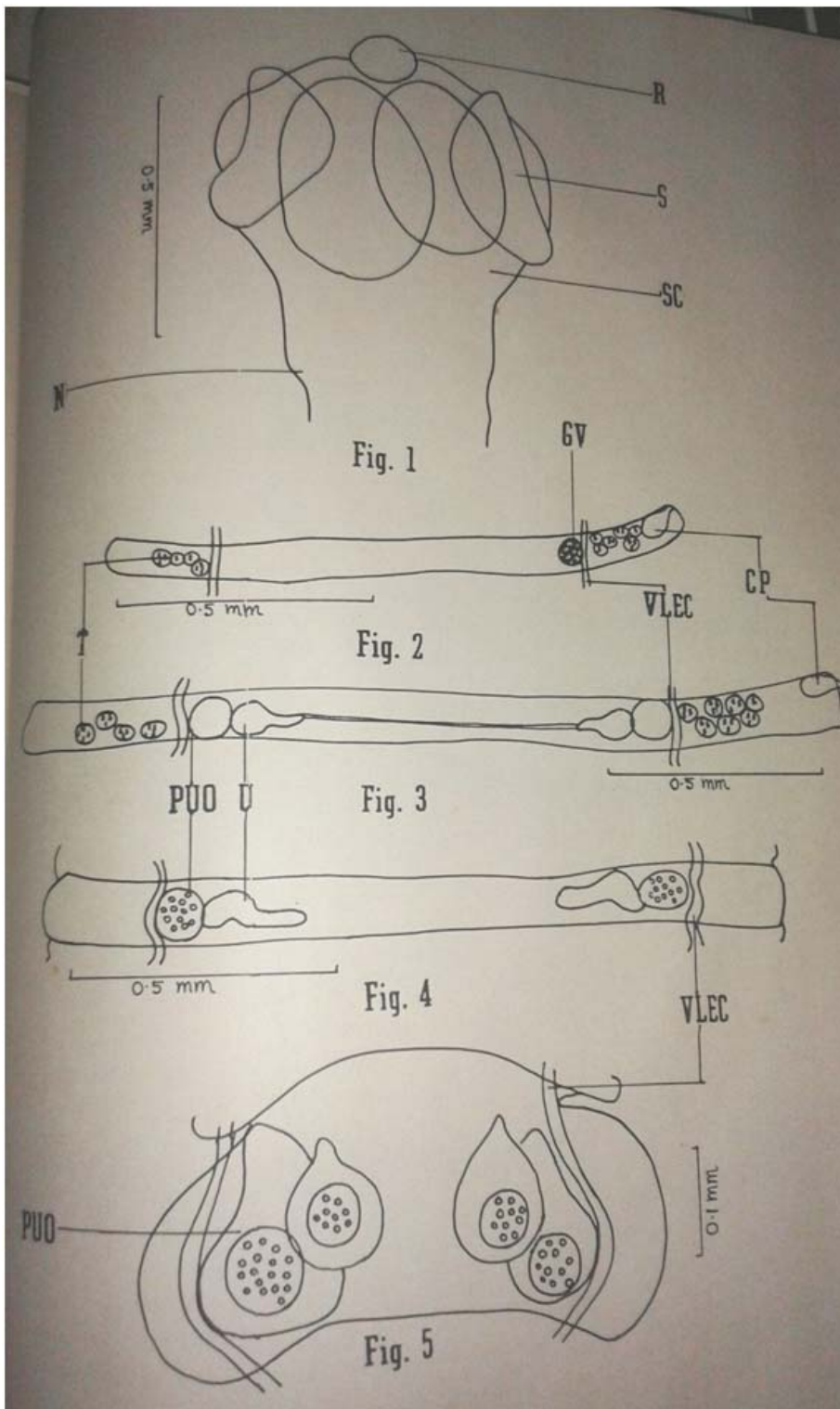
**Description**

**(Generic Diagnosis *Jordangria* N.G. Family Dilepididae Sub family Paruterininae)**

Scolex with an unarmed rostellum. Proglottids acraspedote. One set of genitalia per proglottid. Testis few, in two lateral fields. Genital pores irregularly alternating. Germovitalarium in poral half of the proglottid. Uterus at first a long transverse dumbbell shaped tube which later replaced by four Paruterine organs. Parasitic in Ruminants.

Cestode measures 6-8 cm. in length and 1.806 maximum breadth. Scolex measures 0.504-0.5848 X 0.560-0.782(0.544 X 0.671). Sucker unarmed measures 0.224-0.420 X 0.280-0.391 (0.317 X 0.335). Rostellum unarmed measuring 0.056- 0.110 X 0.126-0.238 (0.083 X 0.182) Neck measures 1.400- 3.220 X 0.18-0.42 (2.310 X 0.350) mature proglottid measures 0.05 X 0.112 X 1.250-1.806 (0.08 X 1.528), gravid proglottid 0.100-0.250 X 0.510-1.204(0.180 X 0.857)

Testes 10-12 (11) in number measures 0.02-0.04(0.03) in diameter. Testes present exterior



*Jordangria capracus* n.g., n.sp.  
 Fig. 1 : Scolex  
 Fig. 2 : Immature proglottid,  
 Fig. 3 : Early mature proglottid,  
 Fig. 4 : Mature Proglottid,  
 Fig. 5 : Gravid proglottid showing peruterine organs

to the ventral longitudinal excretory canal arranged in two lateral group in one or 2 rows. Cirrus pouch small measuring 0.060-0.100X 0.030-0.050(0.080 X0.040). Cirrus pouch does not reach the ventrolateral excretory canal. Cirrus measures 0.042-0.056X 0.010-0.014(0.049x0.013). Internal and external seminal vesicles absent.

Female genitalia single in each proglottid, ovary and vitelline glands united to form germovitellarium. Germovitellarium situated in the poral half of the proglottid margin .Germovitellaria measures 0.03X0.06 (0.04) in diameter.

Receptaculum seminis is absent. The uterus starts developing in early gravid proglottid as a transversely extended dumbbell shaped tube which loses the median portion very early leaving one sac on each side. Uterus measures 0.02 – 0.06X 0.080 –0.087( 0.045X0.084) .The uterus is replaced by four Paruterine organ in the posterior gravid proglottid. Paruterine organ arranged in transverse rows .The outer being slightly posterior to the inner paruterine organs.Paruterine organ measures 0.12 -0.18X 0.005 – 0.150( 0.15X 0.10). The uterus filledup with 9-17 (13) eggs. Eggs measures 0.005- 0.014( 0.0095) in diameter.

Genital atrium poorly developed.Genital pores are alternating irregularly situated in the anterior one third of the proglottid margin.

Ventral longitudinal extretory canal measures 0.01 -0.005(0.03) .

**Revised key to the Genera of the subfamily Paruterininae**

1. Rostellum with four circles of hooks;.....*Neyraia*  
Those in first circle triangular  
Rostellum otherwise.....2
2. Rostellum with one circle of hooks.....*Zosteropicola*  
Rostellum otherwise.....3
3. Rostellum and hooks absent.....4  
Rostellumpresent, hooks present or absent.....12
4. Mature onchosphere vermiform...*Anoncotaenia*  
Mature onchospheres not vermiform.....5
5. Genitalpores open irregularly on dorsal and Ventralsurfacesublateral or medial.....*Anomaloporus*  
Genital pores lateral.....6

6. Sucker almost covered by two lobe like flaps.....*Octopetalum*  
Sucker without flaps.....7
7. Testes number 5-7.....8  
Testes number 20 or more.....9
8. Uterus a multiseptatesac.Genital pores alternating  
Irregularly.....*Multiuterina*  
Uterus not multiseptate Genital pores unilateral.....*Lallum*
9. Gravid uterus a double sac.....*Metrotiasthis*  
Gravid uterus otherwise.....10
10. Uterus reticular, with paruterineorganat anterior  
End.....*Dictyuterina*  
Uterus not reticular.....11
11. Paruterine organ sinuous.....*Leruterina*  
Paruterine organ not sinous.....*Rhabdometra*
12. Rostellum rudimentary, lacking hooks.....13  
Rostellum with a double circle of hooks.....15
13. Gravid uterus treelike or fungi form Paruterine organ  
On a short stalk.....*Dendrometra*  
Gravid uterus otherwise.....14
14. Ovary and vitelline gland separately present.....*Orthoskrjabinia*  
Ovary and vitelline gland fused forming germovitellarium.....*Jordangria N.G.*
15. Uterus breaking down into egg capsules surrounded  
By paruterine tissues.....*Deltokeros*  
Uterus not breaking into egg capsules.....16
16. Uterus divided into two symmetrical sacs behind  
Spherical paruterineorgan. hooks triangular.....*Biuterina*  
Uterus not as above.....17
17. Uterus a transversely elongated sac with short branches  
Behind paruterine organ.....*Culcitella*  
Uterus not as above.....18
18. Testes 5, dorsal to ovary and vitellarium.....*Notopentorchis*  
Testes more than 5, posterior partially lateral

- Or anterior to ovary and vitellarium.....19
19. Testes posterior and lateral, sometimes partly ant. To ovary, uterus horse shoe shaped.....*Paruterina*
- Testes posterior to ovary, uterus spherical
- Or irregular.....*Sphaeuterina*

### Result and Discussion

Out of several genera belonging to the subfamily Paruterininae<sup>1,2</sup> from bird. Only two have been reported showing an unarmed rostellum<sup>3,4</sup>.

So far no cestode species of the subfamily Paruterininae has been made from the mammalian

host<sup>1,2</sup>. Hence present form happens to be the first report of a Paruterine cestode from a mammals in whole of the world.

The present form differs from *Dendrometra*<sup>1</sup> and *Orthroskrjabinia*<sup>2</sup> in having a well developed rostellum, different disposition of testes, formation of germovitellarium, four Paruterine organ completely replacing the uterus and a mammalian host.

In the light of above discussion it is proposed to accommodate the present form as a new genus *Jordangria* and a new species *Jordangria capracus* n.g., n.sp.

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