

**On A New Tapeworm *Davainea Alii* Sp.Nov.(Cestoda : Daveieidae)
From *Pycnonotus Cafer* At Bhavaninagar, District Sangli,
M.S.India**

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Abstract

The Genus *Davainea* was erected by Blanchard, 1891 (Davaine, 1860) from the intestine of *Gallus domesticus* as a type species *Davainea proglottina*. The present communication deals with the description of a new species *Davainea alii* n.sp. which is having 45-50 (47) segments, diameter of the scolex 0.681 x 0.53, diameter of suckers 0.152 x 0.159. Rostellar hooks 14, length of rostellar hooks 0.014, testes 28-35, length of cirrus pouch 0.141 and collected from *Pycnonotus cafer*.

KEYWORDS : *Davainea alii*, *Pycnonotus cafer*, n.sp

MATERIALS AND METHODS

Twenty five specimens, of the cestode parasites, were collected from the intestine of a Red Vented bulbul, *Pycnonotus cafer* at Bhavaninagar, Dist. Sangli, M.S. India, in the month of July, 1988. They were preserved in 4% formalin, stained in Harri's Haematoxyline, dehydrated through alcoholic grades and mounted in DPX. The figures were drawn with the aid of Camera Lucida. All measurements are in millimeters.

DISCRIPTION

All worms were short in length, consisting only 45 to 50 (47) segments, with thin musculature, consists of scolex, immature and mature segments.

The scolex is medium in size, globular in shape, narrow and blunt anteriorly, distinctly marked off from the strobila and measures 0.681 in length and 0.811 to 0.53 in width.

The suckers are four in number, small in size, oval in shape, equidistantly placed, arranged in two pairs, one pair in each half of it and measure 0.136 to 0.152 in length and 0.136 to 0.159 in width.

The rostellum is small in size, oval in shape, armed with a single circle of hooks and measures 0.091 in length and 0.076 in width. The rostellar hooks are in a single circle, 14 in number, single pronged, curved, in two rows, each row with seven hooks and measure 0.014 to 0.02 in length and 0.002 to 0.004 in width. The rostellar sac is medium in size, oval in shape, extending almost up to anterior margin of the posterior pair of suckers and measures 0.152 in length and 0.06 to 0.091 in width.

The neck is absent.

The mature proglottids are broader than long , almost five times broader than long , with lateral convex margins and measure 0.316 in length and 0.981 to 1.156 in width.

The testes are medium in size , oval in shape , 28 to 35 in number , dorsal and posterior to ovary, arranged in two fields , 10 to 13 (11) in poral field, 17 to 20 (17) in aporal field , in the central medulla, unevenly distributed , bounded laterally by longitudinal excretory canals and measure 0.024 in length and 0.015 to 0.024 width.

The cirrus pouch is medium in size, almost spindle shaped , obliquely placed , situated in the antero-lateral corner of the segments, reaches up to longitudinal excretory canals and measures 0.141 in length and 0.029 to 0.058 in width . The cirrus is thin slightly coiled, contained within the cirrus pouch and measures 0.15 length and 0.005 in width. The vas deferens is thin, curved, extends medially, almost up to one fourth of the segments and measures 0.223 in length and 0.01 in width.

The ovary is distinctly bilobed, large in size, situated in the middle of the segments, slightly towards poral side, in the central medulla, transversely placed and measures 0.611 in length and 0.146 to 0.155 in width. The ovarian lobes are unequal in size, compact, poral lobe is short and wide, where as the aporal lobe is long and narrow.

The vagina is thin tube, postero-ventral to the cirrus pouch, starts from the genital pore , runs for a short distance obliquely , takes a curve medially extends for a long distance, turns posteriorly and forms a receptaculum seminis , reaches and opens in to the ootype and measures 0.422 in length and 0.001 in width. The receptaculum seminis is small in size, spindle shaped in appearance, obliquely placed, preovarian and measures 0.097 in length and 0.01 to 0.029 in width. The ootype is small in size, round in shape , situated near the junction of two ovarian lobes, preovarian or antero-ventral to ovary and measures 0.097 in diameter.

The genital pores are small in size , oval in shape, irregularly alternate , at the middle of the lateral margin and measure 0.015 in length and 0.005 in width.

The vitelline gland is large in size, almost triangular in shape , compact , post-ovarian, narrow anteriorly , broad posteriorly and measures 0.194 in length and 0.043 to 0.083 in width.

Host	<i>Pycnonotus cafer.</i>
Habitat	Intestine.
Locality	Bhavaninagar, Dist- Sangli
	M.S. India.
Date of collection	16 th July, 1988.

DISCUSSION

The genus *Davaines* was established by (Davaine 1860) Blanchard , 1981 as a type species *D. proglottina* from *Gallus domesticus*. Later on the following fourteen species are added to this genus , by different workers in the world.

After going through the literature , the worms under discussion, in having the genital pores irregularly alternate , come closer to

1. *D. andrei* Fuhrmann, 1933.

2. *D. meleagridis* D Jones , 1936
3. *D. indica* Shinde, 1969
4. *D. ambajogaiensis* Shinde and Ghare , 1977
5. *D. kekhalensis*, Patil S.R. and Shinde G.B.1999
6. *D. nitini* ,S.S.Bandgar,S.R.Patil and G.B.Shinde G.B., 2001

1. The tapeworm under discussion, is having 45-50 (47) segments, diameter of the scolex 0.681 x 0.53, diameter of suckers 0.152 x0.159. Rostellar hooks 14 , length of rostellar hooks 0.014, testes 28-35, length of cirrus pouch 0.141 and collected from *Pycnonotus cafer*.
2. The present cestode , differs from *D. meleagridis* in having 17-22 segments, diameter of scolex 0.14 to 0.17, diameter of suckers 0.04 to 0.05, rostellar hoks 100-130 in number ; length of hooks 0.08 , testes 25-26, length of cirrus pouch 0.24 and collected from *Meleagris gallopava*.
3. The present form differs from *D. indica* in having 20-25 segments , diameter of scolex 0.45, diameter of suckers 0.06 to 0.08 , rostellar hooks 150-160 in number, length of rostellar hooks 0.1, testes 24 in number, length of cirrus pouch 0.018 and collected from *Gallus domesticus*.
4. The present cestode parasite differs from *D. ambajogaiensis*, in having 27 segments, diameter of scolex 0.36 to 0.40, diameter of suckers 0.068 to 0.08 , rostellar hooks 50-75 in number, length of hooks 0.01, testes 18-20 in number, length of cirrus pouch 0.16 and collected from *Gallus domesticus*.
5. The Present cestode parasite differs from *D.Kekhalensis* in having 55-60(57) segments, diameter of scolex 0.388 x 0.572,diameter of suckers 0.194 x 0.233, rostellar hooks 20, length of hooks 0.027, testes 64 in number, length of cirrus pouch 0.160 and collected from the host *Gallus domesticus*.
6. The present cestode differs from *D.nitini* in having 10-15 (13) segments, diameter of scolex 0.762 x 0.582, diameter of suckers 0.165 x 0.75, rostellar hooks 18,length of hooks 0.020, testes 18-28 (24) in number, length of cirrus pouch 0.116 and collected from the host *Pycnonotus cafer*.

The above noted characters, are valid enough to accommodate these worms, into a new species and hence the name *Davainea alii* n. sp. is proposed , after Dr, Syed Mehdi Ali, Ex-professor and head , Department of Zoology, Marathwada University, Aurangabad, who has contributed a lot in our knowledge of Helminthology.

ACKNOWLEDGEMENT

The authors are grateful to Head, Department of Zoology, Dr.Babasaheb Ambedkar Marathwada University,Aurangabad and Principal, Dr.Bhamburdekar S.B. Krishna Mahavidyalaya ,Rethare Budruk, for providing laboratory facilities.

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Plate No.1

Davainea alii n.sp.

A.Scolex

B.Hooks

C.Mature Segment

