

## A NEW SPECIES OF THE GENUS *NEYRAIA* (CESTODA: DILEPIDIAE) FROM AURANGABAD, M.S., INDIA

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### ABSTRACT

*Neyraia aur angabadensis* sp. nov. was distinct from other known species of the genus *Neyraia* having scolex was large, well developed, tapers anteriorly and broadens in the middle and again tapers posteriorly. The rostellum was fairly well developed and counts 0.12 in length and 0.18 in breadth. It bears hooks in four rows with 80-85 in number and different in shape, size and length. The mature segments were two times broader than long. Testes were rounded calculated 30-35, in number. The ovary bilobed present near the posterior margin of the segment. Vagina was a thin tube, runs posteriorly and reaches to round ootype.

**KEY WORDS:** *Neyraia*, cestode parasite, *Upupaepops* etc.

### INTRODUCTION

Joyeux and Timon David, 1934 established this genus for the worm described by Krabbe, 1982 as *Taenia intricata*. Since then four more species are added to this genus, viz. *N. upupa* (Ortleep, 1940) Yamaguti, 1959 from *Upupa africana* from South Africa and *N. Parva* Mahon, 1958 from *Upupaepops* from Egypt. In 1934 Moghe and Inamdar described a cestode which they considered to be identical with the type species, *N. intricate* from the same host *Upupaepops* from India. Later on Shinde, 1972 add one more species to this genus as *N. moghei* from *Upupaepops* Aurangabad, India.

### MATERIALS AND METHODS

The present species *Neyraia aurangabadensis*, was reported from the intestine of Hoop, *Upupaepops* collected during the month of February, 2005 at Aurangabad, M.S., India. The tape worms were considerably long with mature and immature segments were present.

The scolex was large, well developed, tapers anteriorly and broadens in the middle and again tapers posteriorly. It measures 0.48 in length and 0.87 in breadth. The rostellum is fairly well developed and measures 0.12 in length and 0.18 in breadth. It bears hooks in four rows, 80-85 numbers, different in shape, size and length. The hooks in each row measure as follows –

1) 0.010    2) 0.016    3) 0.018 and 4) 0.021 in length. The suckers were large, round and measure 0.22 – 0.21 in diameter.

The mature segments were two times broader than long and measure 0.49 – 0.44 in length and 0.57 in breadth. Testes were round 30-35 in number, round, in two fields, more number on a poral side, calculate 0.05 – 0.03 in diameter. The cirrus pouch was thin, elongated, obliquely situated and measures 0.11 x 0.04 in length and breadth. The cirrus was contained within the cirrus pouch, which was spiral and measures 0.14 x 0.004 in length and breadth. Vas deferens was a short thin tube, convoluted and measures 0.15 x 0.004 in length and breadth.

The ovary was indistinctly bilobed, compact, transversely situated, near the posterior margin of the segment and measures 0.46 – 0.44 in lengths and 0.08 – 0.03 in breadth. The vagina was a thin tube, posterior to cirrus pouch, runs obliquely, takes a curve, runs posteriorly and reaches to the large, round ootype and measures 0.52 x 0.009 in length and breadth. The ootype lies ventral the isthmus of ovary, round and measures 0.03 in diameters. The genital pores were irregular alternate, marginal, almost at middle of the segment and measure 0.005 x 0.01 in length and breadth.

The gravid segments were almost squares, broad posteriorly and narrow anteriorly, measure 0.98 x 0.79 in length and 1.21 - 1.10 in breadth.

The uterus was a transversely elongated sac, full of developing eggs, near the posterior margin of the segments and measures 0.51 in length and 0.57 in breadth. Eggs are round and calculate 0.03 – 0.01 in diameter.

## RESULTS AND DISCUSSIONS

Joyeux and Timon David, 1934 established this genus for the worm described by Krabbe, 1982 as *Taeniaintricata*. With type species *Neyraiaintricata*. Since then three more species are added to this genus.

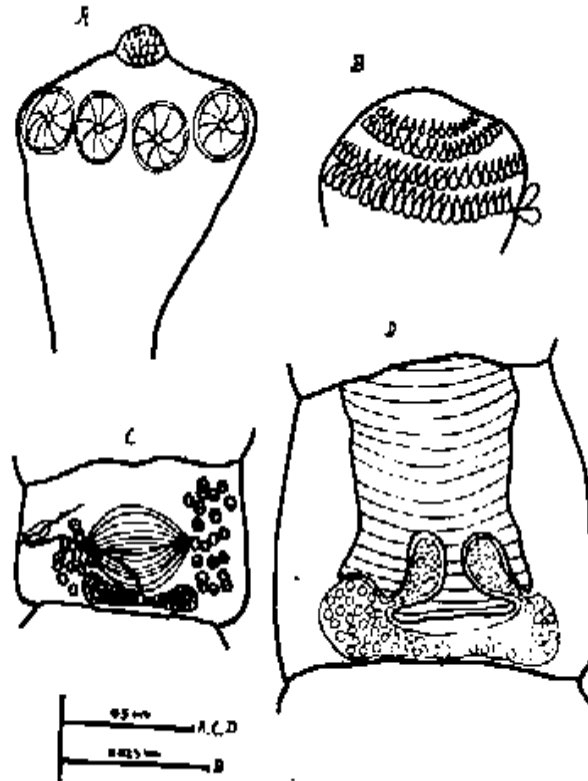


Figure - *Neyraia auranbadensis* sp.

A. Scolex B. Hooks C. Mature segment D. Gravid segment

*N. upupai* (Ortleep, 1949) Yamaguti, 1959.

*N. parva*, Mahon, 1958.

*N. moghei*, Shinde, 1972.

*N. parva*, Mahon, 1958 is regarded as species subjudice by Yamaguti, in 1959 but the characters and measurements clearly show that it should not be accepted as species subjudice but should be considered as a valid and separate species under the genus *Neyraia*. In 1934 Moghe and Inamdar described a cestode which they considered to be identical with type species *N. intricata*. Shinde erected a new species of this genus as *N. moghei* in 1972 and merged *N. intricata* reported by Moghe and Inamdar, 1934 in to this species and named as *N. moghei*.

From the following table it is observed that the present tapeworm which is also collected from the same host, agrees in all the measurements and characters with the type species but they differs from it in many characters.

The above noted characters are valid enough to erect a new species to accommodate the present worms and hence were named as *Neyraia auranbadensis* sp. after the locality.

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**Table 1: A comparative chart showing differentiating characters of the species of the genus *Neyraia* Joyeux David, 1934**

Characters	<i>N. intricata</i> Joyeux et David, 1934	<i>N. upupai</i> Ortleep, 1940.	<i>N. parva</i> Mahon, 1934	<i>N. moghei</i> Shinde, 1972	<i>N.</i> <i>aurangabaden</i> sisn.sp.
Length	105	110	150	50-70	60-70
Breadth	1.5	1.15	1.0	0.18-1.4	0.57-1
Scolex	0.4	0.72	0.45	0.75	0.87
Suckers	0.20	0.24	0.14– 0.21	0.25-0.19	0.22-0.21
No.of hooks	-	77	60-110	68-72	80-85
Ist row	0.04-0.045	0.035-0.04	0.029	0.035	0.010
IIInd row	0.03	0.024-0.03	0.021	0.026	0.016
IIIrd row	0.025	0.017	0.016	0.010	0.018
IV row	0.012	0.11	0.019	0.006	0.021
Testes	7-10	10	8-10	10-13	30-35
Eggs	0.06-0.08	0.059-0.061	-	0.025-0.045	0.038
Host	<i>Upupaepops</i>	<i>Upupaepops</i>	<i>Upupaepops</i>	<i>Upupaepops</i>	<i>Upupaepops</i>
Locality	S. Africa	S.Africa	Egypt	India	Aurangabad, India.

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