# NEYRAIA EPOPSI (CESTODA: BIUTERINIDAE MEGGITT, 1927) N.SP. FROM UPUPA EPOPS AT NILANGA, INDIA

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This paper contains the description of a new species of Neyraia (Joyeux & David, 1934).

#### INTRODUCTION

Worms described in the present paper differ from other species of the genus in having scolex large and quadrangular. Hooks 96 in number, different in shape, size and length; mature segments squarish; slightly broader than long. Testes 15-17 (17), small, round, in two fields; cirrus pouch small, oval in the anterior half of the segments, extends, nearer to longitudinal excretory canal. Ovary dumb-bell shaped in appearance, near the posterior margin of segments, with unequal lobes; vagina posterior to cirrus pouch, receptaculum seminis spindle-shaped, preovarian and genital pores unilateral, marginal and at the centre of lateral margin.

## Neyraia epopsi n.sp. (Fig. 1)

Seven worms, were collected, from the intestine of a Hoopoe, *Upupa epops* (Linn.). Worms are long, thin, with many segments. Scolex large quadrangular, broader anteriorly tapers posteriorly measures 0.047 in length and 0.049 to 0.616 in breadth; rostellum smaller, oval, armed with hooks, measures 0.126 in length and 0.107 in breadth. Hooks are in four rows, 96 in number, different in shape, size and length. Four suckers are almost, medium, muscular, measuring 0.150 to 0.179 in length and 0.126 to 0.164 in breadth.

Mature segments are somewhat squarish, broader than long, measure 0.048 to 0.515 in length and 0.442 to 0.711 in breadth. Testes are 15-17 (17), round, situated in two fields, measure 0.019 to 0.044 in diameter. Cirrus pouch small, oval, extends nearer to the longitudinal excretory canals, measures 0.175 in length and 0.019 to 0.034 in breadth. Cirrus is thin, coiled, measures 0.151 in length and 0.003 to 0.005 in breadth. Vasdeferens is a thin tube, measures 0.141 in length and 0.005 to 0.009 in breadth.

Ovary bilobed, dumb-bell shaped, near posterior margin of segment, lobes unequal, compact and measure 0.344 in length and 0.049 to 0.141 in breadth. Ovarian lobes are oval, poral lobe higher than aporal. Vagina is a thin tube, posterior to cirrus pouch, measures 0.568 in length and 0.005 to 0.002 in breadth.

Receptaculum seminis is small, spindle shaped, preovarian, measures 0.131 in length and 0.019 to 0.034 in breadth.

Ootype is small, round, postovarian and measures 0.024 in diameter.

Genital pores are unilateral, small, almost at the centre of the lateral margin of the segments, measure 0.015 in length and 0.005 in breadth.

Vitelline gland is large, posterior to the ovary, elliptical, measures 0.078 in length and 0.054 in breadth.

Gravid segments were not available.

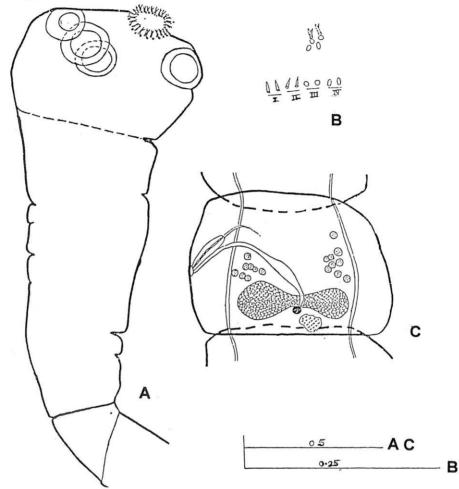


Fig. 1. Neyraia epopsi n.sp. A. Scolex; B. Hooks; C. Mature segment.

## **DISCUSSION**

The genus Neyraia was erected by Joyeux and David 1934 for the worm described by Krabbe (1879) as Taenia intricata. Since then five more species have been added to this genus viz. Neyraia upuai (Ortelepp, 1940) Yamaguti 1959; N. parva Mohan 1958; N. mogheil Shinde 1972; N. hookiensis Chibichenko 1974 and N. multicoronata Khan and Ramakrishna 1985.

Neyraia parva Mohan 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 valid and separate species under the genus Neyraia. In 1974 Moghe & Inamder described a cestode, identical with type species, N. intricata. Shinde erected a new

species of this genus *N. moghei* Shinde in 1972 and merged *N. intricata* reported by Moghe & Inamdar into this species and named as *N. moghei*. Chibichenko in 1974 erected a species as *N. hookiensis*. Recently Khan & Ramakrishna in 1985 erected another species *N. multicoronata*. Later no species is added to this genus.

The present communication, deals with description of a worm, which is collected from the same host agrees in all the measurements and characters, with the type species, but differs from it in many characters. A summary with the differentiating characters of all the species, is given in Table I.

Table 1: Showing the differentiating characters of all the species.

Chara- cters	N.intderi- cata, 1879)	N.upupai (Ortleep 1940 Ya- maguti, 1959)	N.parva (Mohan, 1972)	N.moghei (Shinde, 1972)	N.hookie- nsis(Chi- bichenko, 1974)	N.mutico- ronata (Khan & Ramkrish -na,1982)	N.epopi n.sp.
Length	105	110	150	50-70	-	25-35	-
Breadth	1.5	1.15	1.00	0.18-0.14	-	0.77	0.7108
Scolex	0.4	0.72	0.45	0.75	-	-	0.046 x 0.49-0.61
Sucker	0.02	0.24	0.14-0.21	0.25-0.19	-	-	0.15- 0.17x 0.12-0.16
Number of hooks		77	60-110	68-72	106, 5 rows	100, 5 rows	94,4 rows
I	0.04- 0.045	0.035- 0.04	0.29	0.035	-	0.03- 0.04	0.019 x 0.003
II	0.03	0.024- 0.03	0.021	0.026	×-	0.034- 0.037	0.016 x 0.003
III	0.025	0.017	0.016	0.010	-	0.026- 0.003	0.007 x 0.005
IV	0.012	0.011	0.019	p.006	-	0.015- 0.019	0.012 x 0.005
V		-	-	-	u-	0.008- 0.015	-
Testes	7-10	10	8-10	10-13	-	5-7	15-17
Eggs	0.06-0.08	0.059- 0.061	-	0.025- 0.045	0.06-0.08	0.04- 0.006 x 0.004	-
Hosts	U. epops	U. epops	U. epops	U. epops	U. epops	U. epops	U. epops
Locality	South Africa	South Africa	Egypt	India	Kirgizle U.S.A.	India	India

The characters noted in Table I, are valid enough to erect a new species, to accommodate the present worms and hence it is named as *Neyraia epopsi* n. sp. after the species name of the host.

Type species

Neyraia epopsi n.sp.

Host

Upupa epopa Linnaeus 1758.

Habitat

Intestine

Locality

Nilanga, Dist. Latur, M.S., India.

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