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Research Article

Biosystematic studies on avian cestode genus Angularella strand, 1928 (Cestoda: Dilepididae) with a report on new species from Apus affinis

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ABSTRACT : Present communication deals with an account of a new species of cestode genus Angularella (Clerc, 1906) Stand, 1928, described from the intestine of Apus affinis at Biloli, District. Nanded, Maharashtra state, India. Angularella rostellata Sp. Nov. possesses a scolex armed with 20-25 rostellar hooks. Neck is short, Mature proglottids craspedote, 2-3 times broader than long. Testes 60-70, scattered all over segment. Cirrus medium, elongated, placed at anterior side of segment, extend beyond longitudinal excretory canal. Uterus thin, coiled, tube like, vas deferens long. Cirrus and vagina opens from common genital pore. Vagina posterior to cirrus pouch, Receptaculum seminis small tube, reaches to ootype, which is medium, rounded to oval. Ovary bilobed lobes separated by short, narrow isthmus, forms many equal acini, transversely placed, situated at middle to posterior end of segment. Vitelline gland is compact, postovarion. Longitudinal excretory canals present, placed on lateral side of segment.

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Key words : Angularella, Apus affinis, Cestoda, A. rostellata Sp. Nov.

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INTRODUCTION

Genus Angularella was erected by strand, 1928 with its type species A. beema (Clerc, 1906), in Clivicola riparia, Hirundo rustica; Europe, Asia, N. America. Stamper and Schmidt, 1984 considered A. hirundina (Fuhrmann, 1907) Spasskaya and Spasskii, 1971; A. Urbica Spasskaya and Spasskii, 1971; A. ripariae Yamaguti, 1940; A. audobonensis Stamper and Schmidt, 1984 including A. beema (Clerc, 1906) Stand, 1928 as valid species under this genus. Later A. corvunensis Gupta and Sinha, 1986; A. chanchali V.M. Suryawanshi, 1989 have been added to the genus.

RESEARCH METHODS

During the course of study on avian cestode, two out of a total of three house swifts Apus affinis at Biloli, District Nanded Maharashtra state, India. During July 2006 to June 2009 were found infected with five specimens of the genus Anuglarella (Clere, 1906), Strand 1928. Cestode were taken out and washed with water, stretched in lukewarm water and fixed in 4 per cent formalin for 24 hours. Subsequently, worms were wasted

in running tap water, dehydrated through a graded series of alcohols and stained in Harris haematoxylin, differentiated in acid alcohol, cleared in xylol and mounted in Canada balsm. Camera lucida sketches were made from permanent preparations. Measurements were taken with the help of stage micrometer and occulometer. All measurements are recorded in millimeter unless otherwise stated and values given in parenthesis showed the range observed.

RESEARCH FINDINGS AND ANALYSIS

The findings of the study have been discussed in detail as under:

Description (Based on five specimen)

Angularella rostellata sp. Nov. (Fig. 1and 2)

Order:

Dilepididea wardle, McLeod and Radinovsky, 1974 Family : Dilepididae Railliet et Henry, 1909. Genus : Angularella (Clerc, 1906) Strand, 1928 Species : A. rostellata Sp. Nov.