

## A New species of the genus *Krimi* (Cestoda: Dilepididae) From Buldana (M.S.), India

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### ABSTRACT

The present study deals with a new species of the *Krimi francolinusae* sp. nov. from known species of the genus *Krimi* is characterized by strobili, consists of about a dozen segments, increased towards the posterior end. Rostellum is long with 20 hooks, mature segments broader than long, testes 38, cirrus pouch long, spirally coiled with hair like structures at the tip. Ovary bilobed, placed middle of the segments.

**Keywords:** genus *Krimi*, cestodes, new species.

### INTRODUCTION

The genus *Krimi* was established by Burt, 1944. *K. chrysocolaptic* from *chrysocolaptis gutta cristatusstricklandi* (Layard, 1854) in Ceylon. Later on Shinde and Gakiwad (1981) added two more species to this genus as *Krimi burti* and *K. Udgirensis* from *Vanellusindicusat* Kinwat M.S., India. Later on Sonune, Shinde and Gaikwad (1991), add one new species *Krimi tringae* from *Tringa, glareola*(Linn.) at Aurangabad, M.S., India. The present communication deals with a new species *K. francolinusae* sp. nov. collected from *francolinus pondicerianus* at Buldana, M.S. India.

### MATERIALS AND METHODS

Tapeworms were collected from the intestine of *Francolinus pondicerianus* from Buldana, M.S., India, during December, 2005. These cestodes were preserved in hot 4% formalin, stained with Harris haematoxylin and Borax carmine, passed through various alcoholic grades, cleared in xylene, mounted in D.P.X. and drawings are made with the aid of camera Lucida. All measurements were given in millimeters.

### DESCRIPTION

The worms were long 6-8 cm. in length and consist of 18-20 segments, which increase towards the posterior end. The scolex is well developed and measures 0.47 x 0.53 in length & breadth. Rostellum oval, armed with a single circle of 18 hooks and measures 0.061 x 0.010 x 0.05 mm. in length and breadth. Suckers were four, oval, overlap each other

and occupying the major portion of the scolex and measures 0.19 x 0.43-0.13. Neck was absent.

Mature segments are two and half times broader than long and narrowing at the anterior one and measure 0.31 - 0.27 x 0.69 - 0.63. The testes are large, arranged in a crescent shape, in a single field, 22 in number and measure 0.036 - 0.031 x 0.032 - 0.031. The cirrus pouch elongated and measures 0.18 x 0.003. It open genital pores. Ovary bilobed, centrally placed in the middle of the segment and measures 0.22 x 0.041 - 0.031. Vagina is a thin tube, and opens into the ootype and measures 0.21 x 0.005. Ootype is large, round and measures 0.041 - 0.031 in diameter. Vitelline gland is large, placed at posterior lobe of the ovary and measures 0.051 x 0.031. The cirrus pouch & vagina opens into genital atrium, which is oval and measures 0.07 x 0.01. It open by the genital pore, located at anterior margin of the segment. The genital pore is 0.02 deep and 0.003 in wide. The gravid segments were not available.

### DISCUSSION

The present worm resembles the known species but differs from them in many characters, which are as follows :

1) The worm differs from *K. chrysocolaptis* which is having the scolex oval in shape, rostellar hooks 20 in numbers, rostellar sac small, mature segments longer than broad, testes 38 in number, cirrus pouch small and ovary bilobed, each lobe containing 12 acini.

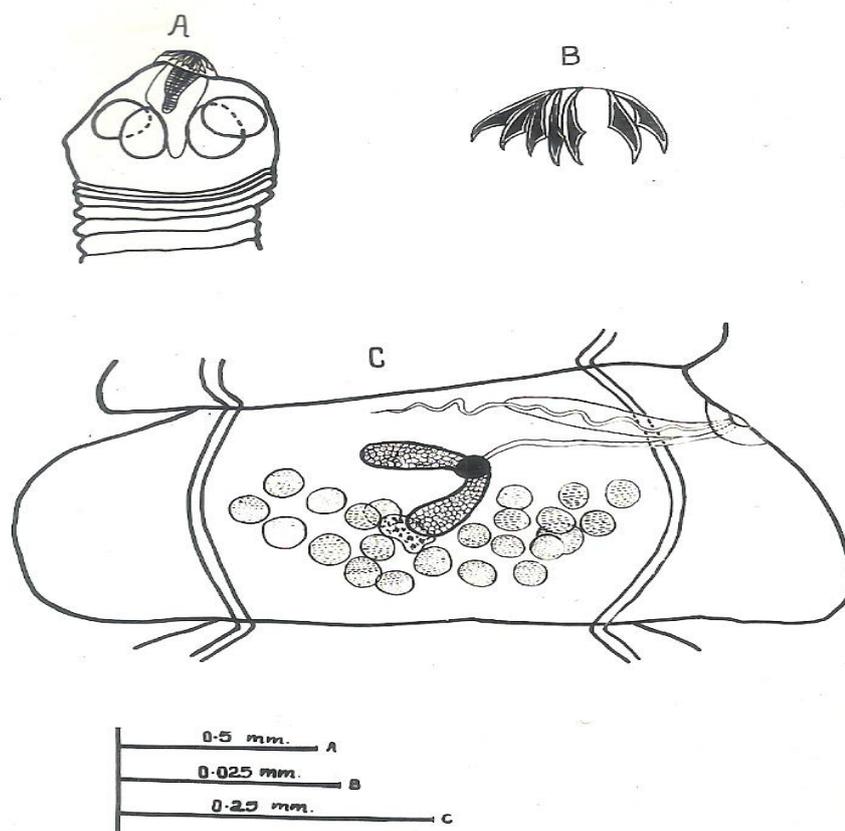


Fig. 1: *Krimifrancolinusae* n.sp. A. Scolex , B. Hooks, C. Mature segment.

2) The present worm differs from *K. burti* which is having the scolex almost quadrangular, rostellar hooks 14 in numbers, rostellar sac fusiform, mature segments one and half times broader than long, testes 10 in number, vas deferens extends up to the longitudinal excretory canal, ovary bilobed, with several acini in each lobe. Vitelline gland small, placed centrally and posterior to ovary.

3) The present worm differs from *Krimi triange* which is having the scolex almost globular, rostellar hooks 10 in number, mature segments squarish. Testes 32 in number ovary bilobed, butterfly shaped, each lobe contains 6-7 blunt acini. Vagina is long

tube. Ootype small, round, posterior to isthmus. Genital pores regularly alternate.

In view of the differentiating characters discussed above, a new species with the name *Krimifrancolinusae* sp. nov. is created. The specific name of this cestode is derived from the generic name of the host.

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