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A DESCRIPTION OF A NEW SPECIES OF THE
NEMATODE GENUS *BLATTOPHILA* COBB, 1920
(THELASTOMATIDAE)

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Cobb (1920) created a new genus *Blattophila* for the reception of a new species, *Blattophila sphaerolaima* from *Panesthia* sp. and later a new variety *B. sphaerolaima* Var. *javanica* was added by Chitwood (1933). Basir (1941) added one more species *B. supellaima* based on the description of female only. Later, Rao (1958) gave the description of the male of the same species.

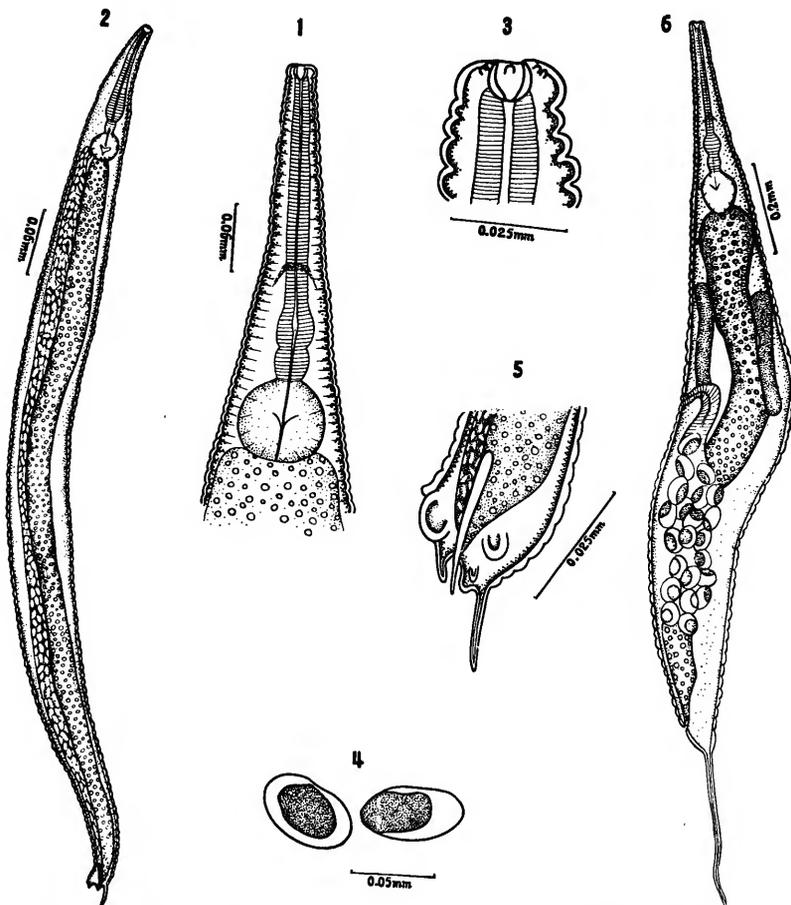
The writers while investigating for the nematode infestation of arthropods, collected the worms belonging to this genus which form the material for the description of this paper. The material consists of 3 females and one male collected on two different occasions.

These are small worms with attenuated head ends. The posterior extremity of female markedly differs from the male. The cuticle bears distinctly transverse striae. The female tail has a long caudal appendage about 1/4th of the length of the body. The male tail on the other hand is truncated with a short medium appendage.

Female: The females measure 1.94 - 1.97 mm in length and have a transverse maximum diameter of 0.23 - 0.25 mm. The striations on the body are very much pronounced and small on the anterior extremity and measure about 10 μ wide and about 20 μ wide near middle of the body. The head is broadly rounded with oral opening surrounded by eight labiopapillae and two amphids at the same level as the papillae. The excretory pore was not observed. The nerve ring is situated about 0.2 - 0.208 mm from the anterior extremity. The mouth opens into a buccal vestibule measuring about 10 μ deep by 8 μ wide. The oesophagus measures about 0.38 - 0.4 mm. The anterior extremity of which surrounds the buccal vestibule. The cylindrical corpus terminates in a swollen bulb-like enlargement connected to the valvular bulb by means of an isthmus. The corpus measures 0.24 - 0.25 mm long

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by 0.015 mm wide and its posterior enlargement is 0.039 mm x 0.033 mm: The isthmus is 0.039 mm long and the valvular bulb is 70 μ in diameter. The intestine forms a cardium at its anterior extremity. The tail is filiform and measures 0.352 - 0.39 mm long. The vulva is almost in the middle of the body at a distance of 0.87 mm, i.e., about 46% from the anterior extremity. There are two ovaries and both arise in the anterior part of the body near the level of the vulva. Vagina joins anteriorly and communicates with a single uterus filled with eggs which is formed by the oviducts which are in continuation of the two ovaries. Eggs are ellipsoidal and measure 65 μ long by 42 μ wide.



1. Anterior end, female, lateral view; 2. Entire male, lateral view; 3. Head-end female, lateral view; 4. Eggs; 5. Posterior end, male, lateral; 6. Entire female, lateral view.

Male: The male measures 1.016 mm long and 0.092 mm in maximum width. The body has a lateral alae starting from the oesophageal region to the tail end. The oesophagus measures 0.18 mm and is almost like the female except the posterior enlargement of the corpus is not pronounced. The measurements of the various parts of the oesophagus are, corpus 0.122 mm x 0.014 mm, isthmus is 0.021 x 0.012 mm and the bulb 0.038 mm in diameter. The tail terminates abruptly with a spike measuring 20 μ long. There are three pairs of papillae, two pairs preanal and one pair post-anal, of which the first preanal is median in position and the other is lateral in position while the post-anal is small and on the caudal extremity. There is a small spicule measuring about 25 μ long.

Discussion: The female of the new parasite resembles *Blattophila supellaima* in having vulva in middle 1/3rd of the body. It can however be differentiated from it on the following grounds: (i) the vulva in the new parasite is more than 46% from the anterior extremity whereas in the *B. supellaima* it is only 41%; (ii) the eggs in the new form are smaller and measure 65 μ long and 60 μ wide but *B. supellaima* eggs are larger and measure 80 μ long by 60 μ wide; (iii) the female tail is about 17% of the total length of the worm which is shorter than *B. sphaerolaima* (23.6%) and longer than *B. supellaima* (15.2%); (iv) male differs distinctly from the male of the *B. supellaima* in having a long spike-like projection and also in having a distinct spicule.

As a result of the marked differences exhibited, the writers feel justified to constitute a new species for the reception of the newly found parasite. It is proposed to name it *Blattophila indica*, sp. n.

Host: *Corydia* sp., Blattaria.

Habitat: Rectum.

Locality: Hyderabad (Andhra Pradesh), India.

The type specimens will be deposited in the museum of the Zoology Department, College of Science, Osmania University.

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