MATERIAL AND METHODS

During the tenure of research work (1977-1980), the work of investigation of nematode parasites from vertebrate animals was carried out at Aurangabad, Nanded, Lonawala, Matheran and Verawal (Sorti Somnath).

Nematodes described in the thesis had been collected from various animals like fishes (marine and freshwater), amphibians, reptiles and mammals. Most of the parasites were recovered from different regions of the alimentary tract and a few were also collected from other organs like lungs.

These worms were fixed in hot 10% glycerine-alcohol (9 parts 70% ethanol and 1 part glycerol). The lactophenol was used as a clearing agent particularly in the study of ascarids. The end-on view was mounted in glycerine jelly.

The drawings were made with the aid of camera lucida.
Rhabdiasidae Railliet, 1915

Entomelas Travassos, 1930

Entomelas versicoloris n.sp.

As a part of research work, the author had undertaken a field trip to the hill station, Matheran. During the course of investigation the author dissected garden lizards, wall lizards, snakes, toads and frogs. A number of nematode parasites were collected from these hosts, and Entomelas is one of them which is described herein.

Out of the ten garden lizards, Calotes versicolor examined, one was found infested with nematodes. In all five nematode specimens were recovered from the lungs of the host. They were examined in fresh condition and found to be the member of the genus Entomelas. The present specimen exhibits certain striking morphological characters different from those of the known species. It is, therefore, desirable to report it tentatively as a new form.

The worms are yellowish brown when freshly collected and are of uniform diameter throughout their
Entemelas versicoloria n.sp.

Figs. 1. Parasitic : Anterior end, female lateral view.
2. Anterior end, magnified.
3. Female : Tail end, lateral view.
4. Female : Vulva, lateral view.

Scale : 0.3 mm applies to figs. 1, 3 & 4
0.05 mm applies to fig. 2.
length except at the two extremities. The body of the worm, all along its length, is covered with a thin transparent cuticular membrane, which is more prominent in the anterior region than in the posterior.

The mouth is circular and surrounded by a cuticular ring and devoid of lips. The buccal capsule is well developed and is a cup-shaped structure. It measures 0.014 - 0.022 mm in length and 0.016 - 0.026 mm in width and lacks the chitinoid teeth at the base of the buccal capsule, so characteristic of the genus.

The body length has a range of 7.20 - 9.04 mm and a maximum width of 0.52 - 0.61 mm. The head diameter ranges between 0.070 - 0.086 mm. The nerve ring is situated at a distance of 0.138 - 0.172 mm from head end. The buccal capsule leads to a claviform oesophagus, which is without anterior swelling as found in Rhahdia species. It is muscular throughout its length and is 0.51 - 0.54 mm long. The oesophagus is followed by a simple intestine containing blood pigments. The vulva lies in the posterior half of the body, at a distance of 3.08 - 4.07 mm from the tail end. The uteri are opposed and possess thin shelled embryonated eggs. The eggs measure 0.048 - 0.081 mm in length and 0.034 - 0.043 mm in width. The tail in all the specimens
observed, is globular in shape, the terminal end of which is of mucronate type. The length of the tail ranges from 0.12 - 0.19 mm.

**Discussion:**

At present the genus *Entomelas* Travassos, 1930 is represented by five species, namely

1. *Entomelas entomelas* Dujardin, 1845;
2. *E. dujardini* Maupas, 1916;
4. *E. kazachstanika* Sharpilo and Vakkar, 1972;

Cruze and Sanmugasundaram considered *Entomelas dujardini* as synonym of *E. entomelas* on the basis of measurements and as they are recorded from the same host, *Anquila fragilis*. Sharpilo (1976) published a monograph, "Parasitic worms of the reptilian fauna of the USSR: systematics, chorology, biology", wherein he has erected a new genus *Paraentomelas* and transferred *Entomelas dujardini* and *E. kazachstanika* as new combinations. Thus, this genus at present comprises of *E. entomelas*, *E. chamaeleonis* and *Entomelas* sp. The present worm is, therefore, compared with these species only.
The worm under discussion differs from *E. entomelas* in the structure of its buccal capsule and in the absence of teeth. *E. chamaeleonia* lacks the prominent buccal capsule and the teeth whereas the present form has a buccal capsule, characteristic of the genus. *E. entomelas* sp. has a large, well developed buccal capsule and is provided with three small chitinoid teeth. The present form differs from this in having a small buccal capsule of a subglobular type without chitinoid teeth. The body length of *E. entomelas* sp. is almost twice the length of the present form—(*E. entomelas* sp. is 14.862 - 16.520 mm and the present form has a length of 7.920 - 9.034 mm). The egg of *E. entomelas* sp. is 0.102 - 0.123 mm long and 0.045 - 0.057 mm wide and the egg of the present form measures 0.048 - 0.081 mm in length and 0.034 - 0.043 mm in width.

In view of the facts discussed above, the author finds it desirable to report this form as a new representative of the genus and is described as *E. versicoloria* n.sp.

Host : *Calotes versicolor*

Habitat : Lung

Locality : Matheran, Maharashtra, India.