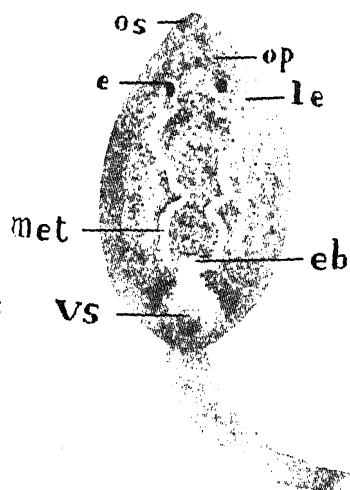
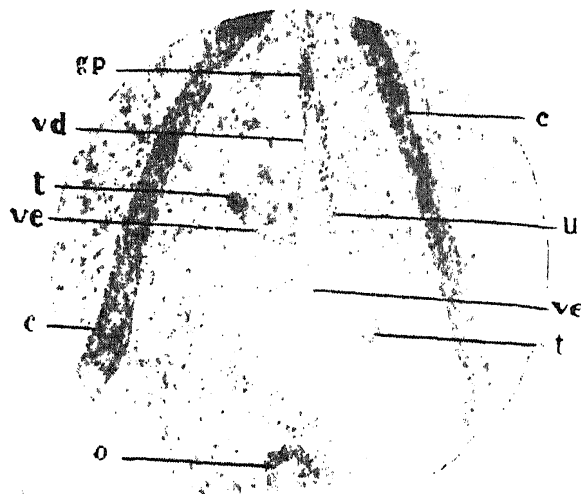


Pl 1.



Pl 2.



Pl 3.

5. The excretory granules in the retrograde continuation of the main excretory canals, and the floating intestinal glands with their ducts and atrium described for *Cercaria kylasami* are lacking in this cercaria under study.

These cercariæ develop in sausage-shaped rediæ, infesting the digestive gland of the molluscan host. The rediæ have almost the same morphological features as described for the other Amphistome redial stages. But it differs from those of the other Indian members of the "Diplocotylea" group in the presence of dark, irregular pigmentary patches on the body-wall in larger specimens only, the absence of ambulatory processes and gut contents, and in the existence of distinct excretory bladders. The rediæ are found to give rise to daughter rediæ or cercariæ or both.

The cercariæ and their parthenitæ raised experimentally in the laboratory, by infecting *Planorbis exustus* with miracidia from the eggs of *Gastrodiscus secundus*, are exactly identical in every detail to those discharged by the snails that had the natural infestation with this type.

Further, adult specimens of *Gastrodiscus secundus* were recovered from the experimental donkey-foal, fed with the newly obtained cercariæ—a fact, which establishes that the cercaria under study is the larva of *Gastrodiscus secundus*.

A detailed study of the different aspects of both the pre-cercarial and the post-cercarial stages in the development of *Gastrodiscus secundus* is in progress.

Summary.—A new cercaria has been described belonging to the Amphistome group and this has been established to be the larval form of *Gastrodiscus secundus*, by feeding experiments.

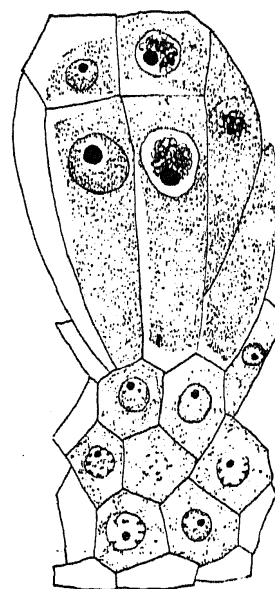
Department of Parasitology, C. T. PETER.
Madras Veterinary College, S. V. MUDALIAR.
September 1, 1948.

1. Rao, M. A. N., *Cercaria kylasami* sp. nov. *Ind. Jour. Vet. Sci. & Ani. Husb.*, 1932, 2, (3) 259-61.
2. Sewell, R. B. S., "Cercariæ Indicæ," *Ind. Jour. Med. Res.*, 1922, 10, (Supplement) 1-370.

DEVELOPMENT OF EMBRYO-SAC IN SOME STERCULIACEÆ

Our knowledge of the development of the embryo-sac in the Indian representatives of Sterculiaceæ is meagre (Y. M. L. Sharma, 1938 and I. Banerji, 1941). The present communication embodies some interesting features in the structure and development of the ovule and embryo-sac in five species of Sterculiaceæ, viz., *Pterospermum Heyneanum* Wall, *P. acerifolium* Willd, *Klenhovia hospita* Linn., *Waltheria indica* L., and *Sterculia alata*.

Pterospermum species differ from other plants studied in having a multicellular archesporium. A group of 10-15 cells extending to two or three layers below the epidermis of the ovule function as archesporial cells; the hypodermal cells cut off primary parietal cells which give rise to a considerable parietal tissue while the sub-hypodermal cells function directly as the megaspore mother cells. Usually a few tetrads are formed in each ovule. A group of cells immediately below the archesporium in the central region of the ovule differ from the rest of the nucellus cells in being larger, having thinner walls, larger nuclei and vacuolated cytoplasm (Fig. 1). The lowest megaspores of the tetrads



(FIG. 1)