

to anterior testis. Seminal receptacle on right side of body between ovary and anterior testis, ovoid, containing few sperm which makes it relatively inconspicuous. Vitelline follicles small, numerous, extending from level of intestinal bifurcation to within a short distance of posterior extremity; mainly lateral (but a few ventral) to caeca except posterior to testes where they occupy most of posttesticular space. Uterus preovarian, containing few (10 to 20) eggs, 74 to 88 by 40 to 50, slightly thickened at anopercular pole (Text-fig. 1, D). A few abnormal eggs, 40 by 25, present in one specimen. Metraterm a simple unarmed tube.

Lymphatic system present (Text-fig. 1, B). Two lateral branched vessels extend anteriorly to, or just beyond, posterior border of oral sucker. These meet ventral to intestinal bifurcation, giving rise to a broad, branched, median vessel which occupies most of intercaecal space as far as anterior border of posterior testis. Vessels conspicuous in life, filled with lymphocytes and spherical granules, but difficult to observe in whole mounts.

Excretory vesicle tubular, reaching to level of posterior testis, with fine projections extending at right angles from its wall into parenchyma (Text-fig. 1, A and B). Conspicuous lateral longitudinal excretory tubules extend to just in front of pharynx. Flame cell formula not determined.

### DISCUSSION

A number of genera of the family Lepocreadiidae have been described, in which gland or prostatic cells are not associated with the external seminal vesicle. Those similar to *Neocreadium* n.g. include *Lepocreadium* Stossich, 1903; *Holorchis* Stossich, 1901; *Opechona* Looss, 1907; *Preptetos* Pritchard, 1960; and *Opechonoides* Yamaguti, 1940. However, these genera differ from *Neocreadium* since they lack a lymphatic system (although *Opechona pharyngodactyla* Manter, 1940 is reported to possibly have lymphatic vessels), and also lack the projections from the wall of the excretory vesicle. *Neocreadium* can be further distinguished from *Lepocreadium* in having a smaller cirrus sac which does not extend posterior to the acetabulum; from *Holorchis* in that the uterus is entirely preovarian, the genital pore is displaced laterally, and the cirrus sac is smaller; from *Opechona* in that the oesophagus is not cellularised; from *Preptetos* in having tandem testes, and a much larger external seminal vesicle; and from *Opechonoides* in that it is not oculate, has a smaller cirrus sac, and smaller and more numerous vitelline follicles. Compared with the five genera listed above, *Neocreadium* shows greatest resemblance to *Lepocreadium*.

*Neocreadium* also exhibits some similarity to *Neolepidapedon* Manter, 1954 (family Lepocreadiidae), a genus characterised by a relatively small cirrus sac and a long external seminal vesicle. However, *Neolepidapedon* has gland cells associated with the external seminal vesicle, and lacks a lymphatic system as well as projections from the wall of the excretory vesicle.

The family Lepocreadiidae was divided into the subfamilies Lepocreadiinae Odhner, 1905, Homalometrinae Cable and Hunninen, 1942, and Deropristinae Cable and Hunninen, 1942, by Cable and Hunninen (1942). Skrjabin (1960) elevated the Deropristinae to family status, and Peters (1961) put forward evidence supporting this decision. Skrjabin followed Yamaguti (1958) in using the family Dermadenidae Yamaguti, 1958, to accommodate the genus *Dermadena* Manter, 1946, and he also included *Pseudocreadium* Layman, 1930, in this family. One or both of these genera had been classified in the Lepocreadiidae by previous authors (Cable and Hunninen, 1942; Manter, 1947; Bravo-Hollis and Manter, 1957; Sogandares-Bernal, 1959). Furthermore, Skrjabin divided the remaining genera of the Lepocreadiidae into ten subfamilies. Nahhas and Cable (1964) retained *Pseudocreadium* in the Lepocreadiidae. The author follows this decision and includes *Dermadena* in the Lepocreadiidae, following previous authors (Manter, 1947; Sogandares-Bernal, 1959). These genera are so similar to some of those retained by Skrjabin in the Lepocreadiidae that they do not appear to warrant separation into a separate family. As far as the subfamilies enumerated by Skrjabin are concerned, the author prefers to retain only the Lepocreadiinae and Homa-