The larva is identified as a metacercaria, as it has no caudal appendage and reflects the adult condition except for the genitalia. The body is elongate, 0·390 mm. × 0·111 mm., broader in the anterior region, and covered with a thick non-spinous cuticle. The oral sucker is conspicuous and large, 0·058 mm. in diameter. The mouth leads to a muscular pharynx, 0·039 mm. × 0·020 mm., situated immediately behind the oral sucker, a pre-pharynx being practically absent. The short œsophagus bifurcates into the intestinal crura, which are broader than the œsophagus itself, and extend posteriorwards up to three-quarters of the length of the body. The ventral sucker is also circular, 0·039 mm. in diameter, and therefore smaller than the oral sucker. It is situated about the middle of the body behind the region where the œsophagus forks. Bundles of gland cells are present on the sides in the anterior region. There is a pair of faintly staining pigment spots, one on each side of the pharynx. The lateral excretory canals are very prominent, only slightly wavy, and are filled with large globules. They are continuous at the posterior end and open out through a short median stem. They become gradually narrower as they go forward and turn back in the œsophageal region. There is no distinct structure as an excretory bladder, and the excretory system therefore appears as an extended V with an insignificant median duct.

This metacercaria needs to be compared with the only one known from a ctenophore, namely, that of the Allocreadiid *Opechona bacillaris* described by Lebour[1], Stunkard[2] and Franc[3]. It differs from it in having wide lateral excretory canals forming a V-shaped pattern, glandular structures associated with the oral sucker and no pre-pharynx. Assuming that this metacercaria is also derived from a trichocercous cercaria, it should be considered as belonging to the ocellate group of marine trichocercous cercariæ, classified by Dollfus[8] together with that of *Opechona bacillaris* and others enumerated by Dawes[9]. Its adult may therefore be a trematode similar to the genus *Opechona* and parasitic in fish hosts which ingest ctenophores.

La Rue[10] has formulated a new system of classification of the Digenea on the basis of life-cycle patterns and larval morphology, providing a key to all the families. This approach will be of immense value in identifying larval trematodes the adults of which have not been related to them, and in solving the life-cycles of many of them. The present metacercaria falls under the super-family Allocreadioidea Nicoll 1934, as an ophthalmotrichocercous kind, and may belong to one of the seven families listed under it, namely, Acanthocolpidae Luhe 1909, Allocreadiidae Stossich 1903, Lepocreadiidae Nicoll 1934, Megaperidae Manter 1934, Monorchidae Odhner 1911, Opecoelidae Ozaki 1925 and Opistholebitidae Fukui 1929—most probably Allocreadiidae. Three hosts are usually involved in the life-cycle of the representatives of these families, and in the present case they could be the gastropod (or lamellibranch), the ctenophore (or medusa, copepod, or *Sagitta*), and the fish.

Pelagic organisms serve as food for marine vertebrates and should accordingly be expected to carry the larval stages of helminths developing to maturity in the latter. The examination of other representatives of the planktonic biota in the coast of Madras is being continued in the hope of discovering more of these larval helminths.

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[1] Lebour, M. V., *J. Mar. Biol. Assoc., U.K.*, **11**, 57 (1916–18).
[2] Stunkard, H. W., *Parasit.*, **24**, 321 (1932).
[3] Franc, A., *Bull. Lab. Marit. Dinard*, **34**, 25 (1951).
[4] Poche, F., *Zool. Anz.*, **28**, 369 (1911).
[5] Martin, W. E., *Trans. Amer. Micr. Soc.*, **64**, 203 (1945).
[6] Dollfus, R. Ph., Anantaraman, M., and Nair, R. V., *Ann. de Parasit.* **29**, 521 (1954).
[7] Dawes, B., *Nature*, **182**, 960 (1958).
[8] Dollfus, R. Ph., *Trav. Stat. Zool. Wimereux*, **9**, 43 (1925).
[9] Dawes, B., "The Trematoda" (Camb. Univ. Press, 1946).
[10] La Rue, G. R., *Exp. Parasit.*, **6**, 306 (1957).

An Albino Specimen of the Common Frog

ON February 22, Mr. L. Gentry, of Blacksmith Hill, Sanderstead, Surrey, found an albino specimen of the common frog (*Rana temporaria*) in his garden. He presented the frog to this Museum, and it is now living in the Aquarium.

The frog is a male with the back and legs an evenly coloured yellow and the ventral surface a whiter tone. The thumb pads are a dark brown and the eyes a bright red.

It is hoped that this frog will breed with normal females, and various workers have agreed to hatch the spawn and rear the frogs with the view of trying to establish an albino strain.

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Influence of Temperature on the Number of Vertebræ in Fish

THE number of vertebræ in fish is considered to vary with temperature during early development. From field observations, it is generally considered that fish subjected to low temperature tend to have more vertebræ than those in warmer waters. This was supported by the experiments of Gabriel[1] on *Fundulus heteroclitus*, of Dannevig[2] on *Pleuronectes platessa*, and of Kubo and Kobayashi[3] on *Oncorhynchus keta*. On the other hand, Tåning[4] showed that the lowest average number of vertebræ was obtained at an intermediate temperature, while both higher and lower temperatures produced a higher average in his experiment on *Salmo trutta trutta*. A similar result was obtained by Lindsey's[5] experiments on *Macropodus opercularis*. Thus the results of experimental studies are not consistent.

I reared eggs at different constant temperatures throughout the sensitive period from one pair of snake-head fish *Channa argus* (Cantor), and examined the vertebral number of the young fish of each group. The experiment was repeated three times using three different pairs. The results are given in Table 1.

From the results, it may be concluded that: an intermediate temperature produces a lower average number of vertebræ than either high or low temperature in *Channa argus*; genetic factors seem to have more effect on the number of vertebræ than environmental ones. The first conclusion does not coincide with the generally accepted view mentioned above, but coincides with the results of Tåning's and Lindsey's experiments.