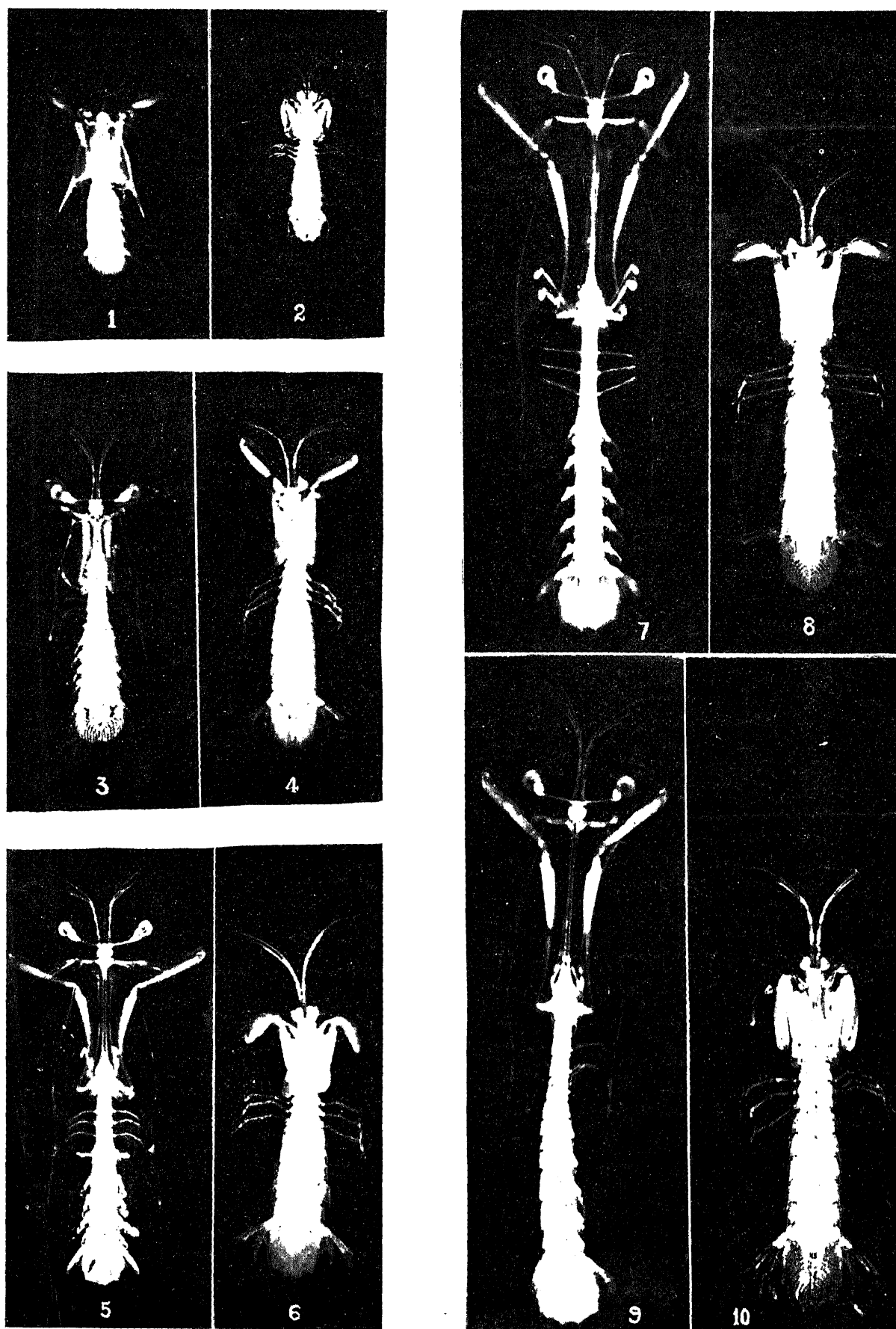


#### ON SOME *SQUILLA* LARVÆ FROM THE MADRAS PLANKTON

THE larval stages of Stomatopods have been studied by various authors like Muller (1862, 1863), Claus (1871), Faxon (1882), Brooks (1886, 1893), Bigelow (1894), Hansen (1895, 1926), Jurich (1904), Giesbrecht (1910), Komai (1929) and others. The usual practice has been to collect the various stages from the plankton, arrange them according to their size and state of development and correlate them to the adults, more or less on circumstantial evidence such as

, by volume denatured with 2% denaturing grade methanol, the comparative abundance or otherwise of the species occurring in the locality. Since the advanced larvæ of the various species of the genus differ from each other only in minor details there is a great possibility of mixing up the larvæ of allied species in this method of identification. The only sure method, therefore, seems to be to observe, wherever possible, what each particular type of larva metamorphoses into.

*Squilla microphthalmia*, *S. raphidea*, *S. nepa*, *S. holoschista* and *S. wood-masoni* are some of the common species of *Squilla* that occur on the Madras Coast. Plankton collections contain various stages of the larvæ of all these species in fair numbers. With a view to determine the identity of the species to which they belong, larvæ which appeared to be in the final stage of pelagic life were picked out from the plankton, carefully sorted and placed in separate jars of clean sea-water. Most of them were found to have undergone metamorphosis overnight into young squillæ. In the newly metamorphosed forms the specific characters were so clear that



Magnification about  $2\frac{1}{8}$  times in each case.

Photographs 1, 3, 5, 7 & 9. Final pelagic larval stage of *Squilla microphthalmalma*, *S. raphidea*, *S. nepa*, *S. holochista* and *S. wood-masoni*. Photographs 2, 4, 6, 8 & 10. Same, in each case, 12 hours after metamorphosis.

their identification was a comparatively easy matter though as a precaution they were kept for a few days longer in the Laboratory aquarium tanks and the identification verified. In this manner the identity of the final stages of the larvæ of all the above-mentioned species has been determined. The photographs given show the final pelagic stage of the larva and the corresponding young *Squilla* into which it metamorphosed in each case. Fuller details in regard to the larval stages of the species of *Squilla* of the Madras Coast will be given in a separate paper.

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