



Fig. 2. *Argulus piperatus*: first and second antennae of male, much enlarged.

Lateral claw of basal joint of first antenna long and slender and curved into a half circle; anterior claw short and weak. Second joint slender, three times the length of the terminal joint, and armed at the distal anterior corner with a short spine; terminal joint tipped with two spines. Second antenna of the usual pattern, the basal joint one-half wider than the succeeding joints and tipped with a long spine; second joint with two spines, third and fourth joints with one spine each.

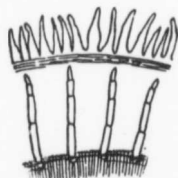


Fig. 3. *Argulus piperatus*: supporting rods in sucking disks; much enlarged.

Sucking disks of second maxillae far forward and well separated, each about 15% of the width of the carapace; the supporting rods slender and far apart, each made up of four cylindrical joints which diminish regularly in size from the base outwards, and which do not quite reach the margin. The latter has a fringe of flattened fleshy setae, attached side by side in a single row.

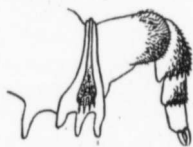


Fig. 4. *Argulus piperatus*: maxilliped of male; much enlarged.

The maxillipeds are rather short but stout; the triangular plate on their base is wide posteriorly and much narrowed anteriorly, but extends to the anterior margin of the appendage; the teeth are long and wide and bluntly rounded. Inside of the base of the appendage, on the ventral surface of the head, is an accessory tooth of the same pattern as those on the plate itself.

The rami of the swimming legs reach considerably beyond the margin of the carapace. The lobes on the basal joints of the fourth legs are small and not very prominent.

Color a light cartilage gray, the dorsal surface covered with small black dots, as though it had been sprinkled with pepper. These dots are not evenly distributed but are massed as shown in the figure.

Total length 5 mm. Carapace 4 mm. long, 3.25 mm. wide. Abdomen 1 mm. long, 0.90 mm. wide.

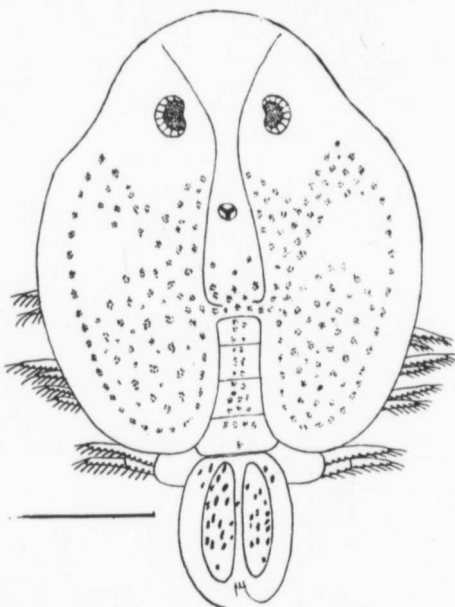


Fig. 5. Dorsal view of *Argulus piperatus*, male. The line represents a length of 1 mm.

*Specific characters of male.* Carapace relatively the same size and shape as in the female; abdomen longer, one-third the length of the carapace, the longitudinal and transverse diameters in the proportion of 15 to 11. Anal sinus not as deep, only 14% of the length of the abdomen and never closed by the approximation of the posterior lobes.



Fig. 6. *Argulus piperatus*: third legs of male, much enlarged.

Of the accessory sexual characters the peg on the anterior margin of the basal joint of the fourth legs is a broad cone, inclined strongly outwards and bluntly rounded at the tip, with a tiny spine on its