

STREPTOSYLLIS *Webster & Benedict.*

STREPTOSYLLIS VARIANS, *n. sp.*

(PL. II, Figs. 24-31; PL. III, Figs. 32-34, *a b.*)

Head, quadrangular (fig. 24) width nearly double the length; the line of separation between the head and palpi very indistinct; posterior margin slightly concave. There are four eyes, dark red; posterior pair largest, a little behind the middle line, lateral, circular; this pair may be divided so as to give two or even three pairs, but one pair is the normal number; anterior pair minute, just outside the bases of the lateral antennæ.

The lateral antennæ are club-shaped; their length is about equal to the width of the head. Median antenna from two to three times as long as the lateral; they may be club-shaped or cylindrical.

The buccal segment is nearly as long as the second segment; it encroaches slightly on the head.

The tentacular cirri are like the lateral antennæ, but a little shorter, the inferior shorter than the superior.

The palpi are free in front of the head, otherwise coalesced; the free part long, outer half conical, almost pointed; often they are turned directly downward; from the middle of the lower surface a small, cylindrical or slightly clavate papilla projects (fig. 33).

The dorsal cirri on the anterior segments (fig. 24) are similar to the lateral antennæ. Further back they may be club-shaped, or cylindrical and irregularly wrinkled, or they may be moniliform with articles of varying length (fig. 34, *a b.*). The ventral cirri are but little shorter than the dorsal (figs. 25-27), very stout at base, conical, acute, wrinkled; they arise near the base of the foot and project beyond it, or they may be turned backward. The setæ are compound, with one, or rarely two,

simple setæ in each bundle. The compound setæ of the anterior feet have very short terminal articles (figs. 25, 28). Both the stem and the appendix become somewhat longer, going backward, and retain their length on the posterior segments (figs. 26, 29, 30). The appendix is truncate, with two minute terminal teeth.

The simple setæ (fig. 31) are longer on the segments back of the first third than on the anterior segments, while the curvature is greater on the anterior than on the posterior segments, and on the posterior segments they are nearly straight. There is a single acicula in each foot (figs. 25, 27, 32), very stout, and with a large terminal button, which barely projects from the foot.

The appendix of the compound setæ in this species lacks the covering membrane found on the setæ of *Streptosyllis arenæ* W. & B.

The pharynx occupies six segments, and terminates in front in a circle of triangular papillæ. The stomach is narrow, occupies eight segments, narrows slightly behind and passes into the intestine without the intervention of any peculiar glands; but the intestine in the first segment back of the stomach is colorless. The body is convex above, flattened below; middle third of uniform width, tapering uniformly but gradually along the anterior and posterior thirds.

The body is colorless; the intestine dark brown to black; pharynx, light brown; stomach, white.

♂. The capillary (sexual) setæ begin on the male on the twenty-first setigerous segment; they are short (fig. 27), not reaching beyond the dorsal cirri, delicate; they fail only on two or three of the posterior segments. The body back of the stomach is much swollen, pure white, but retaining the median, intestinal, brown band.

♀. The sexual setæ of the female also begin on the twenty-first setigerous segment, but they are very long and delicate (fig. 26). The eggs are few, large, irregularly polygonal, pure white.

Dimensions of adult non-sexual forms: Length, 6-8^{mm}; width, 0.6-0.8^{mm}.

We found this species at West Quoddy in coarse sand and gravel, at low water. The area over which it occurred was small, and although diligently looked for, it was not found in any other locality.



