FIGURE 11.17. In adult mysid shrimp (scanning electron micrograph in A, and dissected appendages in B), the T1 appendage (red) is a maxilliped and morphologically similar to the more anteriorly located jaw appendages, such as the maxillary appendage (Mx). T3 and more posterior thoracic appendages (yellow, pink, and orange in A) are all morphologically similar to each other and used for swimming, whereas the T2 appendage (green) is morphologically intermediate between T1 and T3. During mysid embryogenesis (C), Ubx protein is not expressed in T1 and more anterior segments, is expressed at low levels in T2, and is expressed at high levels in T3 and more posteriorly. In cleaner shrimp (scanning electron micrograph of hatchling shown in D), the first three thoracic appendages are maxillipeds (T1, T2, and T3 are colored red, green, and yellow, respectively, in D). During embryogenesis (E), Ubx expression is absent from T3 and all segments more anteriorly, is weakly expressed in T4, and is strongly expressed in T5 and more posteriorly.


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