



**FIGURE 11.16.** In crustaceans, proteins such as *Artemia* (A) and *Triops* (B), that have swimming appendages on all thoracic segments, Ubx expression begins in the T1 segment. *Artemia* (A) have 11 pairs of feathery thoracic swimming appendages, and during development Ubx expression (brown staining in B; black staining reveals the boundary between adjacent segments) begins in T1. Later, when the limbs are visible, Ubx expression (black staining in C) continues in all thoracic segments and appendages. *Triops* (D) have around 60 pairs of thoracic appendages (the T1 appendage on one side is colored red and T2 is colored green). These thoracic appendages are all very similar (isolated T1 appendage shown in E) and are clearly different from the jaw appendages (the jaw appendage of the maxillary [Mx] segment is also shown in E). Ubx expression (black staining in F) is present in all thoracic segments and appendages, but absent in all the head segments (just anterior to T1).

11.16, modified from Averof M. et al., *Nature* **388**: 682–686, © 1997 Macmillan, [www.nature.com](http://www.nature.com)