



Fig. 2-7. Rectal organs of immature Miridae (2-6) and Anthocoridae (7). 2) *Myiomma cicziiforme* (Uhler) (Isometopinae), 2nd instar; 3) *Pilophorus crassipes* Heidemann (Orthotylinae), 1st instar; 4) *Lopus decolor* (Fallen) (Phylinae), 5th instar; 5) *Dicyphus rhododendri* Dolling (Bryocorinae), 5th instar; 6) *Deraeocoris nigrutilus* Knight (Deraeocorinae), 3rd instar; 7) *Orius insidiosus* (Say), 3rd instar.

Hyaliodinae (and possibly Bryocorinae), while the rectal organ seems to be an unrelated structure common to all subfamilies.

The possession of a true rectal organ in adult mirids has received little, if any, attention, but a similar structure is present (Fig. 12-13). It may not be functional, or at least not aid in maintaining contact with the host plant. I have never observed adult mirids clinging to an insect net or collecting vial, as nymphs often do. Petherbridge and Husain (1918) remarked that adults of *P. rugicollis*, in contrast to the nymphs, are easily shaken from branches of their host.

My comments are not intended to resolve questions such as whether the mirid rectal organ varies morphologically among the subfamilies, whether a similar structure occurs in nymphs of related cimicoid families (my observations suggest that one is present in at least some Anthocoridae) (Fig. 7), or whether the organ can help elucidate relationships among higher taxa of