



FIGURE 12—*Halicyne max* new species. 1, PE 25662, counterpart, with maxillae and maxillipedal genicula and laterally/anteriorly oriented thoracopod, $\times 5.2$. 2, PE 25662, with fully extended maxilla and first maxillipede genicula and showing rugae or lamellae in carapace chamber, $\times 3.8$. 3, PE 34772, close-up of Figure 11.1 printed in reverse to better illustrate surface papillation, rostral plate, optic notch, and genicula, $\times 8.3$. mx2 = maxillae, mxpd1,2 = maxillipedes, r = rostral plate, ru = gill rugae or lamellae.

on the carapace, and the anterior and median portions of the carapace shield possess prominently inflated bumps and folds. All other species of *Halicyne* have papillated carapace surfaces. *H. plana* possesses a body more narrow than long, inflated areas on the anterior part of the carapace, and a postero-medial distinctly pointed margin. *H. ornata* may resemble *H. max* most closely in that it has an almost circular outline; but it exhibits large optic notches and a pointed postero-medial margin, and

the ventral part of the rostral plate appears to lack bosses on the surface.

The lamellae under the carapace of *Halicyne* pose problems for interpretation. These structures may constitute a diagnostic feature for this genus. We do not notice lamellae such as these on any other cycloids. Aside from *H. max*, similar lamellae also occur in *H. ornata*. The thin, double-walled nature of the plates possibly suggests an interpretation of these as "gills." One might