

- 36(34). Wall partitions absent from base of branches *Cladophoropsis*, p. 330
 36(34). Wall partitions present at base of branches 37
- 37(36). Filaments from (0.3–)0.5–1.0 mm diam.; branching solely unilateral, on outside of curve
 *Valoniopsis*, p. 314
- 37(36). Filaments seldom greater than 0.5 mm diam.; branching varied, occasionally unilateral
 near apices *Cladophora*, p. 320
- 38(6). Stipe present 39
 38(6). Stipe absent 40
- 39(38). Branching whorled at apex of parent branch *Ernodesmis*, p. 338
 39(38). Branching lateral to parent branch *Siphonocladus*, p. 334
- 40(38). Thallus generally as solitary, large, spherical cell 41
 40(38). Thallus as clusters of large macroscopic cells 42
- 41(40). Cells translucent green, reflective; growing on any solid substrate; attached by small distinct
 rhizoidal cells *Ventricaria*, p. 336
- 41(40). Cells glossy green, not reflective; growing on crustose coralline algae; attached by fine
 coenocytic (without cell walls) rhizoids *Halicystis* stage of *Derbesia*, p. 348
- 42(40). Cells round or oval, large, greater than 3 mm diam. or, if less, greatly elongated, 5–20 mm
 long *Valonia*, p. 338
- 42(40). Cells angular or polygonal, small, less than 3 mm diam. *Dictyosphaeria*, p. 332
- 43(8). Surface or shallow subsurface stolons obvious; siphons with microscopic transverse supports or
 trabeculae [highly variable genus with many forms] *Caulerpa* (in part), p. 356
- 43(8). Surface stolons lacking or obscure; siphons without trabeculae 44
- 44(43). Thallus of tough, spongy branches or as prostrate, tough, spongy mats; composed of complex
 siphons with cortex of tightly packed utricles (swollen siphon apices) *Codium*, p. 350
- 44(43). Thallus with distinct stipe topped by paddle-shaped or parasol-shaped blade or as prostrate
 spongy mat, without cortex of utricles 45
- 45(44). Surface siphons colorless, thin, contorted, tightly interwoven, forming discrete cortex;
 abrupt distinction between cortex and medullary siphons *Cladocephalus*, p. 396
- 45(44). Surface siphons absent or loosely interwoven; no abrupt distinction between cortex and
 medullary siphons 46
- 46(45). Lateral branchlets terminating in specialized hapteroid (finger-like) apices *Rhipilia*, p. 412
- 46(45). Lateral branchlets without specialized hapteroid apices 47
- 47(46). Thalli generally greater than 6 cm high; blades greater than 100 μ m thick.. *Avrainvillea*, p. 380
- 47(46). Thalli generally less than 6 cm high; blades less than 100 μ m thick *Rhipiliopsis*, p. 414

By its cryptic coloration
 and surface texture, the
 herbivorous crab
Thersandrus compressus
 takes refuge on its host
 plant *Avrainvillea*
longicaulis (see Hay et al.
 1990, Littler & Littler
 1999a). Many marine
 invertebrates are
 camouflaged to match the
 algae on which they occur.

