

EPIPHYTIC ALGAL BROWSING by Bittium varium (Gastropoda)
AMONG Thalassia testudinum TURTLEGRASS. Linda K. Hardison and
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In seagrass meadows along the northwest Gulf of Mexico, epiphytic algae are important elements in the food web of diverse invertebrates. These algae commonly found on turtlegrass (Thalassia testudinum König) included encrusting coralline algae (Heteroderma and Dermatolithon), diatoms (e.g., Rhopalodia and Cocconeis), and filamentous green and red algae (Cladophora and Acrochaetium). The most common macroscopic animal present, Bittium varium Pfeiffer, fed primarily on diatoms and coralline algae. Although the usual population density of this snail was high ($\sim 3000/m^2 \approx 30/\text{blade}$), little impact on its foods could be detected. In caging experiments in the field, a depletion of epiphytes was seen only when we maintained a tenfold enhancement of Bittium density over ten days. In this system, the naturally high concentration of snails apparently does not have a large overall impact on their major food resources.