

COMMENSAL AMPHIPODS IN ASCIDIANS AND SPONGES OFF PHUKET ISLAND

Simon Bahrndorff and Magnus Løfstedt

Department of Marine Ecology, University of Aarhus,
Finlandsgade 14, DK-8200 Aarhus N, Denmark

ABSTRACT: Host associations of four endofaunal amphipods were investigated during three months of fieldwork at Phuket Marine Biological Center (PMBC) in Thailand. Two amphipod species, *Colomastix lunalilo* and *Leucothoe tridens*, were reported in the area around Phuket for the first time. *Colomastix lunalilo* was found in two sponge species, *Haliclona* sp. and *Amphimedon* sp. The former host was found on a reef flat and provided *C. lunalilo* with protection even during low tide periods (unnatural for endobiont amphipods found in littoral sponges). *Leucothoe tridens* was found in the sponge *Haliclona* cf. *pigmentifera*. *Nepanamixis* sp. was found in the numerous oscula scattered over the sponge *Xestospongia* sp. and was host specific, the sponge providing the amphipod with camouflage. *Leucothoe furina* was not found to be host specific but had a preference for *Polycarpa* sp., a large solitary ascidian, with an occupancy rate of 80%. A few adults and cohorts of juveniles occupied the host. Sub-adults were found as epifauna among coral-rubble. *Polycarpa* sp. forms an important reproduction habitat for *L. furina* juveniles which experience extended parental care in their host. The absence of sub-adults in *Polycarpa* sp. is explained by intraspecific competition.
