

DIVERSITY OF HOMOSCLEROMORPHA (PORIFERA) IN TWO SUBMARINE CAVES IN THE AEGEAN SEA (EASTERN MEDITERRANEAN)

ANAÍRA LAGE¹, VASILIS GEROVASILEIOU^{2,3}, ELENI VOULTSIADOU³ & GUILHERME MURICY¹

¹ Universidade Federal do Rio de Janeiro, Museu Nacional, Departamento de Invertebrados, 20940-040, Rio de Janeiro, RJ, Brazil (anairalage@gmail.com; muricy@mn.ufrj.br)

² Institute of Marine Biology, Biotechnology and Aquaculture, Hellenic Centre for Marine Research, 71003, Heraklion, Crete, Greece (vgerovas@hcmr.gr)

³ Department of Zoology, School of Biology, Aristotle University of Thessaloniki, 54124, Thessaloniki, Greece (elvoults@bio.auth.gr)

Sponges of the class Homoscleromorpha are hard substratum dwellers, often found in dark or semidark habitats. During a research on cave sponge diversity in the north Aegean Sea, we surveyed with SCUBA diving two submarine caves in Lesbos Island (Aegean Sea, eastern Mediterranean): Fara Cave (18 m depth) and Agios Vasilios Cave (23-40 m depth).

Among the collected material, we identified 10 homoscleromorph species, which we present in this study. Four of them were identified as species of the genus *Oscarella* (family Oscarellidae): *O. cf. balibaloj*, *O. cf. tuberculata*, *O. cf. microlobata*, and *O. jarrei*) and six were species of *Plakina* (family Plakinidae): *P. trilopha*, *P. bowerbanki*, *P. cf. crypta*, *P. aff. weinbergi*, and *Plakina* spp. nov. 1–2. Some of these species have been rarely reported in the Mediterranean up to date: *O. microlobata* and *P. weinbergi* were sporadically recorded in a small number of caves in the Mediterranean Sea, while *P. crypta* was found in a single cave in the northwestern Mediterranean. This is the first record of this species in the eastern Mediterranean.

Homoscleromorpha, as a group, had significant contribution to the sponge assemblages of the studied caves; they occupied 25% of the total sponge coverage in Agios Vasilios Cave and 4% in Fara Cave, with *P. bowerbanki* being the dominant homoscleromorph in terms of spatial coverage in both caves.

The high spatial coverage and diversity of Homoscleromorpha in only two caves, including rare records and three new species, indicate that exploration of more caves in the Aegean Sea might further increase the known species richness of this sponge group in the Mediterranean.