

Characteristics of *Axinella cannabina* (Esper, 1794) (Porifera, Demospongiae) population in the southeast Adriatic Sea (Boka Kotorska Bay, Montenegro)

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Abstract text

The porifera *Axinella cannabina* (Esper, 1794) is endemic species to the Mediterranean, characterized by erected and branched growing. At some locations this species is forming a 3D habitat (marine animal forest) important for different species and classified as Vulnerable Marine Ecosystem. Due to its ecological importance and threats *A. cannabina* is included on the list of endangered and threatened species under the Barcelona Convention (Annex II) and it is listed on the national list of protected species in Montenegro.

Multiannual research on the distribution of *A. cannabina* in the southeastern Adriatic Sea has shown that very abundant populations are present on three sites in the Boka Kotorska Bay (Dražin vrt, Sopot and Pristan). The analysis made by SCUBA diving *in situ* included counting of the total number of individuals and calculation of density, the measurements of the height and assessment of necrosis/epibiosis presence on all measured and photographed individuals.

The obtained results show that the most numerous population was recorded at the site Pristan (211 individuals), where also the highest density of 0.52 individuals/m<sup>2</sup> was calculated. The average height of individuals was the highest (46.07 cm) at the site Sopot, while the maximum height was 136 cm at the site Pristan. In relation to the presence or absence of necrosis and epibionts populations in all surveyed sites were in good condition.