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The Sponge of Barbosa du Bocage
A revolution in Oceanography

In 1864, José Vicente Barbosa du Bocage, professor of Zoology at Escola Politécnica de Lisboa1, published an article in the Proceedings of the Zoological Society of London, revealing a new species for the genus Hyalonema, called Hyalonema lusitanicum. This peculiar animal is a sponge.

The reactions among the scientific community were not consensual and started a broad discussion on the description and habitat of this animal. The genus Hyalonema was known, until then, to live only at the Sea of Japan. The specimens were then described as a series of polyps fixed to a structure of crystalline filaments associated with a sponge at one end, which served as substrate. The discussion was intense between several renowned zoologists such as Gray (British Museum, London), von Brandt (Academy of Sciences of St. Petersburg), Schultze and Valenciennes (Muséum d'Histoire Naturelle, Paris). In 1868, Lovén (Naturhisoriska Riksmuseet, Stockholm) published an article in the Annals and Magazine of Natural History, mentioning similar specimens to the genus Hyalonema but describing them as having the crystalline filaments attached directly to the substrate.

The curiosity about these animals increased and Barbosa du Bocage invites Perceval Wright (Trinity College, Dublin), who had great interest in the seabed, to come to Portugal. Perceval Wright performs dredging in the coast of Setúbal at 1100m deep. He could then collect intact specimens of the sponge that confirmed Lovén's theory. The specimen here displayed belongs to the same genus and is preserved upside down, due to conservation issues but also as interpreted by Bocage.

At the time, the Forbes' Azoic theory predicted that animal life could only exist up to 550m deep. Therefore, the great contribution for oceanography of this discovery by Barbosa du Bocage was the demonstration that there was animal life at 1100m deep, much more than Forbes admitted. Oceanography earned then a new scale.

1 – which existed in this same building.

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