GLOBAL WARMING THREATENES the corals of our sea.

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Along the Italian coastline, the growth of the coral Balanophyllia europaea, a species found only in the Mediterranean, dramatically decreases with increasing seawater temperature.

This is the conclusion of the study of the Marine Science Group (MSG, http://www.marinesciencegroup.org/), the marine biology and ecology research group of the Department of Evolutionary and Experimental Biology of the University of Bologna, with the participation of the Bar-Ilan University of Ramat-Gan (Israel).

The results will be published soon by the most prestigious international scientific journal on aquatic sciences: Limnology and Oceanography (www.aslo.org/lo).

According to the scenarios of the Intergovernmental Panel on Climate Change (IPCC), the most authoritative international body for the study of climate change, by 2100 Mediterranean seawater temperature will increase by 1-3 degrees.

This warming will shift the temperatures above the tolerance limit threshold of Balanophyllia europaea, whose skeletal calcification capacity could decrease up to threaten its survivorship.

This risk could also be shared by other corals or calcifying organisms (like several algae, gorgonians, sea urchins): a possible damage for the natural heritage of the Mediterranean Sea, one of the “hotspots” of global biodiversity.

The technique of scientific diving, in which the Marine Science Group is specialized with international awards, was at the base of the realization of this research, which put the researchers and graduating students to work for 2 years in underwater samplings from Genoa to Pantelleria Island.

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Original title of the scientific article: Inferred level of calcification decreases along an increasing temperature gradient in a Mediterranean endemic coral

International scientific journal: Limnology & Oceanography (International Journal of the American Society of Limnology and Oceanography; http://www.aslo.org/)

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