

Figure S1: Layout of the experimental system used for the constant and the changing temperature effects experiments in this study. In each experiment there were four separate temperature controlled flowing seawater systems, each with four replicate bowls that housed the polyps and podocysts on glass slides. This sketch provides examples of chilled and heated water baths, showing the added seawater and the overflow that enabled maintenance of water quality and temperature regulation.

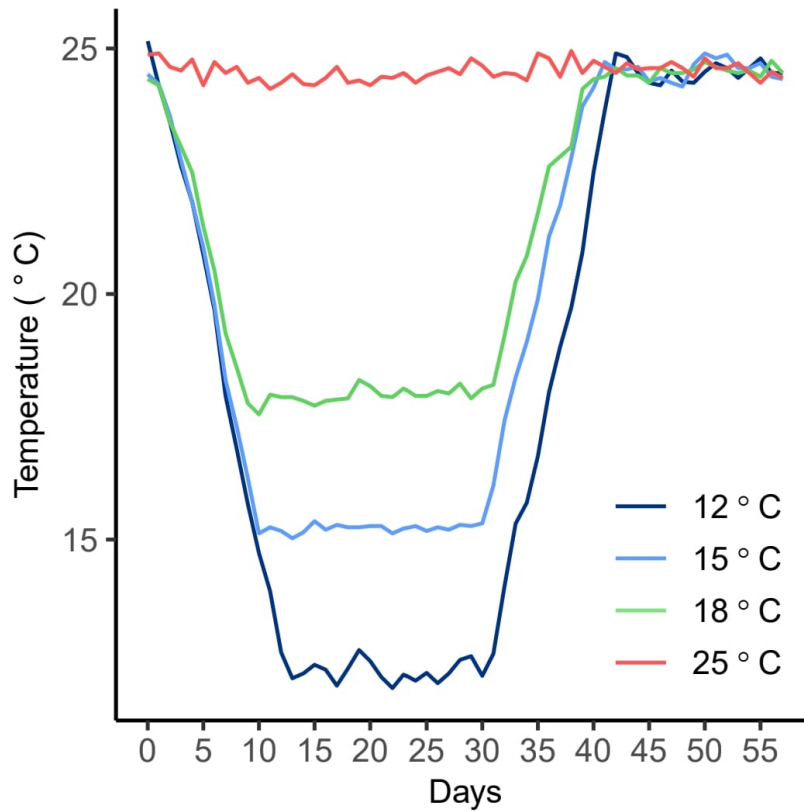


Figure S2: Temperature regime that was used to simulate winter during warm and cold years in the eastern and western Mediterranean during 60 days of experiment with *R. nomadica* polyps and podocysts. The temperature was reduced from 25°C (constant temperature control) to the target temperatures (12, 15, 18°C) at a rate of 0.5-1°C d⁻¹ for 14 days, then kept constant for 18 days, and finally raised (at the same rate) to reach 25°C again.

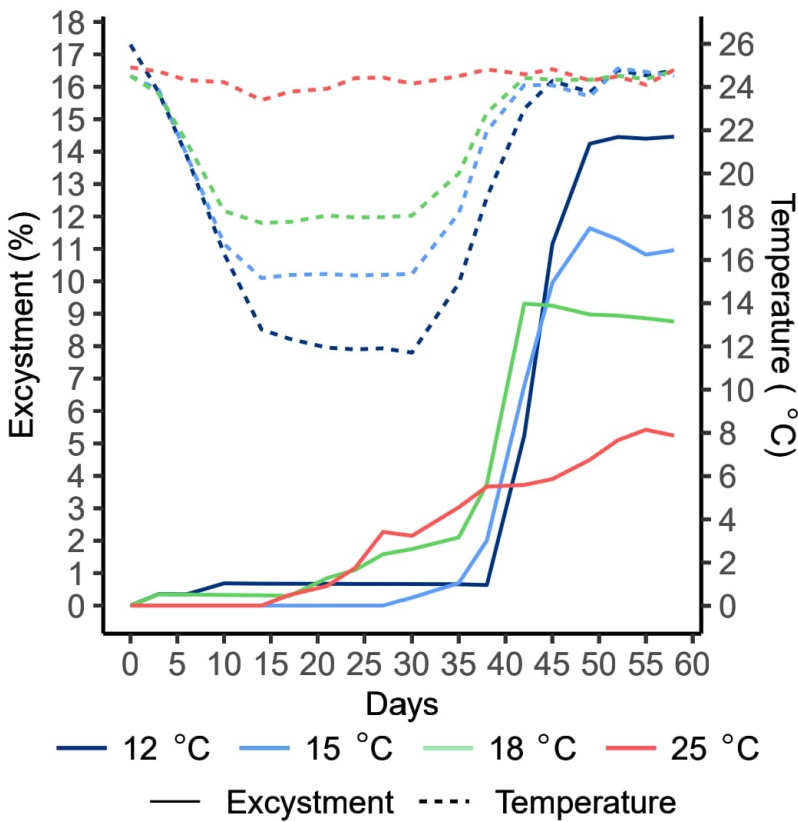


Figure S3: Mean excystment of *R. nomadica* podocysts during 60 days of experiment. Colors represent the different treatments. Dashed lines represent temperatures during the experiment timeline. Solid lines represent podocyst excystment (%). All podocysts, including those produced during the experiment, were analyzed.