

Abstract auf Englisch – Beispiel

The destruction of coral reefs due to human activities has significantly increased over the past decades, posing substantial impacts on marine ecosystems globally. A significant but often overlooked factor contributing to this issue is the contamination of oceans by microplastic particles. This study aims to investigate the specific influence of microplastics on the growth and vitality of stony corals (Scleractinia), a group of corals essential for the formation of reef structures.

To evaluate the effects of microplastics on these corals, aquariums with varying concentrations of microplastic particles were set up: 0 particles/L (as a control group), 100 particles/L, and 1000 particles/L. Over a span of two months, various parameters, such as growth rate, coloration, and general health indicators of the corals, were systematically recorded and analyzed.

Preliminary results indicate significant negative effects on coral growth and overall health condition at the higher microplastic concentrations. Particularly at the concentration of 1000 particles/L, the corals showed significant stress symptoms.

These results point to the urgent need to take marine microplastic pollution seriously and take proactive measures to reduce it. Furthermore, they highlight the importance of preserving coral reefs, not only for their ecological role but also for their socioeconomic relevance to coastal communities that depend on these ecosystems.