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DIFFERENTIAL PHYSIOLOGICAL RESPONSES OF *ULVA RIGIDA* TO WASTEWATER RELATED TOXIC COMPOUNDS

Sewage outfalls are one of the main anthropogenic impacts to coastal systems. Despite great progress, wastewater treatment plants (WWTP) effluents entering surface waters still present a major source of toxic pollutants. The presence and risk of many compounds, the so-called emergent pollutants, is sometimes unknown until they cause alterations in coastal communities. In this way, ecotoxicological biossays have helped to identify the potential toxicity risks of anthropogenic derived effluents and related compounds. In this study we evaluated the toxicity of WWTP effluents, and two compounds frequently present in those inputs, such as zinc (Zn), a metal, and Benzophenone-3 (BP-3), a UV filter included in cosmetic formulas. The physiological responses of the macroalga Ulva rigida, such as growth, percentage of reproductive disks or maximum relative electron transport rate (rETR_{max}), and maximum quantum yield (F_v/F_m), was evaluated under different concentrations of these compounds. The results show that this macroalgal species shows a good and comparable sensitivity to other model organisms used in ecotoxicological bioassays. However, there is no global indicator of the toxicity of these compounds, probably due to their differential effects on the macroalgal physiology. Therefore, more studies aiming to find a good indicator of the toxicity of different compounds to macroalgae are needed.