

**P 8. HEAVY METALS TOLERANCE BY S. PLATENSIS**

Amruta Padgaonkar<sup>1</sup>, Additiya Paramanya<sup>1</sup>, Ahmad Ali<sup>1\*</sup>

<sup>1</sup>*University Department of Life Sciences, University of Mumbai, Vidyanagari, Santacruz (E), Mumbai-400098, India*

*E-mail: ahmadali@mu.ac.in*

**ABSTRACT:** Excessive discharge of wastewater into natural water bodies cause water pollution, due to disturbed self-revival systems. Heavy metals in the sewage have affected the ecosystem to the extent that it is a detriment of humans, as it is difficult to eliminate them and instead, they accumulate in the organisms. Use of dry biomass of *Spirulina platensis* has proven to precipitate and biosorb heavy metals. This study aimed to check the tolerance of wet biomass of *S. platensis* to various heavy metals usually associated with wastewater. Preliminary experiments were conducted to standardise and optimise the growth conditions of *S. platensis*, in turn establishing a growth curve. Special emphasis was made on checking the tolerance of the microalgae to mercury [Hg(II)], for other organisms seldom grow in the presence of mercury.

**Keywords:** *Bioaccumulation, Spirulina platensis, Heavy Metal Toxicity, Mercury, Wastewater*