

Nichel ions removal from waste water using typha angustifolia plant

Abstract: Heavy metals are described as environmental pollutants because their toxicity, longevity in the atmosphere, and unfortunately their ability to accumulate in the human body through bio-accumulation. Also, the pollution of terrestrial and aquatic ecosystems with toxic heavy metals is a major environmental concern that has consequences for public health. These heavy metals are characterized by their high atomic mass and toxicity to all organisms. Most of them cause environmental and atmospheric pollution, and more drastic can be lethal to humans. Heavy metals can become very toxic in contact with different environmental elements (water, soil, air). Eco-friendly and low-cost methods become new perspectives for near future. Our research developed a process for removal of nickel ions from waste water. Using *Typha angustifolia* plant, we made experiments to perform the Ni (II) ions removal. It was observed an increase using more than one plant via a long period of time, the yield being approximately 85% when 5 plants were used, compared to 77% yield when only one plant was used.