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Removal of chromium from aqueous solution by non-living biomass of *Cabomba* sp

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Chromium occurs in several oxidation states ranging from Cr^{3+} to Cr^{6+} with trivalent and hexavalent states being the most common in terrestrial environment. It is widely deployed in various industries namely electroplating, dyes and pigments, textiles and photography and wood processing. Chromium is present in these effluents chiefly as Cr (VI), which is toxic and mutagenic for most organisms. Strong exposure of Cr (VI) causes cancer in digestive tract and lungs.

Both living and dead aquatic vascular plants play an important role in removing heavy metals. The main advantages of using dead biomass over of living plants are that problems of metal toxicity on plant metabolism, plant deterioration, odour liberation and insects proliferation are avoided, no additional nutrients are required and it involves low cost. The dried biomass also presents an advantage for conservation, transport, and handling and as such becomes ready for usage in wastewater units as simple sorbent material.

In this study, dried biomass of *Cabomba* sp was treated with varying concentrations of Cr (VI) solution and after eight days, the biomass was analysed using Atomic Absorption Spectrometer.

Experimental results showed that the removal efficiency of Cr (VI) by non-living biomass of *Cabomba* sp. decreases with increasing concentration of the test solution, showing the maximum % removal of Cr (VI) at an initial concentration of 3 ppm of test solution. These results show promise for the use of non-living biomass of *Cabomba* sp. for removal of chromium from polluted sites

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