**Ripe banana peel as a bio-absorbent for removal of methylene blue**

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The current century is facing numerous health issues due to lack clean water resources. The onset of industrialization and urbanization has led to upsurge in chemical contaminants in water bodies. The contaminants include agricultural contaminants, heavy metals, dyes etc. There has been a gradual increase in the amount of dyed effluents emanated from such dying units. The conventional treatment methodologies for removal of dyes from effluent are not economically viable. The search for a cheaper technique has led to the usage of biological components as bio-absorbents. In the current work peel of ripe banana (*Musa acuminata*) is used as a bio-absorbent. The in vitro studies were conducted to check the removal efficiency of methylene blue. The adsorption experiments were carried out with reference to contact time (5-100) min under constant temperature of 27˚C. . The results indicated that the optimum conditions were adsorbent dose was 0.60 g per 50 ml dye solution with contact time of 40 min.

Key words: Bio-absorbent, Banana peel, Methylene blue