

CHAPTER 10

PREPARATION OF BIOSORBENT FROM RAMBUTAN PEEL FOR REMOVAL OF BROMOPHENOL BLUE DYE IN AQUEOUS SOLUTION

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INTRODUCTION

Wastewater from the chemical industry can hold variables of a polluting substance including dyes. The contamination problem is different for the various types of dyestuffs. Colour is the first contaminant to be realised in the wastewater and must be removed before discharged into the waste body or land. The presence of the very little amount of dye in wastewater is highly visible and will affects the aesthetic merit, water transparency, and gas solubility in the lake or river. An adsorbent for dye removal is often used as for dye removal. Biochar is widely being used as adsorbent because of its capacity for efficiently adsorbing a broad orbit of dissimilar types of dyes that are applied in manufacturing process.

Bromophenol blue is one of dyes that are mostly used in the chemical industry. Bromophenol blue generally used as a histochemical reagent for the recognition of protein. It is also an acid phthalein dye that are commonly used as a pH indicator (Baker, 1958). This dye is mostly used as an agarose gel electrophoresis size marker (Baker, 1958). In the industry, it is undeniable that this dye efficiently helps ensure the success of an experiment or to produce a product. Nevertheless, when the dye is released as waste water, there are many disadvantages that impact the environment, humans and brutes.