

ABSTRACT

With the rapid development industry, the production of dye wastewater has increased year by year. Dye composition complexes, high concentration and high color, difficult to biodegradable substances so the bagasse “the material managed by making adsorbent (activated carbon) as it contains high content of carbon are utilized in filterer paper and making bricks

INTRODUCTION

The main objective of waste management it to reduce the amount of unusable material and prevent potential health and environmental hazards. As we know that bagasse is the byproduct of sugar industry. So, we managed these organic waste material bagasse by making adsorbent and also utilized it in filter paper production and also for making bricks form it. With the rapid development of industry, the production of dye waste-water has increased year by year. Dye composition complex, high concentration, and high color, difficult to biodegradable substances, difficult to biodegrade. It is important to remove these toxic dyes from water. For this purpose, we use very cost-effective method of removing textile dyes by using Bagasse. Bagasse is the dry pulpy fibrous material that remains after crushing sugarcane or sorghum stalks to extract their juice. Bagasse is another by-product of sugar industry. Activated carbon, also known as activated charcoal, is a form of carbon commonly used to filter pollutants from water and air, among many other uses. It is believed to have small, low volume pores that increase the surface area available for adsorption or chemical reaction.

METHODOLOY

The dye wastewater is treated with bagasse charcoal powder. The water get purified after this eco-friendly and cost-effective treatment. The management of waste by product of sugarcane “BAGGASE” by filter paper production and formation of cost-effective bricks



RESULT AND DISCUSSION

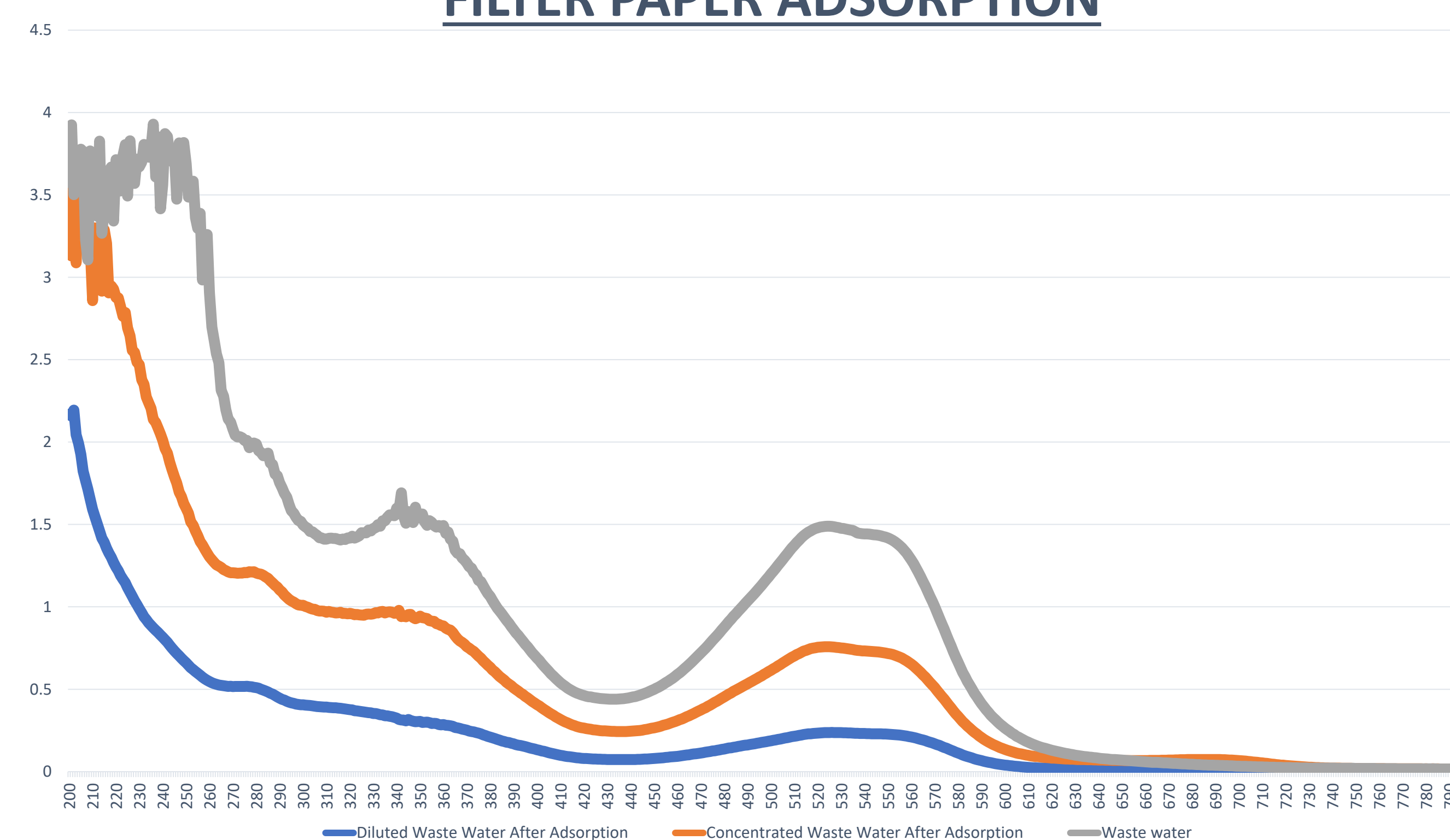
This method of purification of water can be use by industries and common people. It is also a pocket friendly method. It is observed that the filter beds have remarkable strength and are good adsorbent. It adsorbed almost 75-85 % dyes from the water. The carbon ash adsorbed 85% of dyes from waste water, it also worked as a great adsorbent. The bricks manufactured by organic waste are cost effective and have great tensile strength. It can be used for constructive purposes.

CONCULSION

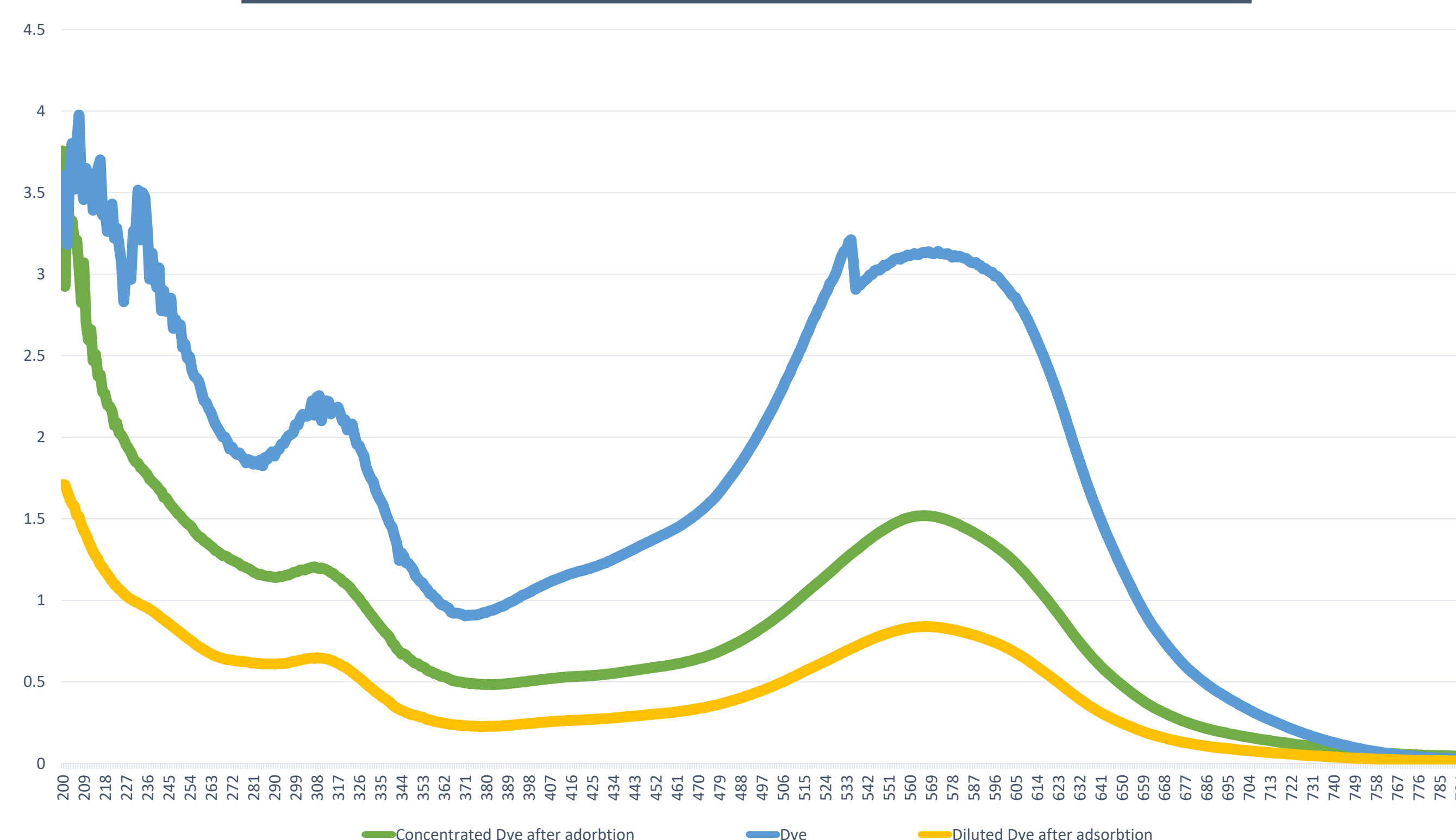
We observed that the dyes wastewater almost get 85% purified. The filter paper strength is remarkable and also have ability to adsorb some of the dyes. The bricks that made by bagasse also have great strength.



FILTER PAPER ADSORPTION



CHARCOAL ADSORPTION OF TEXTILE DYES



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ACKNOWLEDGMENT

We are thankful to Dr. Najma Rasool, Chairperson of the department and Dr. Saiayda Shadiah Masood, Course coordinator, for providing us this research opportunity.