EJ13. REMOVAL OF COLOUR PIGMENTS USING AQUEOUS EXTRACTS OF CAESALPINIA BONDUC SEEDS

N. PRIYANTHA AND S. PERERA

Department of Chemistry, Faculty of Science, University of Peradeniya, Sri Lanka

Alarming increase of water pollution and uncontrollable industrial waste management problems have been a global issue in the twentieth century. As water pollution shows a direct impact on the health and the environment it is crucial that preventive measures be taken as necessary. Further, waste arising from the textile processing industries and synthetic fiber industries may cause major colour pollution of surface waters.

The research is on the use of aqueous extracts of *Caeseulpinia bonduc* seeds, to develop law-cost procedures for removal of some pollutants from industrial effluents. According to absorbance measurements, significant reduction of the many coloured substances used in textile and synthetic fiber industries such as blue CR ,C₂ blue ,C Navy blue CR, Congo red, Crystal violet, C Red C₂G, C Yellow C₂R, YA₃G, OMGT and GABG is observed during the treatment process. This methodology has a potential for removal of coloured substances and decrease in turbidity of industrial effluents. Comparison of the measurements before and after treatment of colour and turbidity indicates that the removal percentages are 70% and 32%, respectively.