

ABSTRACT

Study of color degradation of wantex on a laboratory scale by electrocoagulation method using 4 aluminiums electrode has been conducted with dimensions of 12cmx30cm. The effect of time, voltage and distance between electrodes is proven to be able to increase the efficiency value of waste color degradation. The electrocoagulation process was carried out for 7 hours and measurement of the clarity of the sample was carried out every 30 minutes. The variation of the voltage used is 10 and 12 volts. The variations in the distance between the electrodes used were 1, 2, and 3 cm. The variations in the concentration of wantex used were 2; 2.67; 3.33; and 4 (w / v%) by mixing 0.6; 0.8; 1; and 1.2 grams of wantex powder into 3 liters of distilled water. The results of photometer measurements showed that the wantex waste color degradation with a clarity level of up to 99.89%. This value is much higher than the previous study which only reached 88.51% at the same time, voltage, and distance between the electrodes, namely 180 minutes, 12 volt, and 1 cm.

Keywords: *Electrocoagulation, Color, Waste, pH, wantex, degradation*