International Journal of ChemTech Research
CODEN(USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.10 No.12, pp248-255,2017

Effectiveness of Moringa Seeds Powder and Tamarindseeds Powder Asnatural Coagulant for Increasing Tofu Industrial Waste Water Quality

Harimbi Setyawati, Muyassaroh*

**Chemical Engineering Department, National Institute of Technology (ITN)Malang
Jln. BendunganSigura-gura No 2 Malang, East Java, Indonesia 65145, Ph. 0341-551431**

Abstract: This research investigated the effectiveness of moringa seed and tamarind seed as a natural coagulant. Both of natural coagulant was used to increasetofu industrial waste water, that contains very high organic material. Based on the results of this experiment, the tofuwaste water contains BOD (510mg/L), COD (800 mg/L) and TSS (2800 mg/L). So, it must be treated before discharged into the environment to reduce the contaminants. Moringa seeds powder (4,81% v/v in water) and tamarind seed powder asorganiccoagulant (particle size 70 mesh), variations of stirring time of 1, 1.5, 1, 2.5 and 3 minutes were used in this experiments. The jar test methods was used to know the optimum dosage from the both of the natural coagulant. Thisresults showed that moringa seed powder was more effective to reduce BOD, COD and TSS content than tamarind was. The best result of moringa seeds powder treatment could be reduce the BOD content to 76 mg/L, COD content to 96 mg/L and TSS content to 400 mg/L.
Keywords: organiccoagulant,moringa seeds, tamarind seeds, tofu, wastewater.

*****