

Reduction of Chromium (VI) in Industrial Tannery Plant Waste Using *Saccharomyces cereviceae*

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ABSTRACT

One of the causes of environmental pollution is Cr (VI) contained in the tannery plant waste. Processing study of Cr (VI) contained in tannery plant waste using *Saccharomyces cerevisiae* was conducted. A total of 25 mL of tannery waste water samples were incubated with *Saccharomyces cerevisiae* is concentration of 1.25 mL; 2.5 mL; 3.75 mL; 5 mL; 6.25 mL; 7.5 mL. The essay is performed using a UV-Vis Spectrophotometric at a wavelength of 544 nm. The result showed that wastewater samples in the leather tanning industry at Sukaregang Garut positive for Cr (VI). The concentration of Cr (VI) in tannery wastewater samples 9.492 ppm or 9.492 mg/L. The terms of Cr (VI) concentration by Keputusan Menteri Lingkungan Hidup is 0.06 mg/L, and it showed that the concentrations of Cr (VI) in tannery waste is too large and inappropriate with the terms. Addition of *Saccharomyces cerevisiae* to each concentration (1.25 mL; 2.5 mL; 3.75 mL; 5 mL; 6.25 mL; and 7.5 mL) had decreased levels. Calculations using Anova Statistics showed a significant difference between the variation of concentrations of *Saccharomyces cerevisiae*. The optimum results is in the addition of 7.5 mL of *Saccharomyces cerevisiae* with 72.06 while 7 day.

References :

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Presented on The University of Muhamadiyah Ourwekerto Pharmacy International Confrence (UMP_PIC) as Poster Presenter