ABSTRACT
(*Literature review)*

THE EFFECT OF CONTACT TIME VARIATIONS ON ADSORPTION OF METAL CADMIUM (Cd) USING DIFFERENT FRUIT PEEL ADSORBENTS

Iis Swanti

An example of a very dangerous heavy metal is cadmium (Cd). Watermelon rind is used as an alternative source of pectin production. Mas banana peel (*Musa acuminata* Colla) is used as a biosorbent. Kepok banana peel (*Musa paradisiaca* L.) is a source of lignin, pectin, cellulose and hemicellulose. The aim of the study was to determine the optimum contact required to adsorb heavy metal cadmium (Cd) using the adsorbents of watermelon skin (*Citrullus lanatus*), Mas banana peel (*Musa Accuminata* Colla), and Kepok banana peel (*Musa paradisiaca* L.). This research method is literature review with scanning, skimming, mapping flow. The conclusion from the results of a literature review study of 3 articles shows that fruit peel waste can be used as an adsorbent, where variations in contact time affect the adsorption of Cadmium (Cd) metal. The optimum contact time on the use of watermelon rind as an adsorbent was 30 minutes with an initial concentration of 10 mg/L to 0.545 mg/L, a decrease of 9.455 mg/L (94.55%) occurred in the use of Mas banana peel as an adsorbent during 35 minutes with the gain of 78,45% adsorption percentage, and the use of kepok banana peel as an adsorbent for 60 minutes with the acquisition of 99.5% adsorption percentage. From this literature review study, it can be used as an alternative to using other fruit peel wastes as adsorbents and parameters other than contact time are used as independent variables in the next literature review.

Keywords : Cadmium, adsorbent, contact time