ABSTRACT
(RESUME ARTICLE)

PERCENTAGE OF LEAD METAL ADSORPTION (Pb) SOME TYPES OF FRUIT PEELS AS BIOSORBENTS BASED ON THE INFLUENCE OF CONTACT TIME VARIATIONS

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Pollutants generally have toxic or toxic properties that are harmful to living organisms. Breadfruit peel waste (*Artocarpus altilis* (Park) fosberg), Rambutan fruit skin (*Nephelium lappaceum*) and Salak pondoh fruit skin can be used as an alternative source of adsorbent making because it contains pectin and cellulose. The purpose of the study was to determine the contact time needed to adsorb the heavy metal Lead (Pb) using adsorbents of breadfruit peel (*Artocarpus altilis* (Park) fosberg), Rambutan fruit skin (*Nephelium lappaceum*) and Salak pondoh fruit skin.

This research method is Article Resume. Researchers search manuscripts through official databases and library sources relevant to the research topic. The database used is Google Scholar. Search for manuscripts found and relevant, namely by means of a systematic search process of online catalogs, encyclopedias in the subject area, periodical indexes, and abstracts (scanning), identifying important information or ideas by reading quickly and carefully, potential material that is in accordance with researchers (skimming), information organizing techniques (mapping / mapping).

The results of the Resume article study of 3 articles show that fruit skin waste can be used as an adsorbent, where contact time affects the adsorption of Lead (Pb) metal. Percent efficiency results of Pb^{2+} metal ion reduction using breadfruit peel pectin (*Artocarpus altilis* (Park.) Fosberg) applied to pharmaceutical laboratory waste obtained maximum conditions at pectin weight 500 mg, contact time 90 minutes, pH 5 and particle size 120 mesh which can reduce Pb^{2+} metal ion levels by 89.42%. In activated carbon, rambutan fruit peel, the most effective reduction in Pb metal occurred at a stirring time of 30 minutes with an absorption effectiveness of 83.08%. The adsorption test uses activated carbon adsorbent from salak pondoh fruit peel on Pb^{2+} solution, the optimum time occurs at 15 minutes with adsorption percentage reaching 90.9%

From the study, Resume Articles can be used as an alternative to the use of other fruit skin waste as adsorbents and used parameters other than contact time as independent variables in the next article resume.

Keywords : Adsorption, Lead, Fruit peel adsorbent