

ABSTRACT
(ARTICLE RESUMES)

**THE USE OF SOME TYPES OF FRUIT SKINS ON LEAD (Pb) METAL
ADSORPTION BASED ON THE EFFECT OF VARIATION OF pH**

Widyan Ningsih

Pollutants usually have toxic or toxic properties that are harmful to living organisms. Jackfruit peel (*Artocarpus heterophyllus*), breadfruit peel (*Artocarpus altilis*) and watermelon peel (*Citrullus lanatus*) can be used as alternative adsorbent sources because they contain pectin and cellulose. The aim of this research review was to determine the optimal pH required to adsorb the heavy metal Lead (Pb) using an adsorbent of Jackfruit peel (*Artocarpus heterophyllus*), Breadfruit peel (*Artocarpus altilis*) and Watermelon peel (*Citrullus lanatus*).

This research method is an Article Resume. The researcher conducted a search through official databases and library resources related to the research topic for the manuscript. The databases used are *Indonesia One Search*, *Researchgate* and *Google Scholar*. Search for manuscripts that are found and relevant, namely through a systematic search process in libraries and online catalogs, subject field encyclopedias, periodical indexes, and abstracts (*scanning*), identifying important information or ideas by reading quickly and carefully potential materials suitable for researchers (*skimming*), techniques of organizing information (*mapping*).

The resume results for three articles show that the fruit peel can be used as an adsorbent where changes in pH affect the adsorption of Lead (Pb) metal. The optimum pH for using activated carbon from Jackfruit peel (*Artocarpus heterophyllus*) was reached at pH 6 with an adsorption effectiveness of 96.78%, on Breadfruit peel (*Artocarpus altilis*) as an adsorbent reached at pH 5 with an adsorption percentage value of 89.06%, and when using Watermelon peel (*Citrullus lanatus*) as an adsorbent the adsorption process was achieved at pH 4 with the highest percentage of 89.60%. Based on the study, article resumes can use other alternative fruit peels as adsorbents, and further article resumes can use parameters other than pH variations as free/independent variables.

Keywords : Lead (Pb), adsorbent, pH