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**ANALYSIS OF PANDANUS AMARYLLIFOLIUS (PANDAN) LEAVES  
EXTRACT AS SHAMPOO FOR HAIR GROWTH**

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**ABSTRACT**

This study analyzed Pandanus amaryllifolius (pandan) leaves extract as an ingredient in shampoo for promoting hair growth. The research employed an experimental method with a Posttest-Only Control Group in which the measurement of hair length was conducted after the treatment. The findings indicate that the presence of phytochemicals such as flavonoids, alkaloids, saponins, and tannins in pandan leaves contributes to hair growth. The experimental results show that a 20% concentration of pandan leaves extract, which is the highest concentration among the set-ups of 0%, 5%, 10% 15% in the shampoo formulation, is the most effective, achieving the highest mean hair length of 3.5 mm in Mus Musculus over a seven-day period. The one-way ANOVA test confirms with a p-value of  $7.47 \times 10^{-6}$  that there's a significant difference between the varying concentrations of pandan leaves extract and its effect on the length of hair growth, with higher concentrations leading to faster hair growth. This study highlights the potential of pandan leaves extract as a natural and sustainable alternative to synthetic hair growth treatments, offering valuable insights for future research and development in the field of hair care.

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