

## Abstract

The use of learning media has significant benefits in the world of education. Apart from that, to make it easier for educators to convey material to students, learning media also plays an important role in increasing students' motivation to learn more interactively and actively in the classroom. The aim of the research is: To produce valid infographic media on biotechnology material for class located on Jalan Pancasila RT.05 RW.02 Sako Village, Sako District, South Sumatra Province. The papaya leaves used are young and fresh leaves, because they still contain many natural compounds which are usually used as insecticides to kill head lice (*Pediculus humanus capitis*). The type of data obtained from this research is qualitative data, but analyzed using a quantitative approach. The data is in the form of numerical data which is then interpreted in the form of words. The Likert scale is used to measure attitudes, opinions and perceptions of individuals or groups towards a social phenomenon. Validity tests are carried out by experts in the fields of material, media and language. From the recapitulation results, it can be seen that the level of validity of infographic media is very high, with material experts reaching 91.11%, media experts reaching 91.25%, and language experts reaching 93.33%. The overall average percentage reached 91.76%. Based on the results of this validity test, it can be concluded that the development of infographic media for the Class XII SMA/MA Biotechnology subject can be categorized as very valid. These results strengthen the effectiveness of infographic media as a reliable learning tool in conveying information with high accuracy and credibility. In the test results, the characteristics of anti-head lice shampoo using papaya leaf extract (*Carica papaya* L.) are in accordance with SNI standards. This shampoo has certain properties that are measured through organoleptic tests. A good extract in shampoo is found at 7%. The texture appears as a thick liquid with a blackish green color, and has the distinctive aroma of papaya leaves. Additionally, the pH of this shampoo reaches a range of 7.56 to 7.40, indicating suitable acidity. The height of the shampoo foam is in the range of 14.83 cm to 19.05 cm, indicating the ability to produce good foam. This shampoo also shows good homogeneity, and its viscosity value ranges from 1731.89 cp to 2910.35 Cp, indicating an appropriate viscosity level.

**Keywords: Papaya leaves, Anti-Head Lice (*Pediculus humanus capitis*), Learning Media, Biotechnology**