

ABSTRACT

Acne (*Acne vulgaris*) is a common skin problem, especially in teenagers, and can reduce self-confidence. One of the main causes of acne is bacteria *Propionibacterium acnes*. This study aims to determine the antibacterial activity of an organic gel mask with lime peel extract (*Citrus aurantifolia*) and arrowroot tuber flour (*Marananta arundinacea*) as an organic ingredient that has the potential to be used in acne skin care. The research was carried out using experimental methods with stages of sample collection, extract making, gel mask formulation, and antibacterial testing. Lime peel was extracted using the maceration method with 70% ethanol solvent. Arrowroot tubers are used as a basic ingredient for forming gel. Testing was carried out with three variations of concentration, namely 5%, 10% and 15% Positive Control (Chloramphenicol) Negative Control (Aquades). Based on laboratory data, it was found that the organic gel mask with lime peel extract and arrowroot tuber flour did not have bacterial inhibitory power. *Propionibacterium acnes*. This means that this mask does not have the potential to be used as an anti-acnes agent because it needs several improvements, including the concentration of orange peel extract is still low so it is necessary to increase the concentration of lime peel extract. Then testing the gel mask product with orange peel extract and arrowroot tuber flour also needs to be tested on other acne-causing bacteria and the need for the extraction process from lime peel to be more optimal by using two types of solvents to ensure the antibacterial compounds can be extracted properly.

Keywords : Organic mask, lime peel extract, arrowroot tuber flour, antiacne