

ABSTRAK

Di Indonesia sering mengalami masalah pencemaran limbah terutama pada limbah rumah tangga yang dapat menyebabkan pencemaran lingkungan. Seringkali dijumpai limbah nanas di pinggir jalan, di pasar atau di samping rumah masyarakat Indonesia, berupa bagian kulitnya, batang, dan bahkan bonggol yang sangat kurang dimanfaatkan. Kulit buah *Ananas comosus* (nanas) mengandung vitamin C, karotenoid, flavonoid, dan enzim bromelain yang dapat digunakan sebagai antibakteri. Tujuan penelitian ini adalah menciptakan sabun cuci piring yang efektif menghilangkan noda minyak dan bakteri *Staphylococcus aureus*. Pada penelitian ini peneliti melakukan pembuatan sabun secara langsung dan uji organoleptik dengan membagikan kuesioner atau angket kepada 10 panelis. Hasil dari penelitian ini menunjukkan bahwa, sabun cuci piring kulit *Ananas comosus* (nanas) dapat menghilangkan noda minyak secara efektif serta menghambat pertumbuhan bakteri *Staphylococcus aureus*. Dilihat dari uji organoleptik kepada 10 panelis menyatakan bahwa sabun cuci piring peneliti layak dipakai, dan menghasilkan pH sebesar 7 sehingga sabun cuci piring sudah mencapai batas kualitas yang baik menurut standar SNI-2588-2017 serta dengan ketinggian busa yang terbentuk sekitar 2 cm sabun cuci piring dapat secara optimal membersihkan noda minyak.

Kata Kunci: antibakteri; ekstrak kulit buah *Ananas comosus* (nanas); *Staphylococcus aureus*; sabun cuci piring.

ABSTRACT

In Indonesia, we often experience waste pollution problems, especially household waste, which can cause environmental pollution. We often find pineapple waste on the side of the road, in markets or next to Indonesian homes, in the form of parts of the skin, stems and even tubers which are very underutilized. The skin of *Ananas comosus* (pineapple) contains vitamin C, carotenoids, flavonoids and the enzyme bromelain which can be used as an antibacterial. The aim of this research is to create dishwashing soap that is effective in removing oil stains and *Staphylococcus aureus* bacteria. In this study, researchers carried out soap making directly and organoleptic testing by distributing questionnaires to 10 panelists. The results of this research show that *Ananas comosus* (pineapple) skin dish soap can remove oil stains effectively and inhibit the growth of *Staphylococcus aureus* bacteria. Judging from the organoleptic tests on the 10 panelists, it was stated that the researcher's dishwashing soap was suitable for use, and produced a pH of 7 so that the dishwashing soap had reached the good quality limit according to the SNI-2588-2017 standard and the height of the foam formed was around 2 cm of dishwashing soap. can optimally clean oil stains.

Keywords: antibacterial; *Ananas comosus* (pineapple) fruit peel extract; *Staphylococcus aureus*; dish soap.