The Antimicrobial Activities of The Extracts of Red Fruit (Pandanus conoideus Lam) Pre-dried by Détente Instantanée Contrôlée(DIC)

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Abstract

Red fruit (*Pandanus conoideus* Lam.) is an indigenous plant from Papua Province, Indonesia. Local communities believed that fruit of *P. conoideus* Lam. can treat several degenerative diseases such as cancer, arteriosclerosis, rheumatoid arthritis, and stroke. DIC is a high-steam pressure treatment, is also categorized as a HTST (High Temperature Short Time) process. In this study, the antimicrobial activity of the etanolic and the hexane extract of red fruit pre-treated and untreated by DIC, and the red fruit oil are observed. The red fruit oil and all the ethanolic extract obtained from the red fruit powder pre-treated and untreated by DIC do not show an inhibitory activity toward *Escherichia coli* and *Staphyloccoccus aureus*. Also, the hexane extract from DIC pre-treatment does not show an inhibitory activity toward *Escherichia coli* and shows an inhibitory activity, but is not as potent as amoxicillin.

Keywords: Dètente Instantanée Côntrolée, pre-drying, Red Fruit (Pandanus conoideus), antimicrobial