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Lipstick Formulation To Use A Natural Dye From Rambutan (*Nephelium lappaceum* L.) Rind Extract.

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ABSTRACT

The red colour of rambutan (*Nephelium lappaceum* L.) rind is caused by anthocyanin compounds. Anthocyanin is a pigment that can be used as a natural dye. The aim of this study was to formulate lipstick using rambutan rind extract as a natural dye and to study its stability during time of storage. Fresh rambutan rind was macerated using 96% ethanol, then solvent was evaporated to obtain viscous extract. The lipsticks were formulated with various concentrations of extract to which 25, 27 and 29%. Physical stability of lipstick tests were conducted by measuring melting point, breaking point and stability of shape alteration, homogeneity, spread ability and also as well as irritation and the hedonic test was also applied to assess users acceptability. Qualitative dye stability test was using paper chromatography to which the samples were stored at three different temperatures; 2-8°C, 15-30°C, and 40°C. The results showed that the lipstick preparations gave pink to red colour, easy applied and stable during time of storage. Melting and breaking point fulfill requirement of lipsticks on the market. Paper chromatography results showed that rambutan (*Nephelium lappaceum* L.) rind extract as the natural dye remained unchanged at different temperatures of storage. The best formula was lipstick with 29% of extract because it had good physical quality (colour, homogeneity, melting point, physical strength, stability, and spread ability). The lipstick was easy well received by the panelist and did not give any irritations.

Keywords: Anthocyanin, *Nephelium lappaceum* L., lipstick, natural dye.

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