

# EFFECT OF EXTRACTION AND ROTATORY CONDITIONS ON QUALITY OF ANTHOCYANIN PIGMENT SOLUTION FROM *Peristrophe roxburghiana* LEAVES

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## Summary

*Peristrophe roxburghiana* is a perennial herb that is popularly cultivated in the Mekong delta. Anthocyanin pigment that is extracted from the leaves of this plant has used to dye for various foods. The study was conducted to investigate the effects of temperature (65, 75, 85 and 95°C) and extraction time (15, 20, 25 and 30 minutes); effect of water/material ratio (10/1, 15/1, 20/1, 25/1 and 30/1, v/w) and pH of the extracted water (2.5, 3.5, 4.5 and 5.5); the effects of vacuum rotatory time (30, 40, 50, 60 and 70 minutes) on the quality of anthocyanin color solution from leaves that were used for dyeing in the processing of coconut jam. The content of anthocyanin, total acid, dissolved solids/Brix, absorption (A), color values ( $L^*$ ,  $a^*$  and  $\Delta E$ ) of color solution were determined. The results showed that leaves were extracted at 85°C for 25 minutes; water/material ratio 25/1 and pH 3.5. The extract was supplemented with 15% maltodextrin and rotated at 80°C for 60 minutes, obtaining the best colorant with anthocyanin content of 72.0223 mgCE / 100g DM; absorption A ( $\lambda=520$  nm) 0.471; total acid (by citric acid) 0.324 g/L; 58°Brix; brightness  $L^*$  38,21; red value  $a^*$  7.76; total color difference  $\Delta E$  55.27.

**Key words:** *Peristrophe roxburghiana* leaves, extraction, rotatory, anthocyanin, Hunter's color system.