

**Selecting the best extraction method of betanin from beet
root (*Beta vulgaris*) and evaluating the suitability as a
colorant for set-yoghurts**

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By

R.W.D. CHATHURIKA

**Animal Science Degree Programme
Faculty of Animal Science and Export Agriculture
Uva Wellassa University**

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ABSTRACT

Selecting the best extraction method of betanin from Beetroot (*Beta vulgaris*) and evaluating the suitability as a colorant for set-yoghurts

Today many people trying to extract the juice of natural plant such as fruit or vegetable and incorporate it into the several industrial applications, naming as food, pharmaceutical, tanning, cosmetics and etc. Among them incorporation of natural extract in to food industry has revolutional trend. Beacuse of the health effects, cost reduction and conversion into safety food theme. Best extraction method of betanin colour from Beetroot and evaluation of betanin colour stability within the set yoghurt (Strawberry yoghurt) has been studied. Betanin are water soluble pigments found in vacuoles. In this study, extended shelf life of the betanin colour incorporated semi-moist yoghurt has been explored. Betanin colour was extract according to three methods such as blanching, alcoholoic and direct extraction and direct extraction was found out as best method by sensory evaluation. To prevent the oxidation of the colour 1% of vitamin C was added in to extracted colour solutions. Then directly extracted betanin colour stability within the set yoghut was observed. 1 ml of betanin colour was enough to give the relavant colour of strawberry yoghurt. Those each treatment has three replicates. Due to betanin colour incorporation cost of the production was reduce from 1.80 LKR. Better health effects of Beetroot, betanin colour incorporated strawberry yoghurt will contribute to reduction of many health problem such as carcinogenic risks, heart problems and etc, due to incorporation of artifial food colours. According to all results and findings incorporation of betanin colour into strawberry yoghurt properly stabilize within the set yoghurt and it was cause to reduce the cost of production and health risks.