



FEATURED RESEARCH SCHEME 2014 OF
EAST KALIMANTAN PROVINCIAL GOVERNMENT
In collaboration with
DEPT. OF AGRICULTURAL PRODUCTS TECHNOLOGY,
MULAWARMAN UNIVERSITY



Vitamata: Pro-vitamin A supplement aimed for vitamin A deficient children in East Kalimantan

LEAD INVESTIGATOR:

Dr. Anton Rahmadi, Dept. of Agricultural Products Technology, Mulawarman University.

Presented as: Sukmiyati Agustin, Miftakhur Rohmah, and Anton Rahmadi. Emulsification of Pumpkin Extract and Red Palm Oil as Functional Food Product Rich In Carotenoids. International Conference on Challenges of Biotechnology in Food and Health. Slamet Riyadi University, Surakarta, Central Java, 15-16 November 2014.

Also featured in: Anton Rahmadi. Borneo Studies Network: Graduate Students Workshop 2014 theme: Workshop on Health and Functional Foods Research. University of Brunei Darussalam, Brunei, 27-31 October 2014.

SHORTENED ABSTRACT

The Aim of this research was to produce functional food with pumpkin and red palm oil as main ingredient, namely "VitaMata", with optimization on the composition of both raw materials. Hedonic and quality hedonic tests by 30 semi-trained panellists were conducted on the products resulted in one formula with the best sensory quality. It was concluded that a certain emulsion concentration (pumpkin extract: red palm oil) was favoured by the panellists. Emulsion of pumpkin extract and red palm oil contained 141.77 mg/L of trans- β -carotene. The pH and free fatty acids contents of the emulsion product were 3.5 and 1.73%, respectively. After 2 months of storage at 8°C, no significant changes were observed.

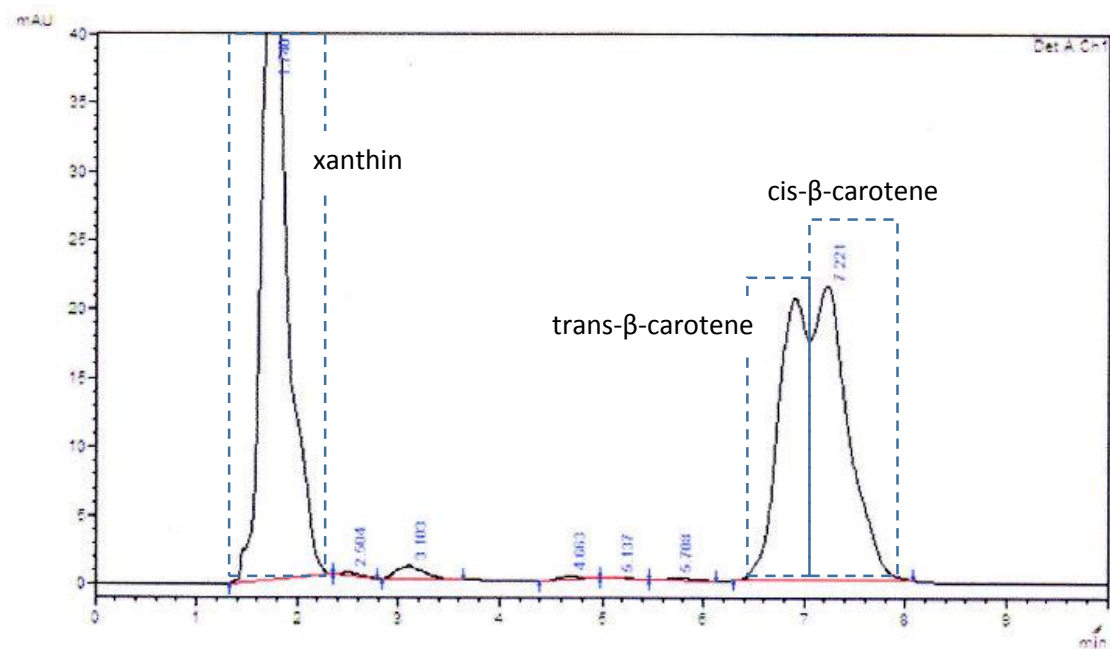
PRODUCT BRAND



The product is branded as **VitaMata**

PRODUCT CHEMICAL CHARACTERISTICS

Emulsion of pumpkin extract and red palm oil contained 141.77 mg/L of trans- β -carotene. The pH and free fatty acids contents of the emulsion product were 3.5 and 1.73%, respectively.

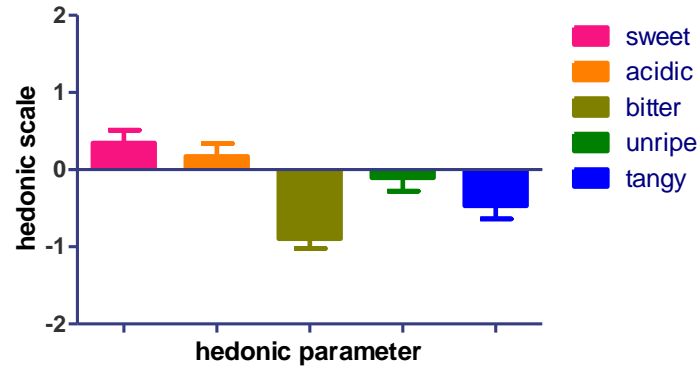


HPLC Result for trans- and cis- β -carotene quantification.

PRODUCT SENSORY CHARACTERISTICS

The product has sensory characteristic of sweet and slightly acidic.

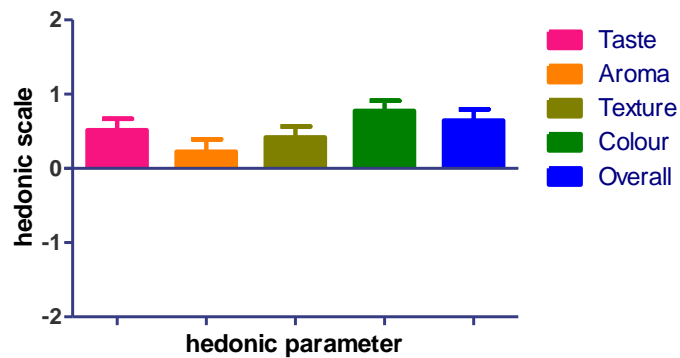
5 hedonic scale of preference



PRODUCT ACCEPTANCE

In general, the emulsion of pumpkin extract and red palm oil received positive acceptance as scored by 30 semi-trained panellists.

5-scale hedonic test of acceptance



FURTHER INQUIRY

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