

Dr. Ben



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Effect of Cooking Methods on Gamma-Aminobutyric Acid (GABA) and Anthocyanin Content of Germinated Brown Rice (Leumpua Purple Ssticky Rice)

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Abstract—The germinated brown rice "Lampua Purple Sticky Rice" is a normal rice type of that rich in GABA and anthocyanin content. This study was investigated the GABA and anthocyanin content of different cooking methods of germinated Lampua Purple Sticky Rice from community economic Phetchabun Province, which used as ingredient of Flake rice and Chinese tamale (Bacang). Two different cooking methods of germinated brown rice were evaluated, (First): Flake rice, the sample was soaked in water, steamed, sun dried and finally roasted, (Second) Chinese tamale (Bacang), the sample was soaked in water, fried, and finally boiled and the control was native rice sample (mean not pass through cooking method). The GABA content was 116.46 52.17 and 46.23 mg/kg of rice sample of Native rice, Flake rice and Chinese tamale respectively and while the content of anthocyanin was 657.50 155.80 and 16.97 mg/kg of rice sample of Native rice, Flake rice and Chinese tamale respectively. The result indicated that the lost of GABA and anthocyanin content were shown of two cooking methods when compared to Native rice sample but highest decreased in the Chinese tamale method which presented decreased of 60.31% and 97.42 % of GABA and anthocyanin content respectively.

Keywords—Gamma-Aminobutyric Acid (GABA), Anthocyanin, Germinated brown rice, Thai Purple Sticky Rice.

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Date: August, 31 2015

Dear Sompong Sansenya,

We are pleased to announce that your abstract has been accepted for a poster presentation at The International Conference on Science and Technology (TICST2015).

Paper ID: 142-231-1 (Poster Session)

Title: Effect of Cooking Methods on Gamma-Aminobutyric Acid (GABA) and Anthocyanin Content of Germinated Brown Rice (Leumpua Purple Sticky Rice)

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The Rajamangala University of Technology Thanyaburi (Thailand) has the pleasure of inviting you as poster presenter delegate to TICST 2015: The International Conference on Science and Technology 2015 to be held in Pathum Thani on November 4 – 6, 2015.

We look forward to your participation in the TICST 2015: The International Conference on Science and Technology 2015.

Sincerely,

Nipat J.

Dr. Nipat Jongsawat
Technical Program Chair &
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TICST 2015 Conference

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