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No : 039/FIAC/IX/2018 Bogor, 07 September 2018
Attach : -
Subject : ***Acceptance Letter for Oral Presentation***

To:
Maria Erna K
University of Lampung

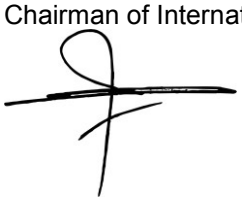
Dear Author,

We are pleased to inform you that your abstract entitled **"High Pressure Carbon Dioxides (HPCD) Technique as An Alternative Method for Preservation of Tempeh"** has been accepted for **Oral** presentation at the IAFT-SEAFAST International Conference entitled **Science-based Ingredients: The Future for Food in Asia** to be held on October 3-5, 2018 in Jakarta, Indonesia. Please note the following:

1. Your paper presentation has been scheduled for the session indicated in Session Summary (please visit our website at: http://seafast.ipb.ac.id/fia2018/ for the details agenda. The abstract of your paper will be published in the conference program book and will help attendees ascertain their interest in attending your presentation.
2. Each oral presenter will be scheduled for a total of 15 minutes, including discussion. Please keep in mind that the time schedule is fixed so that attendees may move between sessions.
3. Please complete your conference registration and send your pay-in slip with your name and address via email: seafastseminar@gmail.com, by 14th September 2018. The abstracts of all unregistered presenters will be removed from the program after this date. You can register for the Conference at the following link: http://seafast.ipb.ac.id/fia2018/registration.php
4. Your full paper will be reviewed for publication in the Conference proceeding or JTIP. A set of instructions for the full paper format will be available on our website. The deadline for Full Paper Submission is on 20th of September 2018.
5. Please visit the SEAFAST website (http://seafast.ipb.ac.id/fia2018//) and check for the updated program of the Conference. Your assigned paper code will be listed on the program.
6. All presenters will be responsible for their own registration, travel and accommodation expenses.

Should you have further queries, please do not hesitate to e-mail us. We look forward to your participation in our Conference in October.

Chairman of International Conference



Dr.-Ing. Azis Boing Sitanggang

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High Pressure Carbon Dioxides (HPCD) technique as an alternative method for preservation of tempeh

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ABSTRACT

Now days, consumers pay more attention to minimally processed foods that can maintain the quality of freshness and taste in addition to health and food safety for a certain storage period. Supercritical carbon dioxide is a non thermal processing to improve the microbial safety of product while maintaining nutritional and sensorial characteristics. Tempe is highly nutritious foods but has a short shelf life. The aim of the research was to predict the shelf life of tempeh after processed with sub/near supercritical CO_2 (6.3 MPa, 25^oC) for 10 min. The result showed that supercritical CO_2 treatment destroyed mold tempeh to undetectable number and reduced bacterial counts. However the molds survived 10^4 CFU/g and the number of bacterial decreased 1 Log CFU/g when tempeh was processed with sub/near supercritical CO_2. In addition, water content of tempeh slightly reduced but protein did not alter. Tempeh meets the standards of SNI No. 3144-2009. The inactivation process of mold tempeh was reversible so it can grow during storage at 30^oC and produce color and compact textures. By analyzing the texture and color changes of tempeh during storage at 20, 30, and 40^oC for 5 days, it was found that the shelf life of tempeh was 6.89± 0.37 days, 10.28± 1.48 days, and 2.70± 0.12 days at 30^oC, 20^oC and 40^oC respectively. The acceptance of panelists against tempeh which was processed with CO_2 and tempeh control after being stored was significantly different, and was at the level of "somewhat like" to "like" by the panelists. The conclusion was that supercritical CO_2 processing can serve as an alternative method of cold pasteurization for tempeh and extend their shelf life.

Key words: sub supercritical CO_2, cold pasteurization method, tempeh, shelf life