

Dear Colleague

Low-Cost Analytical Proficiency Testing (PT) to Improve Food Laboratory Analyses in the Asia Pacific Region

Thank you for participating in the APFAN PT2 trial. The final reports on the analysis of the **defatted soybean flour, fish meal, rice flour (natural) and rice flour (spiked)** are shown in the APFAN PT-2 Workshop website at:

(http://www.inmu.mahidol.ac.th/aseanfoods/apfan/program.php) under the "Session 3: APFAN-PT Programme: PT2 Report". These PT2 test materials have been provided free of charge to all participants. The goal of this APFAN PT2 trial was to provide laboratories in the Asia Pacific region access to an inexpensive proficiency testing trial in order to assess their performance compared to their peers. Results of analysis have been received from 100 laboratories in Australia, Indonesia, Malaysia, The Philippines, Sri Lanka, Thailand and Vietnam.

Results have been statistically assessed to ISO 13528:2015. Laboratories are encouraged to review their results, including measurement uncertainties, z scores, and Zeta scores and the methodologies used. Questionable and unsatisfactory results should be investigated by raising a corrective action within the laboratory's management system.

Thank you to each of the 100 laboratories who analyzed and reported the results in a timely manner. This APFAN PT2 trial is part of a three-phase project that will be conducted over a number of years. A follow-up workshop is to be conducted in Bangkok (19th-21st June, 2019) that will discuss these PT2 results in detail, with emphasis on the defatted soybean flour as an example of a fully compliant PT Study. For the other test materials, participating laboratories can view the relevant results and graphical displays in the same website.

I look forward to further cooperation with you in the remaining activities in this APFAN project and beyond as we realize our goal, which is to improve the proficiency and capabilities of food testing laboratories in the Asia Pacific region, enabling the participants to improve their methodologies and adopt a more uniform approach to regional food analysis.

Yours sincerely

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ASIA PACIFIC FOOD ANALYSIS NETWORK (APFAN)

APFAN activity: Proficiency Testing 2 (PT-2) to Improve Food Laboratory Analyses in the Asia Pacific Region

Final Report of APFAN PT-2 (2019):

Defatted Soybean Flour, Fishmeal,

Natural Rice Flour and Spiked Rice Flour

by

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INTRODUCTION AND ACKNOWLEDGEMENTS

APFAN is a special project of the Federation of Asian Chemical Societies (FACS) and was formed at the Third Asian Chemical Congress, held in conjunction with the 10th Royal Australian Chemical Institute Analytical Chemistry Conference in Brisbane in 1989. The aim of APFAN is to serve the needs of food analysts and thereby promote food quality and safety and good nutrition by promoting and supporting (reliable) food analysis laboratories in the region, indirectly contributing to the improvement of regional food security.

This current APFAN project has produced PT1 and PT2 test materials that have been distributed free of charge to participant laboratories. APFAN acknowledges and appreciates the significant efforts of the following people and organizations who contributed to the success of the PT2 Study. In particular:

- Charoen Pokphand Group (CP), Indonesia (Ms. Binarti Dwi Astuti and Ms. Sorta), for preparation and homogeneity testing of the fish meal material;
- PT. Indofood CBP Sukses Makmur Tbk, Indonesia (Mr. Joko Budiyanto and Mr. Cahyo Konstitusianto), for preparation and homogeneity testing of the rice flour material;
- SGS (THAILAND) Limited, Bangkok, Thailand (Ms. Chin Chaothaworn and Ms. Siriruk Kamonwiboon), for homogeneity testing of moisture, total nitrogen and ash of deffated soybean flour;
- The Institute of Nutrition, Mahidol University (INMU), Thailand (APFAN Country Contacts Assoc. Prof. Kunchit Judprasong and Assoc. Prof. Prapasri Puwastien), for assistance with distribution of the PT1 and PT2 materials in Thailand;
- The National Institute of Metrology (Thailand), for providing reference values of minerals in defatted soybean flour;
- The Philippine Food and Nutrition Research Institute (FNRI), Department of Science and Technology (DOST) (APFAN Country Contact Ms. Rosemarie Dumag), for assistance with distribution of the PT1 and PT2 materials in the Philippines;
- APFAN Country Contacts in Indonesia, Malaysia, Sri Lanka, and Vietnam for assistance with distribution of the PT materials in their countries;
- Special appreciation for Assoc. Prof. Kunchit Judprasong, Prapasri Puwastien, Piyanut Sridonpai, and Preecha Saetang, Institute of Nutrition, Mahidol University (INMU), Thailand for the statistical analysis of the PT-2 results; and
- Special appreciation for Assoc. Prof. Prapasri Puwastien, Institute of Nutrition, Mahidol University (INMU), Thailand for her expert guidance in the statistical analysis and interpretation of the results.

Results were to be reported on an 'as received' basis. The laboratories also provided information on the methods used, to allow more in-depth comparison of the results. The defatted soybean flour report is shown in full, with all relevant information to demonstrate the detail that is required of PT providers to comply with ISO 17043:2015. The reports for the fish meal, rice flour and spiked rice flour provide a summary of assigned values, z score, Zeta score and summary of evaluation of laboratory performance.

Please find in the website <u>http://www.inmu.mahidol.ac.th/aseanfoods/apfan/program.php</u> the reports for:

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