chondroprotective ability. Even though the reported evidence was mostly non-clinical, the nutraceutical animal-based studies do provide a strong signpost for the EBN to become a potential valuable nutraceutical product. To conclude, the newly discovered nutraceutical findings of EBN suggested that EBN may offer much more than just another protein source.

Keywords: Edible bird's nest, nutraceutical, swiftlet

Dr. Nurain Aziman

Senior Lecturer, Department of Food Science and Technology, Faculty of Applied Sciences, Universiti Teknologi MARA, Cawangan Negeri Sembilan, Kampus Kuala Pilah, Malaysia

Dr. Nurain Aziman obtained her first-class Bachelor of Science (BSc) (Hons) (Science and Food Technology) from Universiti Teknologi MARA Shah Alam, Selangor in 2009. She then pursued her Ph.D. at the same university under the fast-track Ph.D. program and received her Ph.D. in 2017. She is currently serving as a senior lecturer at Universiti Teknologi MARA, Kampus Kuala Pilah, Negeri Sembilan. Prior to this position, she was a postdoctoral fellow at the Malaysia Institute of Transport (MITRANS), Universiti Teknologi MARA Shah Alam, and Institute of Tropical Forestry and Forest Products (INTROP), Universiti Putra Malaysia, Serdang from 2017-2020. Her postdoctoral research with the title "Safe biodegradable packaging" has collaborated with Bangor University (UK), Eco Premium Packaging (M) Sdn. Bhd and PolyComposite Sdn. Bhd industries. Her research interests cover functional food, food antioxidants, and food microbiology. She has published 13 research articles from 2012 with her current H-index of 8.



Presentation Summary

Herbs - Natural Food Preservatives

Nurain Aziman

Alliance of Research & Innovation for Food (ARIF), Universiti Teknologi MARA, Cawangan Negeri Sembilan, Kampus Kuala Pilah, 72000 Kuala Pilah, Negeri Sembilan, Malaysia

*Corresponding author: ainaziman@uitm.edu.my

Food preservation is a primary concern of the food industry due to the high demand for better quality. Many food preservation methods have been practiced to prevent deterioration and spoilage of food products, and extend their shelf-life. However, the use of synthetic food preservatives to maintain the quality of food products has become commonplace, therefore consumer concerns about their safety are prompting the food industry to seek out natural alternatives. There are no

doubt plants provide good alternatives. Herbs which are generally consumed directly or are used in various local recipes to enhance the flavour of the foods have been reported to have a wide range of biological activities due to their phenolic compounds. The utilization of herbs as natural preservatives in food products and food packaging film to prolong shelf-life and to improve safety, thus maintaining the quality of the product has become our focus.

Keywords: Herbs, natural preservatives, shelf-life

Dr. Hisham Mohd Nooh

Senior Lecturer, Department of Food Science and Technology, Faculty of Applied Sciences, Universiti Teknologi MARA, Cawangan Negeri Sembilan, Kampus Kuala Pilah, Malaysia



Dr. Hisham Mohd Nooh was born on 4th February 1984 at Raub, Pahang. Currently, he is a senior lecturer at Universiti Teknologi MARA, Kampus Kuala Pilah, Negeri Sembilan. He graduated with a Master of Science, Major in Microbial Biotechnology in February 2012 at Universiti Putra Malaysia with 1st Class. He graduated with a Ph.D., Major in Industrial Biotechnology with 1st Class in November 2018. Dr. Hisham Mohd Nooh has skills in Laboratory Hazardous Chemical Management (MS ISO 9001:2008), Laboratory Management -Procurement. Calibration, Service and Documentation, Research & Development Natural Bio-Product, Identification of Bacteria Using Molecular Technique, NCBI Basic Local Alignment Search Tool (BLAST), SDSC Biology Workbench, Statistical Analysis, Optimization Process - Response Surface Methodology & Artificial Neural Network (Neural Power) Cloning & Expression Using Bacteria And Yeast Host., Bioreactor Operation & Enzyme Production, Soap & Detergent Formulation, Rotary Evaporator, Freeze Dryer & Spray Dryer Operation And Maintenance, Computer Maintenance, Build And Upgrade.

Presentation Summary

Production of Thermostable T1 Lipase Using Agro-Industrial Waste Medium Formulation

Hisham Mohd Nooh 1,2,6*, Malihe Masomian^{3,6}, Abu Bakar Salleh^{2,5,6}, Rosfarizan Mohamad^{4,7}, Mohd Shukuri Mohamad Ali^{5,6}, and Raja Noor Zaliha Raja Abd. Rahman^{2,3,6}

¹Department of Food Science and Technology, Faculty of Applied Sciences, Universiti Teknologi MARA, Cawangan Negeri Sembilan, Kampus Kuala Pilah, 72000 Kuala Pilah, Negeri Sembilan, Malaysia ²Laboratory of Molecular Biomedicine, Institute of Bioscience, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia

 3 Department of Microbiology, Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia