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## **UMP, Malaysian Cocoa Board collaboration strengthens efforts on Malaysian cocoa industry development**

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KUALA LUMPUR, 22 April 2021 - Universiti Malaysia Pahang (UMP) and the Malaysian Cocoa Board (MCB) will conduct research on producing cocoa extract, developing healthcare products based on cocoa extract and developing e-Nose sensor technology that uses artificial intelligence system to improve cocoa bean quality inspection.

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This collaboration enables both parties to conduct research and develop products involving sharing expertise, research resources, and technology.

The recent memorandum of understanding (MoU) was signed by the Director of the Centre for Bioaromatic Research, Associate Professor Dr. Saiful Nizam Tajuddin representing UMP and MCB was represented by the Director-General, Dr. Haji Ramle Haji Kasin.

Present to witness the event at Premieria Kuala Lumpur were the Minister of Plantation Industries and Commodities, Datuk Dr. Mohd. Khairuddin Aman Razali, Chairman of MCB, Dr. Aliakhbar Gulasan and the Deputy Vice-Chancellor (Research and Innovation), Professor Ts. Dr. Kamal Zuhairi Zamli.

Also present were the Director-General of the Farmers Organization Authority (LPP), Dato' Azulita Salim and the Chairman of the Board of Directors, Farmers Organization (PPK) of Bagan Datuk (PPK), Haji Ahmad Abdullah.

According to Professor Ts. Dr. Kamal, UMP, with expertise in this field of technology, will conduct research in the detection of cocoa quality and product and market development related to cocoa tree parts extract such as cocoa bean leaves and seed peels.

“Researchers will analyse the quality control of dried cocoa beans through the e-Nose sensor, an application system and tool similar to human sensory testing.

“This new technology uses an artificial intelligence system to manage the developed cocoa quality data.

“It can also help accelerate and improve the efficiency of odour and taste determination in the early stages of cocoa bean quality inspection and active ingredient profile,” he said.

MCB will also conduct active ingredient profiling analysis in cocoa beans and products and provide industrial training students and graduates to conduct research projects.

MCB is currently planning and negotiating to establish several collaborations with various government agencies, industries, and universities.

Cocoa is rich in active ingredient compounds that can benefit humans, especially in the health field.

It also has a high content of active ingredients such as polyphenol compounds with biological activities such as anticancer, antibacterial, antioxidant, anti-ageing and many more.

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