

STIXFRESH INNOVATIVE STICKER HELPS MAINTAIN FRESHNESS OF FRUITS



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KUALA LUMPUR – To avoid losses and wastage of fruits, Information Technology graduate, Zhafri Zainuddin, introduced a sticker which is able to prolong the freshness of fruits by protecting them from threats of fungus and diseases.

Zhafri, 37, said the sticker called StixFresh is an innovative sticker-based technology that can extend the shelf life of fruits naturally, up to two to three times longer, depending on the types of fruits.

“I came up with the idea when I was involved in the local fruit business in Seremban and often incurred losses when fruits have to go to waste after they become rotten,” he told *Bernama*.

Applying the ‘from waste to wealth’ concept, Zhafri, who is also the co-founder and chief executive officer of StixFresh International Sdn Bhd based in Senawang, Negeri Sembilan said, the sticker uses natural anti-microbial compounds produced by plants to protect the fruits.

“It is developed with a coating technology, whereby plant and herb extracts are placed on the label sticker to enable them to act as a diffusion material, protecting the fruits

from being attacked by fungal growth during the sale and delivery process, thereby extending the period of freshness,” he said.

He said the materials used in the sticker are categorised as GRAS (Generally Recognised as Safe) which comply with the standards of the United States Food and Drug Administration (USFDA) and even this freshness preservation technology has also been registered with the World Intellectual Property Organisation (WIPO).

“The labelling sticker is not merely a decoration and this technology was developed to assist consumers and the industry in finding solutions in line with the goal to help reduce from farm to fork wastage,” he said.

In fact, Zhafri, who is from Kuala Lumpur said, the research and development (R&D) process for StixFresh technology had also received strong support from the Negeri Sembilan Agriculture Department (JPNS) and the Ministry of Science, Technology and Innovation (MOSTI).

“It is not easy to develop a technology and it may take up to three years for it to mature and be accepted in the market,” he said adding that the company is in the midst of applying for a Strategic Research Fund from MOSTI.

“We are also actively planning on a collaboration with Universiti Putra Malaysia Faculty of Food Science and Technology, to add value to this technology and further strengthen its position in the local and global markets,” he said.

However, Zhafri said for now, the label sticker could only be used for certain types of local fruits such as mango, papaya and dragon fruit and he was planning to expand the use of this technology to other premium fruits such as Japanese pears and the melon varieties.

“We will also tackle small-sized fruits such as strawberries and grapes, not with the stickers but rather with the use of food grade liquid sprays that do not contain any harmful substances.

“We also intend to develop a kind of sachet and smart packaging for vegetables, while at the same time start a fruit business that uses StixFresh technology as an added value.

StixFresh had also made waves at the global stage after its participation at the World Expo of Perishables Dubai in 2016 and is now well- known in the United States and Japan.

“This year, we are the only local company selected for the ‘InnoChallenge’ programme which provides rewards in the form of ‘in-kind grant’ worth three million Yen, thus helping to open up the market in Japan as well as the opportunity to participate in the Circular Accelerator Cohort 21 programme which focuses on advancing the global transition to a more circular economy,

“Our goal is to become a green technology company that reduces food waste in the agricultural industry and we strive to position ourselves as a global player in food safety solutions improving freshness to vegetables, dairy and fish products the natural way,” he said.