

Tamil Nadu Agricultural University O/o the Public Relations Officer Coimbatore – 641 003

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Date: 5-3-2015

The Editor,

Sir,

То

I request that the following matter may kindly be published in your esteemed daily:

"Inception Workshop" of the IDRC

India, the second largest fruit and vegetable producer in the world next to China, but the per capita availability is nearly half of the requirement due to the heavy post-harvest losses (30-35%) which amounts to a huge economic drain of Rs. 2,00,000 Crores annually (equivalent 33.3 billion USD) in the country according to the latest reports (PTI, 2013). In order to address the issue of post-harvest losses, scientists from University of Guelph, Canada, Tamil Nadu Agricultural University (TNAU), India and Industrial Technology Institute, Sri Lanka, have jointly worked for the past three years and come out with a practical solution to enhance preservation of mango fruits. The project used hexanal, a natural plant product that delays fruit ripening and aging. Guelph plant agriculture Professor Gopi Paliyath holds an American patent on the discovery of hexanal as a post-harvest agent. It's also an FDA-approved food additive.

Dr. Gopi Paliyath and Dr. Jayasankar Subramanian have demonstrated that preharvest spray of hexanal formulation is effective in extending shelf-life of temperate fruits and vegetables. Dr. K.S. Subramanian and his team in TNAU have proved it effective in mango orchards in extending shelf-life by three weeks on the trees and three weeks in storage.

Nanotechnology research in India has received a major collaborative research grant jointly funded by Canadian Government (DFATD, Department of Foreign Affairs, Trade and Development) and International Development Research Center (IDRC), Canada. The project entitled "Enhanced Preservation of Fruits using Nanotechnology" is being funded under the Canadian International Food Security Research Fund (CIFSRF) involving six institutes namely University of Guelph, Canada, TNAU, India, Industrial Technology Institute, Sri Lanka, University of Nairobi, Kenya, Skoine University, Tanzania and University of West Indies in Trinidad & Tobago, with a total budget of 4.2 million CAD (equivalent to Rs. 23.1 Crores).

The inception workshop for anchoring the CIFSRF project was held in Bangalore during January 21-23, 2015, involving scientists from all six partnering Institutes. The workshop was designed to discuss and deliberate various aspects of the project and set milestone for the next 3.5 years of project period. The workshop was inaugurated by Dr. K. Ramasamy, Vice Chancellor of TNAU. In his inaugural address, he narrated the importance of Canadian Government funding to TNAU and India for various innovative projects since 1970's. He appreciated and whole-heartedly thanked DFATD-IDRC for funding both Phase I and II of the project which benefitted TNAU in equipping infrastructure and research skills in the fascinating field of nano science and technology.

During the inaugural session, Dr. K.S. Subramanian, Principal Investigator (PI), TNAU and Dr. Jayasankar Subramanian, overall PI of the Project from University of Guelph, Canada. Dr. Kevin Tiessen, Senior Program Specialist from Ottawa provided technical input to refine the activity milestone. The results of the Phase I provided solid scientific base to evolve nano-matrices to regulate the release of hexanal which may lead to a development of nano-packaging. The leading farmers Thiru AP. Karuppiah, Theni, Thiru Sitrarasu, Krishnagiri, Thiru Santhakumar, Santhur besides women farmers who have directly benefitted from the mango value addition training provided feedback on the benefits of the project. The farmers expressed that the hexanal formulation is helping in retention of mango fruits and the sprayed trees remained green and healthy. Preliminary experiments have shown that the formulation is extending shelf-life of banana fruits as well.

During the workshop, a "Biosafety Manual on Hexanal" was released by Mr. Sidney Frank, Canadian Consul General from Bangalore and first copy of the same was received by Dr. Anindya Chatterjee, Asia Regional Director, IDRC, New Delhi. The authors of the manual Dr. K. Gunasekaran and his graduate student Ms. Karthika were appreciated for bringing out a nice piece of work. The biosafety manual is one of the requirements for the scaling up the technology. The Consul General and the Director, IDRC, congratulated the team of scientists of Canada, India, Sri Lanka, Kenya, Tanzania and Trinidad & Tobago for their active involvement and participation.

Public Relations Officer