NIPGR developed a new technology to enhance shelf life of fruits and vegetables
By Bilqeesa Bhat

A research team headed by Dr. Jagadis Gupta Kapuganti from New Delhi based National Institute of Plant Genome Research (NIPGR) has developed a safe and user-friendly technology to considerably delay the ripening process of fruits and vegetables.

A significant delay of ripening observed after 7 days of harvest (right images). Left images are control

Fruits and vegetables are healthy but most perishable agricultural produce. Post-harvest losses incur several thousand crore debt per year to India farmers. The loss of produce primarily occurs due to lack of proper technology for storage and transportation facilities. It has been estimated that approximately 52% of fresh fruits and vegetables get waste before they even reach to the consumer. Since, fruits undergo ripening very rapidly, they need to be protected from excess of ripening and spoilage both during storage as well as transportation.

The fresh produce is wasted throughout the supply chain, right from the initial agricultural production at fields to the final consumption. In our country except for cold storage, we are lagging behind all other agri-logistics required to bring the produce from farm to markets.
Dr Jagadis Kapuganti received Biotechnology Ignition Grant (BIG) from Biotechnology Industry Research Assistance Council (BIRAC) to develop a device using his innovation to enhance shelf life of fruits. Patents have been filed for this technology. This novel technology has potential to provide a solution for fruit producers, fruit importer- and exporter companies, consumers, and fruit storage facilities.

Contact details:
Dr. Jagadis Gupta Kapuganti
jgk@nipgr.ac.in, jagadishguptak@gmail.com
Tel: 91-11-26735111,14,17 Ext. – 111