EXTENDED SHELF-LIFE OF FRUITS AND VEGETABLES

ALMA MATER STUDIORUM-UNIVERSITÀ DI BOLOGNA



The invention refers to a new packaging solution for extending shelf-life of perishable fruits and vegetables. It allows for the harvesting of the fruit and vegetable products at a more advanced ripening degree than usual, with consequent higher sugar degrees, lower acidity and best profiles in molecules allowing to obtain a product with high organoleptic quality.

Protection: United States, Europe and Mediterranean Countries

Inventors: Gardini Fausto, Lanciotti Rosalba, Patrignani Francesca, Siroli Lorenzo

INVENTION

The patented invention is a transport packaging supplemented with an antimicrobial solution, spread on its surface, which lasts on the packaging itself as long as packing, so to reduce alteration phenomena linked to the development of spoilage microorganisms of the fruit and vegetable products contained in the packaging. The antimicrobial solution (a mixture) is in liquid form and it is composed of water and specific active substances, in particular, aldehydes. These have been chosen because notoriously have a broad spectrum of antimicrobial action and because organoleptically compatible with the packaged fruit and vegetable products. In fact, they are substances that are part of the essential oils or of the aroma constituents of many plant products.

ADVANTAGES

- Increased safety of the packaged products
- Reduced surface contamination of the packaging itself
- Enhanced sensorial characteristics of packaged products
- Reduced cross-contamination of the products

CONTACTS

Knowledge Transfer Office 0039 051 20 99356 www.unibo.it/patents kto@unibo.it

APPLICATIONS

- Fruit producers
- Vegetable producers
- Cardboard manufacturers
- Logistic value chain

