



UNIVERSIDAD
POLITÉCNICA
DE CARTAGENA



OTRI

Oficina de Transferencia de
Resultados de Investigación
UPCT - Universidad Politécnica de Cartagena

DESCRIPCIÓN DE LA TECNOLOGÍA / TECHNOLOGY DESCRIPTION

Título / Title

Postharvest technologies to store tropical fruit from the Amazonian Region

Resumen / Abstract

Araza is a very perishable fruit with good nutritive and aromatic value. In the framework of a bilateral agreement between UPCT and SINCHI coordinated by Dr. Hernández -Amazonic Institute for Scientific Research SINCHI, Colombia- and Dr. Fernández-Trujillo -UPCT, Spain- we developed several postharvest treatments to extend araza shelf life and quality. We are looking for a European company with capabilities to introduce araza in the European postharvest system and able to support part of our cooperative research on this fruit (or other Fruit from the Amazonian Region).

Descripción y características fundamentales / Description and special features

Araza is a very perishable fruit particularly at room temperature very rich in vitamin C and with a pleasant flavor. Fruit is also susceptible to wilting, softening, chilling injury (at temperatures below 12°C) and decay (anthracnose). Several combinations of physical postharvest treatments (modified atmosphere packaging, intermittent warming, etc.) have been successfully used to prevent or alleviate these disorders for local markets in Colombia (South America). Our know-how has been partly disseminated as a chapter in the review of the Handbook 66 of the US Department of Agriculture (USDA) (see website below). Arazá fruit is being registered for fresh consumption in the USA, but the fruit is unknown in the Western world. The know-how and expertise background with these fruit can help to develop systematic studies to improve fruit quality and the postharvest system for local market or exports. We are looking for companies interested in supporting our research and apply the postharvest treatments that we developed in a commercial scale for arazá or different fruit from Amazonian.

Origen de la Tecnología: Fuente de financiación / Financial source of the technology

Proyecto europeo / European RTD project
Proyecto nacional / National project

Proyecto regional / Regional project
Financiación privada / Private funding

Ventajas competitivas / Competitive advantages

Arazá fruit can be used for processing and fresh as well as for immediate juice squeezing. The fruit is being registered in the USA for fresh consumption. The product will be exotic in the EU with attractive flavor and nutritive value. Additionally, the fruit is not able to growth outside the rain forest of the Amazonic region or Costa Rica, reason why this fruit can be sold as a typical rain forest product

Aspectos innovadores / Innovative aspects

Nobody developed before systematic studies about the postharvest behavior of arazá fruit that is not present in the European or North America market. The postharvest technologies will be developed with fresh fruit in situ (Colombia) and can be implemented with a reasonable cost. We can help companies to design an suitable postharvest strategy to import arazá fruit.

Estado de la propiedad industrial e intelectual / Current state of intellectual property

Secreto industrial / secret know how

Arazá fruit is not known in markets outside South America. Arazá vitamin C content is the second one reported for fruits and can be used to make exotic juices ready for consumption.

Disciplinas científicas en las que se encuadra la tecnología / Scientific domains

Industria de la Agroalimentación

Tipo de colaboración solicitada / Type of collaboration sought

- x Cooperación técnica / Technical cooperation
 - Acuerdo de joint venture / Joint venture agreement
 - Acuerdo de fabricación / Manufacturing agreement
- x Acuerdo comercial con asistencia técnica / Commercial agreement with technical assistance
 - Acuerdo de licencia / License agreement
- x Financial support

Comments:

The fruit is actually sold in microperforated bags or polyuretan net to avoid mechanical damages. The postharvest technologies have ben developed in a laboratory scale are applied to a semi-comercial scale. Fruit is stored at 12oC usually in local markets.

Sectores empresariales de los potenciales clientes / Industrial sectors of the potential users

Fruit and vegetable importers and shippers. Agri-food industry. SME Industry in the whole fruit sector exports in Europe, interested in introducing and diversifying tropical fruit offer. Research institutions interested in applying to INCO projects. The specific area of activity of the partner: Fruit and vegetable shippers. Agri-food industry. The tasks to be performed of the partner sought: Development and production. Implementation of postharvest treatments for arazá exports. Location of the right segment for fruit market imports in Europe. Type of partner sought: SME Industry in the whole fruit sector exports in Europe, interested in importing, introducing and diversifying his actual offer in tropical fruit. Research institutions interested in applying to INCO projects.

Información adicional / Additional information

Web: A review of knowledge about arazá has been provisionally published:
<http://www.ba.ars.usda.gov/hb66/027araza.pdf>

Breve Perfil del Grupo de Investigación

Postharvest technology of fruits and vegetables.
Cooperation with the Amazonic Institute of Scientific Research SINCHI from Colombia since 1998 in tropical fruit. The contact person belong to the Promissory Fruit from Amazonia Group (Colombia) and the Postharvest & Refrigeration group (UPCT). Experience as a principle investigator in national and regional projects (two underway actually) as well as in R+D with different companies (seed companies, postharvest services dealers, cooperatives, etc). Financial support for our research. We pursue a dynamic interaction between our research team, local Colombian growers or local organizations, and the company in order to create a safe and top quality European market for this tropical fruit. Implementation of the postharvest protocol developed by our group or other new protocols to be developed for importing and distribution of arazá fruit in Europe. Location of the right segment for fruit market imports in Europe.

Datos de Contacto / Contact Person

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