PROCESS FOR OBTAINING ENZYME POWDER WITH PROTEOLYTIC ACTIVITY FROM THE BY-PRODUCTS FROM THE HARVEST OF PAPAYA	
Offering Organization:	Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.
Type of Organization:	Public Research Center
Development Stage:	Commercial Concept Tests
Desired Relationship:	– Technological research and development financing (technological partner) – Specialized application tests – Creation of a new company (Joint Venture) for the commercialization of the products outlined herein – Licensing of patents
Sector:	Food
Area of knowledge:	Food Technology
Key words:	Enzyme powder, papaya products, proteolytic activity, papaya crop

DETAILED DESCRIPTION:

Problem to be solved:

Mexico is a leading producer of papaya globally and the harvest of the fruit generates a significant amount of by-products (leaves, stems, unripe fruit), which have thus far been underutilized. However, such products are a source of biocatalysts of industrial interest as studies indicate that there are different hydrolases in the tissues of the papaya plant (Azarkan and col., 2003.; Balls and col., 1940; Glibota and col. 2000).

Solution:

A process for obtaining an enzymatic powder with proteolytic activity from the by-products of the harvesting of papaya.

New and Innovative Aspects

This novel invention uses all by-products (stems, leaves, roots, fruits, buds, petioles) from the harvest of any variety of papaya plant whose reproductive cycle has concluded after two years of continuous production.

TECHNICAL CHARACTERISTICS:

The process for obtaining enzymatic powder with proteolytic activity from the by-products of harvesting papaya consists of the following stages:

1. Selection of raw material
2. Extraction
3. Centrifugation
4. Concentration of the extract
5. Encapsulation
6. Drying by aspersion

Main advantages derived from its utilization:

This novel invention uses all by-products (stems, leaves, roots, fruits, buds, petioles) from the harvest of any variety of papaya plant whose reproductive cycle has concluded after two years of continuous production.

Applications:

– Food Industry	
INTELLECTUAL PROPERTY	
– MX 329593 B	
ABOUT THE OFFERING ORGANIZATION	
Presentation:	El Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C. (CIATEJ) is a public research center that belongs to the national technology development and innovation network, the National Council for Science and Technology (CONACyT). CIATEJ is focused on the agricultural, food, health, and environmental sectors with an emphasis on the application of innovative biotechnology.
Contact Information:	Mtro. Evaristo Urzúa Esteva - eurzua@ciatej.net.mx