

METHOD OF OBTAINMENT, USES AND APPLICATIONS FOR EXTRACTION OF A HIGH METHOXYL PECTIN USING A BIODEGRADABLE ACID FROM CITRUS WASTE MATERIAL

<i>Offering Organization:</i>	Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.
<i>Type of Organization:</i>	Public Research Center
<i>Development Stage:</i>	Commercial Concept Tests
<i>Desired Relationship:</i>	<ul style="list-style-type: none"> – 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
<i>Sector:</i>	Food
<i>Area of knowledge:</i>	Food Technology
<i>Key words:</i>	High methoxyl pectin, citrus residuals, emulsifiers

DETAILED DESCRIPTION:

Problem to be solved:

Pectin is considered one of the most versatile functional ingredients across various industry sectors including the food, pharmaceutical and cosmetics sectors. Among its most valuable properties are its capacity for use as a stabilizing, thickening, gelling, or adhesive agent, to name a few. For many years the food industry has focused its efforts on the development of products with new textures, flavors, and appearances. On the other hand, from a nutritional standpoint, pectin has demonstrated its ability to lower cholesterol in the blood, especially low-density lipoprotein fractions, thus reducing the risk of heart disease (Charalampopou , D. er al. , 2009).

Solution:

The present invention relates to the obtainment of a high methoxyl pectin with gelling and emulsifying properties extracted using a biodegradable acid of gradual and continuous pH degradation from citrus waste material. The method of obtaining the above and its uses and applications are also mentioned.

New and Innovative Aspects:

The product is obtained using a biodegradable organic acid. It has a higher yield and a lower cost of production.

TECHNICAL CHARACTERISTICS:

The process for obtaining the product from the present invention is comprised of the following steps:

1. Obtaining flour from the lime peel
2. Solubilization
3. Recovery
4. Drying
5. Grinding

Main advantages derived from its utilization:

- This invention uses a method that can be easily implemented and is low cost
- It uses a biodegradable acid from citrus waste material

Applications:

- In the following industries: food, pharmaceutical and cosmetic

INTELLECTUAL PROPERTY

- Patent filed in 2014
- MX/a/2014/015446

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.

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