

SYSTEM AND PROCESS FOR THE PRODUCTION OF PILONCILLO AND MOLASSES FROM SUGARCANE

<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>	Industrial Pilot
<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>	Brown sugar, sugarcane syrup, molasses, cane juice, granulated brown sugar, jaggery, piloncillo, melado, panela

DETAILED DESCRIPTION:

Problem to be solved :

Panela, also known as “piloncillo” and molasses are unrefined products obtained from sugarcane juice that have been produced for a long time, in virtually all sugarcane producing countries, in rustic facilities of minimum sophistication. The products made there do not meet the hygienic and safety standards of products intended for direct use in foodstuffs and present risk of contamination caused precisely by this lack of a modernized process.

Solution:

This invention pertains to a system and industrial process for obtaining molded and granulated piloncillo, syrup, and other alternative products such as piloncillo flavored with natural additives, from sugarcane juice, of an innocuous grade, for use in food and drinks for human consumption.

New and Innovative Aspects:

The present invention pertains to an integrated industrial process for the production of foodstuffs derived from sugarcane juice such as the product traditionally referred to as piloncillo, in molded solid blocks or granulated, and concentrated sugarcane juice referred to as molasses. There exists the option to obtain any of these foodstuffs with additives or specific flavors using natural essences. The process is carried out in a continuous fashion with hygienic procedures which assure the quality and safety of the food products.

TECHNICAL CHARACTERISTICS:

This is a system for the production of piloncillo and molasses, characterized by the following: A first step of preparing the cane, a second step of extracting the cane juice, a third step of treating and concentrating the juice, and a fourth step of molding, refinishing, and packaging the product. This invention pertains to a system and an industrial process for obtaining molded and granulated piloncillo, syrup, and other alternative products such as piloncillo flavored with natural additives, apart from sugarcane juice of an innocuous grade, for use in foods and beverages for human consumption. This invention allows for the accomplishment of industrial production of piloncillo and molasses in a continuous fashion and with minimal handling, in the end assuring the hygienic quality of the products.

Main advantages derived from its utilization:

- The option exists to obtain any of these products with specific additives and flavors by employing natural essences. The process is carried out in a continuous fashion and with hygienic procedures which guarantee the quality and safety of the foodstuffs.
- This system includes the factors that allow for the obtainment from sugarcane of piloncillo and molasses of an innocuous grade and quality with traditional organoleptic properties.
- It allows for the preservation of the original composition of traditional piloncillo, which has a higher nutritional value than any other product derived from sugarcane and obtained through processes of refinement.
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Applications:

- Food, and more specifically the manufacturing of unrefined products from sugarcane juice.

INTELLECTUAL PROPERTY

- Patent granted in 2012, valid until 2024.

ABOUT THE OFFERING ORGANIZATION

<i>Presentation:</i>	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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