LIPOTE (Syzygium curranii) FRUIT CONCENTRATE

TECHNICAL FIELD

The present utility model relates to a product, more particularly to lipote (*Syzygium curranii*) fruit concentrate.

5 BACKGROUND

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A fruit native to Luzon, lipote (*Syzygium curranii*) belongs to the Myrtaceae family, and is related to duhat and makopa. Lipote trees are evergreen, and can grow up to 15 meters tall. Its fruits are ellipsoid berries, measuring 1-2.5cm in diameter and are dark red to purple in color. The berries are edible, fleshy and are sweet and sour in taste. They are primarily found in forests and in low to medium altitude areas. The trees are commonly found in the provinces of Batangas, Laguna, Marinduque, Bicol and Samar. However, lipote is rarely cultivated and is not much known outside of the country.

The lipote berries are usually eaten fresh off the tree, but they are also processed into sweet preserves, jellies, pickles, candies, wine and other beverages. They are a rich source of vitamin C, and are identified as an antioxidant and antihypertensive. The fruits, as well as the leaves are also found to contain antibacterial, anti-inflammatory and antitumor properties. The timbers of its tree are also used for construction.

Fruits of the lipote tree are found in compact clusters of up to 50 or more berries. The ripe fruits have about 83% of edible portions, which consists of water, protein, fat, carbohydrates, fiber, calcium, phosphorus, iron, and Vitamin A, among others. Its flowers are white, and in clusters attached to the stems. The leaves are alternate, obovate, about 20-25cm by 6-8cm, pointed, leathery, dark green and shiny. The trunk has branches that are angularly winged. The lipote plant can be raised from a seed or through grafting. It bears fruits after 4-5 years upon cultivation. Lipote is locally known among Bicolanos as *baligang*, while the Warays know it as *igot*.

As healthy, organic and nutrient-packed foods gain popularity worldwide, the demand for such products increases. Lipote, with its nutritional and medicinal value, is a great choice to develop into food products of economic potential.

SUMMARY OF THE UTILITY MODEL

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This utility model introduces a fruit juice concentrate derived from ripe lipote (Syzygium curranii), a native and underutilized tropical fruit of the Philippines. It addresses the technical challenges of postharvest spoilage and limited seasonal availability by providing a method that extends the fruit's shelf life and transforms it into a stable, high-value product.

In contrast to existing uses—where lipote is typically consumed fresh or processed into traditional items such as jams or wines—this model presents an innovative solution by converting the fruit into a pasteurized juice concentrate. This process preserves the fruit's nutritional properties while significantly improving its storage potential.

Beyond product innovation, the model promotes sustainable fruit utilization by reducing waste, supporting value-added production in rural communities, and offering alternative livelihood opportunities for small-scale processors.

The concentrate is made from ripe lipote fruits and sugar, resulting in a healthier fruit-based product. The primary goal of this utility model is to develop a nutritious, long-lasting concentrate from an undervalued tropical fruit. It ensures year-round availability of lipote in a convenient form while contributing to food security, waste reduction, and rural economic development.

DETAILED DESCRIPTION

The production process of the present utility model begins with the careful selection of fully ripe lipote (Syzygium curranii) fruits. The selected fruits are thoroughly washed three times under clean, running water to remove any dirt or impurities.

After cleaning, the fruits are crushed using a mechanical chopper. The resulting pulp is then squeezed through a cheesecloth to extract approximately one liter of juice. This extracted juice is further filtered using a stainless steel strainer lined with cheesecloth to ensure clarity and remove any remaining solids.

The filtered juice is transferred to a casserole or stainless steel cooking pot. One kilogram of sugar is added to the juice and stirred until completely dissolved, forming a

uniform mixture. This mixture is then pasteurized by heating it to a temperature of 60–65°C for five (5) minutes, with continuous stirring to maintain even heat distribution and prevent scorching.

Once pasteurization is complete, the hot mixture is immediately poured into presterilized glass bottles. The bottles are securely capped while still hot to maintain product sterility. Following this, the filled and capped bottles are steamed for 15 minutes to ensure microbiological safety, then allowed to cool to room temperature. Finally, the cooled bottles are properly sealed and labeled for distribution and storage.

This method results in a shelf-stable, high-quality lipote fruit concentrate that retains the natural flavor and nutritional value of the fruit.

The present lipote fruit concentrate made has the following composition:

| Ingredients | Amount |
|-------------------------|-------------|
| ripe lipote fruit juice | 1 liter |
| sugar | 1 kilogram. |

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