# Milpesos: nourishing like breast milk, delicate like olive oil.

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#### The fruit of wine

The "palm of a thousand pesos" is the name by which the species *Oenocarpus batahua* Mar is commonly known in the Colombian Pacific. In other parts of Colombia, it is also known as seje, chapil, milpés, patabá, seje grande, unamo, trupa, aricaguá, bateí, batú, obango, milk palm, resin palm. The name "Oenocarpus" means "wine fruit" from the Greek oeno = wine and carpus = fruit or seed. This name was given to it by the first explorers of America and refers to the use of the fruit in the production of an alcoholic beverage. The palm has a smooth, solitary stem 15 to 30 centimeters in diameter with very marked scars left by the falling leaves, and can reach 22 meters in height. A characteristic feature of the species is the shape of the bunches that resemble a horsetail 1 to 2 meters long (figure 1).



Figure 1. General appearance of the milpesos palm, showing the cluster in the shape of a horsetail.

The fruit is ovoid, violet to black in color, with a pointed apex, 2.5 to 4 cm long and 2 to 3 cm in diameter, with fleshy and greasy pulp (Figure 2). When fresh, the fruit weighs around 15 grams, while the bunches of fruit can weigh up to 30 kilograms.



Figure 2. Fruits of the thousand-peso palm. Photo: Yurani Mosquera.

# **Uses and benefits of milpesos**

**Food:** The pulp of the fruit can be eaten directly or a juice can be prepared which has a nutritional value comparable to that of human breast milk (Figure 3); the pulp can also be used to make ice cream. To a lesser extent, the young stem or bud commonly known as "palmito" is consumed. An indirect food use of the palm is the cultivation or harvesting of beetle larvae.

Traditional medicine: Different parts of the milpeso palm are used in traditional medicine. For example, the young inflorescences are used to cure dysentery; the infusion of the young seedlings is used to treat snake bites: the roots have antidiarrheal, antidysenteric and vermifuge principles. The oil is used to treat conditions such as inflammation, joint pain, bone pain in general, prevent the appearance of skin fungus, gastrointestinal problems and treat tuberculosis.

**Building materials:** The leaves of the milpesos palm are used in the construction of traditional homes.



Figure 3. Milpesos juice. Photo: Yenifer Rentería.

*Handicrafts*: Fibers extracted from the leaves of the milpesos palm are used to make baskets, brooms, backpacks, mats, fans, hats, bags, and other handicrafts.

*Oil*: Oil is the product derived from the milpesos fruit with the greatest economic importance. It is comparable in flavor, appearance, and quality to olive oil (Figure 4).



Figure 4. Milpesos oil. Photo: Yenifer Rentería.

## **Establishment of the crop**

Because the exploitation of natural populations, which can be destructive when the palm is cut down either to extract the palm heart or to harvest the fruit, is the main way of using the milpesos palm, methods have been created for the implementation of plantations in order to reduce the pressure on native palms and guarantee the conservation, sustainability, safety and efficiency in the production of the resource. One of these techniques is described below.

### Nursery phase

The seed is put to germinate in the shade in boxes containing a moist substrate of decomposed sawdust. Germination begins 20-40 days after sowing and continues for up to 90 days after seedling. When the plants reach 5 to 10 cm, they are transferred to black plastic bags with a capacity of 2 kg containing a mixture of black soil, sand, and decomposed organic matter in a 1:1:1 ratio. The seedlings should be kept in 50% shade during the nursery phase and high humidity conditions that promote the proliferation of fungi should be avoided. The seedlings should remain in the nursery until they reach a height of 30 to 40 cm, which may take 1 to 1.5 years, at which time they are transplanted to the field.

## Transplanting into the field

The seedlings can be planted without problems in various types of soil; however, it is advisable to plant in clay loam and sandy clay loam soils. Deforested lands with a neutral or slightly acidic pH are ideal for the implementation of milpesos cultivation. Since the species does not tolerate direct exposure to the sun in its initial stage of growth, it is recommended that it be planted with an associated crop that provides temporary shade during the first stage. The suggested planting distance for monoculture plantations is 7 x 7 m, with the application of 1.5 kg of fertilizer per plant. For the agroforestry system, distances of 6 x 12 m or 12 x 12 m are suggested, the species proposed for association are cacao (Theobroma cacao), caimarón or uvilla (Pourouma cecropiifolia), guaba (Inga edulis), avocado (Persea americana). Sowing should be done in 40 x 40 x 40 cm holes containing a substrate of soil and decomposed organic matter

and should be done at the beginning of the rainy season.

#### Extraction of oil

The artisanal process of extracting milpesos oil consists of washing the fruit and heating it to 50 °C; then it is macerated to separate the pulp from the seed; the resulting juice is cooked until the water evaporates and is filtered with paper.

## **Recipes with milpesos**

• Milpesos juice

#### *Ingredients*:

- -2 pounds of milpesos fruits
- -4 liters of water
- -Sugar to taste

#### *Process*:

Place the fruits in a pot with two liters of water.

Bring the pot to a boil and leave on the heat until the fruit is soft, approximately 15 to 20 minutes. Remove from the heat and wait for it to be warm. Remove the fruit from the pot.

In another pot, mash the fruit with a Stone until you obtain a pulp.

Add water to the pot with the pulp and stir well to extract all the juice from the fruit until it has the desired consistency.

Sift the mixture to separate the juice from the pulp and the seeds.

Add sugar to taste and stir well to dissolve. Serve the milpesos juice cold or at room temperature, as you prefer.

Milpesos sauce

#### *Ingredients*:

- -1 pound of milpesos fruits
- -Water (enough to lightly cover the fruits).
- -Sugar (to taste)
- -Salt (a pinch)

#### *Process*:

Cooking: Cook the milpesos fruits in a pot with a little water for approximately 15 minutes, until they are soft.

Crush: Remove the cooked fruits from the water and place them in a mortar or suitable container. Crush the fruits with a stone or mortar until you obtain a paste-like consistency.

Sweetening: Add sugar to taste to the mixture and continue crushing until the sugar is well integrated and the mixture has the desired sweetness.

Seasoning: Add a pinch of salt to the mixture and stir well to integrate all the ingredients.

Ready to serve: The milpesos sauce is ready to be served. You can use it as an accompaniment to various dishes.

#### **Bibliography and Related Links**

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