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Romerito and Rosemary—Foods with Multiple Properties

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Abstract: Rosemary, of Mediterranean origin, is widely recognized for its properties in traditional medicine, due to the presence of bioactive compounds with antioxidant, anti-inflammatory and digestive effects. In contrast, the romerito, originally from Mexico, is distinguished by its role in Mexican gastronomy, especially in festive contexts, in addition to its nutritional value as a source of vitamins and minerals. The joint analysis allows us to show how both species represent different ways of using natural resources, either for therapeutic or food purposes. It is concluded that both the rosemary and the romerito have a significant importance in their respective contexts, contributing to scientific knowledge and cultural heritage. Romerito and rosemary are plants that grow in saline environments, as is the case of romerito, and calcareous in the case of rosemary. Both are edible, provide nutrients and have medicinal and cosmetology uses.

Key words: Botanicals, medicine, gastronomy, cosmetics.

1. Introduction

1.1 El Romerito

It is a traditional edible plant from Mexico, widely known for its use in gastronomy, especially in typical dishes such as *romeritos con mole*. Despite its common name, the romerito is not botanically related to rosemary, as it belongs to a distinct family and has its own morphological and ecological characteristics.

Since pre-Hispanic times, the romerito has been a fundamental part of the diet of various indigenous peoples of the Mexican highlands. Its cultivation and harvesting have been maintained to the present day, making it an important element of the country's cultural, culinary and agricultural heritage. In addition to its nutritional value, the romerito stands out for its adaptability to saline environments and its nutritional contribution [1].

1.2 The Rosemary

Rosemary (*Rosmarinus officinalis*) is a shrub with prismatic stem, narrow and very aromatic leaves belonging to the Lamiaceae family.

Its natural habitat is arid environments, such as sunny slopes or slopes near the sea, protected from the wind on soils of calcareous origin. It is easy to propagate and does not require special care, and adapts to soils of low fertility and occasional irrigation.

Its main characteristic is the presence in its leaves of glands that contain essential oils of particular properties. Rosemary contains various active ingredients widely used in traditional medicine and gastronomy.

Rosemary (*Rosmarinus officinalis* L.) is an aromatic and medicinal plant that has accompanied humans since ancient times.

Today, rosemary remains one of the most valued plants worldwide due to its wide range of applications in traditional medicine, gastronomy, cosmetics and agriculture. Its easy cultivation, environmental resistance and high content of bioactive compounds make it a species of great scientific, cultural and economic relevance [2].

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2. Characteristics

2.1 El Romerito

The romerito is a quelite—a term from Nahuatl *Quilitl*, meaning "edible grass"—which has been a part of human consumption since ancient times. It grows in saline or alkaline soils and its natural adaptation reflects an ancestral relationship between indigenous peoples and their ecological environment.

The romerito is an annual herbaceous plant, with thin, erect or slightly branched stems, which can reach between 30 and 80 cm in height (11,811-31,496 in). It has an intense green coloration and a soft texture when young.

Its leaves are elongated, narrow and fleshy, similar in shape to small needles, which gives rise to its common name due to its superficial resemblance to rosemary. However, they lack a strong aroma. The leaves grow alternately along the stem and make up the edible part of the plant.

The flowers of the romerito are small, not very showy and greenish in color. They are usually grouped in the axils of the leaves. Flowering occurs during the growing season, and reproduction occurs by seed.

From an ecological point of view, the romerito develops in saline or humid soils or near bodies of water. This ability to tolerate high levels of salt classifies it as a halophytic plant, a rare characteristic in edible plants.

Nutritionally, romerito is rich in vitamins A and C; iron, calcium and potassium, fiber and antioxidants, making it a healthy and low-calorie food [3].

2.1.1 Taxonomy

The taxonomic classification of romerito is as follows:

- Kingdom: Plantae.
- Division: Magnoliophyta (angiosperms).
- Class: Magnoliopsida (dicots).
- Order: Caryophyllales.
- Family: Amaranthaceae.
- Subfamily: Suaedoideae.
- Genus: *Suaeda*.
- Species: *Suaeda mexicana* (or *Suaeda torreyana*, depending on the classification).
- Common name: Romerito.
- It belongs mainly to the genus *Suaeda*, with species such as *Suaeda edulis* or *Suaeda nigra* used in Mexico as a romerito.
- It is a herbaceous plant that can measure between 60 and 110 cm in height (23,622-43,307 in) with green stems and succulent, thin and fleshy leaves.

2.2 The Rosemary

Appearance: Evergreen, woody and aromatic shrub that can reach 2 m. The root is pivoting and its stem is extensively branched from the base, forming an intricate tangle. When tender and young, the stems are covered with a hairiness of whitish or grayish tones. As it ages, the hairiness disappears and the stems take on a reddish color and brittle texture.

Rosemary is a woody, perennial shrub belonging to the Lamiaceae family, the same family that includes plants such as mint, oregano, and basil. It can reach heights that vary between 50 centimeters and 2 meters, depending on the conditions of the environment and agricultural management.

From an ecological point of view, rosemary is adapted to Mediterranean climates, characterized by dry summers and mild winters. It prefers light, well-drained soils with good sun exposure. It is highly resistant to drought and poor soils, making it ideal for arid and semi-arid areas.

Chemically, rosemary contains essential oils rich in compounds such as cineole, camphor, borneol, rosmarinic acid, and various flavonoids, responsible for its antioxidant, anti-inflammatory, and antimicrobial properties [4].

2.2.1 Taxonomy of Rosemary

- Kingdom: Plantae.
- Division: Magnoliophyta.
- Class: Magnoliopsida.
- Subclass: Asteridae.

- Order: Lamiales.
- Family: Lamiaceae.
- Subfamily: Nepetoideae.
- Tribe: Mentheae.
- Genus: *Rosmarinus.*
- Species: *Rosmarinus officinalis* L., Sp. Pl., 1, 23, 1753.

2.2.2 Habitat and Distribution of Rosemary

It grows on soils of calcareous origin, stony or sandy soils with good drainage, as it is not very demanding in terms of humidity.

It is located at altitudes below 1,500 m a.s.l., (1640,419 yds) being a species that tolerates icy environments, up to -10 ºC (14 °F).

This species can be found at a higher altitudinal level, but its yield and quality of essential oils is lower. Its presence is frequent on intervened land, degraded by logging or burning, on rocky and eroded slopes.

3. Importance

3.1 El Romerito

Nutritional importance: From a nutritional point of view, romerito is a highly beneficial food. Its iron content helps prevent anemia, while its vitamins and antioxidants contribute to the strengthening of the immune system. Also, its high fiber content promotes digestion.

3.1.1 Agricultural and Environmental Importance

Romerito is important because it can be grown in saline soils where other plants do not thrive, making it a sustainable agricultural alternative. In addition, its cultivation contributes to the conservation of traditional agricultural practices and the responsible use of specific ecosystems [5].

3.1.2 Nutritional and Food

In addition to its cultural value, the romerito provides important nutritional benefits:

- It has dietary fiber, necessary for good digestion and cholesterol regulation.
- Its consumption can help strengthen the immune system, prevent anemia and contribute to general well-being.

These benefits make romerito a nutritious and functional food.

3.1.3 Economic and agricultural

The production of romeritos also has a regional economic importance. It generates income for farmers.

3.2 The Rosemary

The importance of rosemary is manifested in multiple areas:

Food: Its leaves are used to flavour breads, legumes, broths and roasts, as well as vinegars and vegetable oils. also to season red meat, poultry, fish, potatoes, oils and breads.

Medicinal: The various active components present in *Rosmarinus officinalis* give it different therapeutic properties such as antiseptic, antispasmodic, flavorings, aperitif, balsamic, digestive, diuretic, stimulant and rubefacient. Regular intake of rosemary tea regulates blood glucose levels and eliminates toxins from the liver.

An essential oil is extracted from rosemary that has various applications in traditional medicine. Its internal use provides antispasmodic, digestive and carminative properties, stimulates urine and perspiration, and regulates menstruation and bronchitis.

Fig. 1 Romerito.

Fig. 2 Rosemary.

3.2.1 Industrial and Cosmetic Importance

In the cosmetic and pharmaceutical industry, rosemary is a frequent ingredient in the production of creams, lotions, shampoos, soaps and perfumes. Its antimicrobial and stimulating properties make it ideal for skin and hair care products, especially to strengthen the scalp and prevent hair loss.

3.2.2 Environmental and Agricultural Importance

From an environmental point of view, rosemary plays an important role in soil conservation, as it helps prevent erosion in dry soil. In addition, by attracting pollinators such as bees and butterflies, it contributes to biodiversity and the balance of ecosystems [6].

4. Conclusions

4.1 El Romerito

The romerito is a plant of great food, cultural and environmental value. Although it is often confused with rosemary because of its appearance, it has a botanical identity of its own. Its nutritional characteristics, its adaptability to adverse conditions and its relevance in gastronomy make it a plant resource of great importance. Promoting their consumption and conservation means preserving biodiversity.

Botanically, its adaptation to difficult soils and its ease of cultivation make it an interesting resource also from an agricultural point of view. Nutritionally, its contributions of vitamins, minerals and fiber position it as a valuable quelite within a healthy diet.

4.2 The Rosemary

Rosemary is a plant of great value due to its versatility and multiple benefits. Its botanical characteristics allow it to adapt to different environmental conditions, while its medicinal and aromatic properties make it a fundamental resource in health, gastronomy and industry. The responsible use and cultivation of rosemary promote not only human well-being, but also environmental balance [7].

Its continuous scientific study has confirmed applications in nutrition, health and cosmetology, so it offers valuable biological properties with the potential to improve the quality of human life in an economical and appetizing way.

The various active components present in rosemary make it have therapeutic properties such as antiseptic, antispasmodic, balsamic, diuretic, and digestive. The regular intake of rosemary tea regulates blood sugar levels and eliminates toxins from the liver.

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