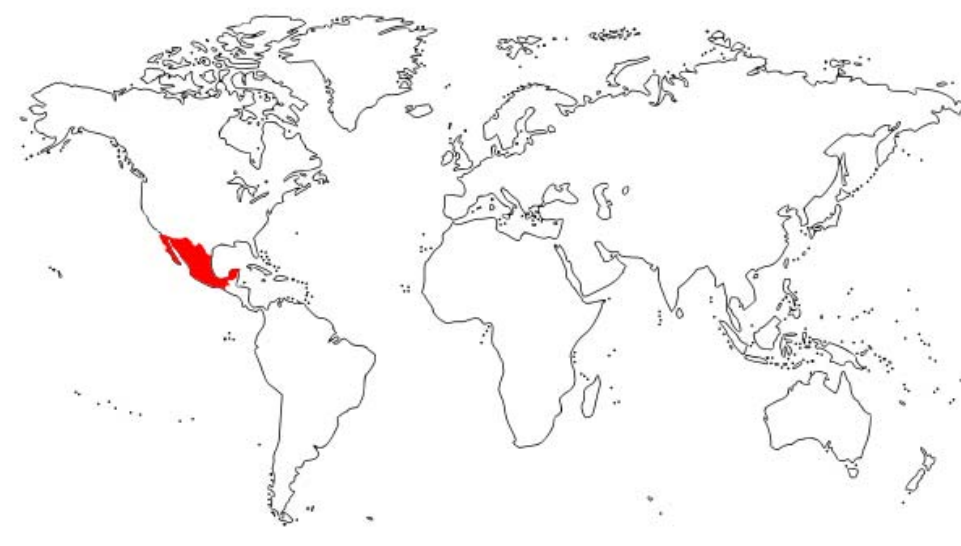


Chaya and the Reawakened 25

THE NAME THAT ANCIENT MAYANS GAVE TO CNIDOSCOLUS ACONITIFOLIUS WAS CHAY, MEANING “TREE SPINACH,” from which today’s Chaya is derived. It is the main dietary source of leafy vegetables for the Kekchi people of Alta Verapaz in Guatemala. Chaya is poisonous if eaten raw but, when cooked, it can be used for a variety of different recipes. Its nutritional profile is impressive; Chaya is high in protein, calcium, iron, vitamins, and antioxidants. It has been used as a medicinal plant since the Mayan ages. Chaya is also both drought and heavy rain tolerant, easy to grow, and not affected much by insects. Neglected for decades, Chaya has been rediscovered as a great ally in the war against today’s dietary diseases.



CHAYA

Cnidoscolus Aconitifolius

Origin: Mexico
Grown in: Mainly Central America, some other tropical regions

The name that ancient Mayans gave to *Cnidoscolus aconitifolius* was Chay, from which today’s Chaya is derived, literally “tree spinach”. It is the main dietary source of leafy vegetables for Kekchi people of Alta Verapaz in Guatemala. Chaya is poisonous if eaten raw but, when cooked, it can be used for a variety of different recipes. Its nutritional profile is impressive, being high in protein, calcium, iron, vitamins and antioxidants, it has been used as a medicinal plant since the Mayan ages. If it is not enough to make it a great plant, Chaya is also both drought and heavy rain tolerant, easy to grow and not very affected by insects. Neglected for decades, Chaya has been rediscovered as a great ally in the war against today’s dietary diseases.

BOTANY

Chaya, otherwise known as spinach tree, is a fast-growing perennial shrub that often grows 10ft (3m) high and 6.5 ft (2m) wide. It grows well in a wide range of climates, but performs best in hot and rainy areas. The leaves grow palmately with 3-5 lobes and flowers (male and female) grow in cymes from long peduncles. The leaves are large, dark green, and some have stinging hairs. All leaves contain some amount of cyanide and therefore must be cooked before eating. Seeds and seed pods rarely grow, so propagation happens from cuttings. Because of this, Chaya is unlikely to become a weed. Chaya is also highly resistant to pests and disease. Chaya is most closely related to *Manihot* and *Jatropha* species (ECHO 2006).

CULINARY USE

The leaves and stems of Chaya are commonly eaten, but they must be boiled or cooked for at least five minutes to release the cyanide toxin. There are some recipes for drinks that use raw chaya and it is thought that when blended the cyanide is released. However, it is best recommended to cook it. The leaves and stems can be served as a side dish or baked into bread and tortillas. It is not well known what the common ways to eat chaya were during pre-Columbian times, but more recently it has been eaten in a variety of ways. From making wraps to boiling it in stews, and frying it with eggs, there are many different ways chaya is consumed today (ECHO).

NUTRITION AND MEDICINAL USE

Nutritionally, chaya is of better value than most other dark leafy greens. It contains high amounts of vitamins and minerals, especially Vitamins A, B, and C, and Calcium, Iron, and Carotene. An adult’s recommended daily value of Vitamin C can be met by eating 25 grams of chaya. When boiled, the Vitamin C ends up in the water, so this broth should be drunk to obtain the Vitamin C. Many medicinal claims have been made of chaya, but most commonly it is used for diabetes and kidney-related issues. It can be brewed as a tea or infusion, or the greens can be eaten once cooked.

AGRICULTURE

Chaya originated in Mexico, so it grows well in hot weather. It withstands long droughts and heavy rains and is highly resistant to pests & disease. Because chaya rarely produces seeds, it is propagated by cuttings. Stem cuttings propagate best if broken rather than cut with a tool as this leads to a lower risk of infection. It is also recommended that they dry before being planted to prevent rot (Ethnobotany). Once planted, chaya does not need much attention to grow well (ECHO).

HISTORY

Chaya was domesticated in Mesoamerica during pre-Colombian times. It grows wild from southern Texas, along the Yucatán, through Chiapas and down to other Central American countries, and as far south as Colombia. Its non-native name suggests that it was only introduced to places outside of Mayan Yucatán after colonization. There are four different varieties of chaya, but not all are grown, suggesting regional differences. Today, it still is a commonly used leafy green vegetable for eating, as ornamental, as a natural fence, and as medicine to help with kidney and diabetes-related issues (Ethnobotany).

From the 16th to 20th centuries, multiple different Spanish writers documented the use of chaya. For example, 16th-century writer Frey Diego de Landa wrote in his work titled *Relación de las cosas Yucatán*, “They have a little tree...the leaves of which are eaten cooked and are like cabbages to eat...The Indians plant it...and during the whole year it has leaves to gather.” And in the mid-20th century, chaya was documented as the only leafy green on a list of common foods Mayans ate (Ethnobotany). It was also documented in the 16th century that in times when there was a scarcity of food, wild chaya was eaten as a nutrient-rich source. Today it continues to be eaten in many parts of Central America and has recently been introduced to other places around the world including Southeast Asia, southern North America, and parts of Africa (ECHO).

RESEARCH

There has been little research on chaya, but beginning in the late 1970s what has mostly been studied are its medicinal and nutritional benefits. Researchers have focused on the positive effects chaya has for patients with Type II Diabetes. It has been shown to decrease blood glucose in mildly diabetic mice and possibly stimulate dormant insulin-secreting cells (Vhealthtech). Other research demonstrates the potential for chaya to be grown in places outside of its origin as a nutritive source of food. In 1999, researchers took cuttings from home gardens in Mexico and spread them to different labs and gardens at universities in Mexico, Guatemala, and the United States to continue being studied and propagated (Ethnobotany). In addition, a nonprofit organization, ECHO, based in Florida, has been cultivating and distributing chaya since the late 1980s. Its partners have cultivated it across the world in places such as Kenya, Hawaii, Zambia, Indonesia, Brazil, and The Philippines (ECHO). This demonstrates the potential for growing chaya in many different countries outside of its origin due to its tolerance of heat, rain, pests, disease, and its relative ease of cultivating.

CUISINE

- [Mexico in My Kitchen](#)
- [Chaya Recipes for the Whole Family](#)
- [Healthier Steps: Chaya Spinach Tree](#)

SOURCING

- [ECHO](#)
- [Amazon](#)

COMMUNITY RESOURCES

- [Chaya Community Resources](#)
- [Slow Food Foundation for Biodiversity: Chaya](#)
- [How to garden with chaya](#)
- [Mother Earth News](#)
- [MexConnect](#)

RESOURCES

- [The Ethnobotany of Chaya](#)
- [Chaya: a Technical Note from ECHO](#)
- [Vhealthtech](#)

