

# Ethnobotany: The Plant-People Connection

People need plants! And not just as food. It's mind-boggling to consider all of the ways we depend on plants to not only survive, but also to enrich our lives.

## What is Ethnobotany?

Ethnobotany is the study of how people in different cultures, regions, and time periods made use of plants. Ethnobotany can also help us remember and honor the native wisdom that underlies so many of our modern-day products, as well as ongoing scientific "discoveries" that are rooted in ancient traditions.



Imagine walking into a wilderness area and trying to figure out which plants are edible and nutritious, which are poisonous, and which have healing properties. Thousands of years of trial-and-error yielded a wealth of knowledge specific to the needs and ecosystems of indigenous groups.

Research related to how native peoples used local plants and how "discovering" that information has improved our well-being is an important component of the field of Ethnobotany. Consider aspirin — a commonplace in medicine cabinets around the world — as an example. Indigenous peoples of North America chewed on willow bark to soothe pain. In the late 1800s, scientists were able to isolate the active substance, salicin, which led to the development of aspirin providing pain relief even where willow trees don't grow.

It is incredible to consider how indigenous peoples discovered which plants native to their regions could be used for sustenance, such as for food, fiber, medicines, shelter, dye, soap, and oil. This knowledge was collected and passed down by through the elders to youth, with each generation adding their own discoveries.

## Better Living Through Synthetics?

The mid 1900s brought not only a technological revolution, but also a revolution in mindset. The phrase "better living through chemistry" — a variation of a chemical company slogan — summarizes the pervasive idea of that era: that manmade or synthetic was somehow better than "natural."

Times have changed, however, and the last decades have seen a resurgence of interest in the treasure trove of traditional wisdom that allowed generations of indigenous peoples to live sustainably off the land. As ethnobotanists systematically study and document the use of plants by peoples across the globe, they preserve the knowledge for current and future generations.

## Quest for Conservation – Ethnobotanists to the Rescue

Scientists continue to discover (or rediscover) the important role of plants in our environment and the benefits they can offer to us. For example, an extract from an annual species of artemisia is showing promise in treating malaria microbes that have evolved to be resistant to currently available medications. This species of artemisia has the common name sweet wormwood, alluding to its use in treating intestinal parasites. However, it has also been used in Chinese traditional medicine for at least 2000 years to treat malaria.

As forces such as industrialization and climate change put native plants at risk for extinction, ethnobotanists play a critical role in

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identifying those plants most at risk, as well as those with historical uses and potential for further research. They are strong proponents of conservation and protection of ecosystems. They also play an important role in recognizing and honoring plant lore and giving indigenous communities the respect (and, ideally, compensation) for their knowledge.

## **Beyond Foods and Medicines**

Here are just a few of the many ways cultures across the globe used (and many continue to use) plants in their everyday life.

**Plant dyes:** Sumac, walnut, madder, and coreopsis are just a few of the many plants that can be used to dye fabrics and other materials.

**Sacred plants:** White sage, aromatic incense, musical instruments made from reeds and bamboo, herbal teas, and wax candles have all been used in sacred rituals, purifications, and healing ceremonies. Wax from plants is used to make candles.

**Preservation:** Tannins from conifer trees can be used to tan hides into leather. Plant resins and waxes can preserve wood.

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