

TEPEXCOHUITE: The Magic Tree

Despite some scientific scepticism, the bark of this Mexican tree seems to cure skin burns better than most known treatments.

At all hours of the day and night, people with serious burns arrive at the tiny Red Cross hospital in Tlalnepantla, state of Mexico, one of the country's most important industrial areas. They come to be treated with "the powder."

"Is this where you come for the powder that heals burns?" asks an anxious woman, "you see, I've brought my son who was burned."

"Yes, wait just a minute, please."

When the doctor on duty is finally free, the patient is brought in. The doctor examines the burn, asks what caused it and orders the nurse to clean the wound. Then he sprinkles a brown powder on the entire area, saying to the mother, "Don't cover it, don't let it get wet. Let it be just as it is, and bring him in again in two weeks."

Because of the very simple way it's applied, because of its origin and because of the way people come in search of it, the powder seems almost magical. It is prepared by grinding the bark of the *Tepexcohuite* tree, the Nahuatl name for a species that grows in north-west Chiapas and the Cintalapa Valley, also in Chiapas.

People with first, second and even third degree burns come to this health center for attention. Some are even brought in from other hospitals where they were being treated.

Somehow people find out that burns are taken care of in a very special way there and that the results are excellent. Health officials have not put out a formal statement calling for people to seek attention there, nor have they decided to extend the use of the brown powder to other health facilities.

Dr. Rafael Martínez Mondragón, physician for the Tlalnepantla Red Cross, explained that they've been using *Tepexcohuite* powder on first and second degree burns for the past five years, with excellent results. "It's

harder to use in treating third degree burns because muscle tissue and deeper veins are damaged; thus, we need to use grafts or other more extended treatment procedures."

He continues, "Many people come in with burns that are ten days, two weeks or even a month old, and we can't do anything for them. The healing process is too far along, and the powder can no longer penetrate into the wound. It must be applied to raw flesh, so it's best to treat the burn immediately, or at least before a week goes by. Otherwise, we must remove the scar tissue that's begun to form.

"*Tepexcohuite* bark powder is sprinkled on the burned area to form a thin layer. With first degree burns, at the end of two weeks, the scab peels off like bark from a tree. It's like nothing ever happened. At first the skin is rather ashen, but it eventually returns to its normal color. There is no scar."

Roque León, an engineer from Ocozocuautila, Chiapas, was the first to take the bark powder to the Tlalnepantla health center. He tells how in 1923, when his brother suffered a fractured skull in an accident, they sent for a native healer. The old man asked for *Tepexcohuite* bark and used it to cure the injured man. "Since then," says León, "I've been very fond of the plant and continued to do research on it. I later discovered that it not only heals fractures, but also burns and dental infections and that it helps close wounds."

"About five years ago, when a friend of mine was taken to the hospital in Tlalnepantla with a bad burn, I brought him some of the powder."

The doctors became convinced of its curative qualities, and León continued to stock them with the bark. He explains the relatively simple procedure for preparing the powder: "First it is autoclaved at 100 pounds pressure and 80 degrees centigrade. Then it's put in an oven to dry; then



A medicine man as portrayed by painter Diego Rivera.

it's ground and passed through a tanus colare classifying mesh. Finally, it's jarred and stored. It's best to use bark from trees at least nine years old."

The first scientific mention of *Tepexcohuite* dates from 1846, as published in the *London Botanical Journal*. It was classified as *Mimosa tenuiflora* Benth. In his book, *The Vegetation of Chiapas*, Dr. Faustino Miranda describes it as a woody plant growing to about

8 meters in height and covered with white flowers, clustered on dense spikes. It grows in abandoned fields, often forming extensive patches.

In 1984 the country was struck by two major natural disasters. The first was the eruption of the "El Chichonal" volcano in Chiapas, causing countless victims. A few months later, in November, a natural gas facility in Tlalnepantla exploded. On both occasions, the bark of *Mimosa tenuiflora* Benth.

was used with great success.

Nonetheless, despite the evidence produced in those cases, the Ministry of Health showed no interest in the plant. Only after recent television coverage and some publications on its curative properties, did General Director of Health Inputs (part of the Ministry of Health) Dr. Mario Liberman visit Roque León to ask for information on the plant.

To date all of Mr. León's work has been entirely on his own, using only the resources he has at hand. He has still not been able to identify the active substance in the bark; that is, the compound responsible for its healing action.

Popular wisdom and the use of certain folk medicines have often provided the basis for medical advances. Three cases have been particularly important in Mexico: the use of "peyote" (*Lophophora williamsii* Lem.) to produce peyotina and lofoforina; the use of hallucinogenic mushrooms (*Psilocybe aztecorum* Helm. and *Psilocybe mexicana* Helm.); and the use of two plants, known commonly as "barbasco" and "cabeza de negro" (*Dioscorea mexicana* Guill and *Dioscorea composita* Helm.) to produce chemicals for contraceptive pills.

Montserrat Gispert, ethnobotanist at the National Autonomous University of Mexico, explains the importance of folk knowledge for the advancement of science: "Traditional wisdom plays an important role in scientific knowledge because often we find a kind of vegetation or some plants that are new for us, even though local people are traditionally familiar with them. They'll know the name of a certain tree, how it's used, what parts are used, when it flowers and how it fruits. They can often distinguish different botanical species among plants that are very similar in appearance. We may know of some of these things from the literature, but other times, we don't. And even when we do, people often help us to refine our knowledge even more."

"There are natural plant resources that people eat, and we didn't know they were food plants; others that are used medicinally, that we didn't know anything about. So they provide us with new food and medical resources.

"Mexico offers the richest vegetational and ethnic mosaics in the world; plant life is quite diverse, and there are many, many ethnic groups, languages and dialects. Before the Spanish Conquest, all of these peoples had a widely extended culture related to plants. They had an impressive knowledge of plants and used them extensively, especially for medicinal purposes. Nonetheless, for a very long time this traditional knowledge has been ignored. Our health institutions aren't really interested.

"More than anything else, our folk knowledge has served to enrich the multi-national corporations that used Indian peoples' knowledge of "barbasco" to produce steroids for contraceptive pills. They've benefitted more than the people who create and maintain this popular wisdom and more than the Mexican scientific community."

Roque León explains that "almost all the multi-nationals" have gone to the Cintalapa Valley. "They've carried away trees and large quantities of bark. With that, and the fact that community people pull it up to cultivate corn and beans, the plant population has diminished."

Far from benefitting the community, the industrialization of *Tepexcohuite* by these companies could well harm our natural resources, as they extract juicy profits and abandon the communities that have generated traditional wisdom to their fate, forsaking them to their poverty.

Couldn't this plant be used to produce an inexpensive, folk remedy, accessible to all Mexicans? ★

Luz Guerrero Cruz

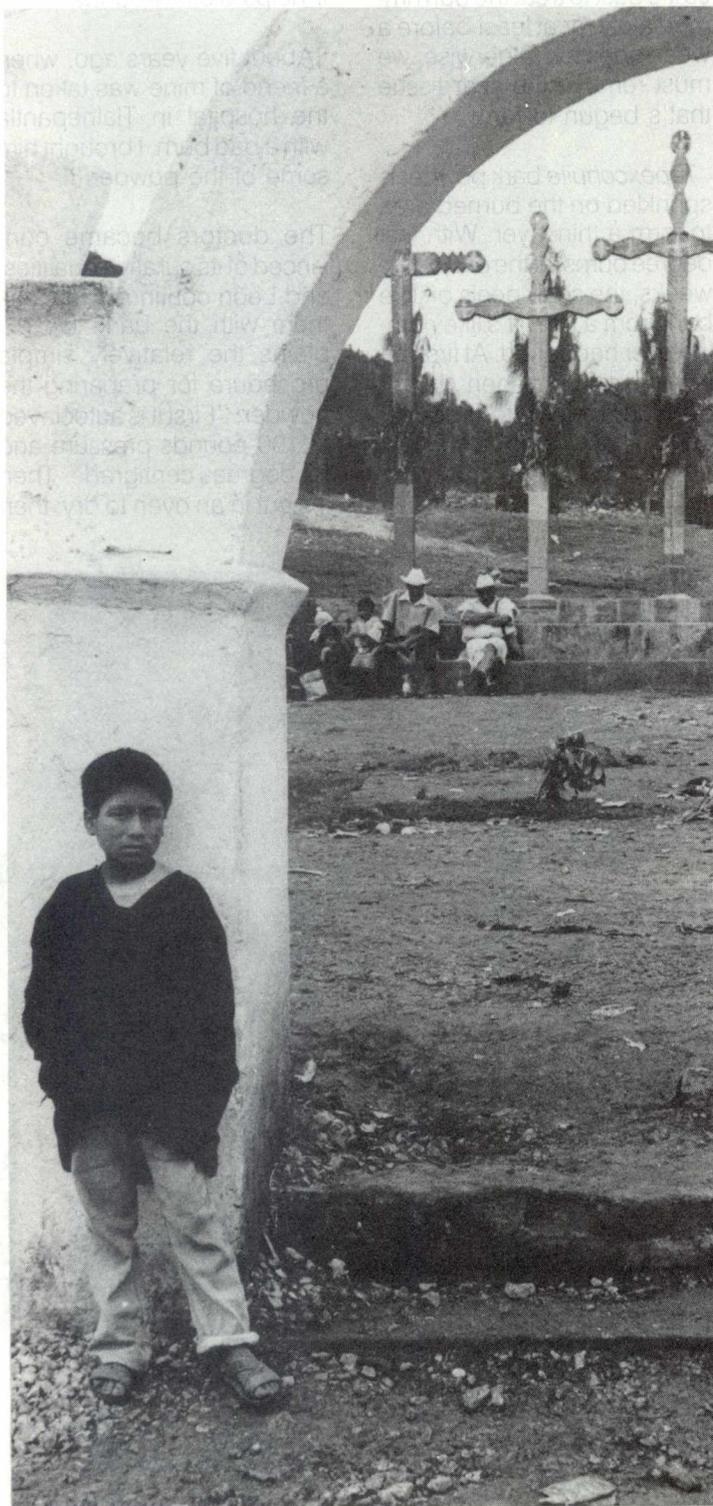


Photo by Marco A. Cruz/IMAGENLATINA

Indian Mexico preserves a wealth of traditional medicinal knowledge.