## Herbs and drugs

## In Mexico, natural drugs compete with modern medicines

A wild reed called *lágrimas de San Pedro* (tears of St. Peter) has recently been in demand throughout Mexico and abroad as a cure for diabetes.

Christian Felix Hernández, a government official, discovered the reed; it was being used in Veracruz not only for diabetes but reduction and elimination of gallstones.

"However, it is not true that this plant is a cure for cancer, as reported in a Mexican magazine," he says.

The Mexican Department of Health has undertaken research to determine the therapeutic properties of the reed, and whether it can be used commercially.

"The curative power of the plant was known since the time of the Aztecs. Herbal teas from wild plants have always interested me and, lately, suffering from diabetes myself, I did some detective work and was able to locate it through rural workers in the state of Veracruz," says Hernández.

According to Veracruz health authorities, a demand for the plant has suddenly sprung up. More than 5,000 Mexicans have obtained it, and as a result of the magazine article requests also came from some South American countries and France and Germany as well.

Despite advances in modern medicine in Mexico, the use of medicinal herbs and plants is widespread. Every market in Mexico has one or more stands where herbalists prescribe natural teas. The herbalist often enjoys equal status with a doctor, and in rural areas is more frequently consulted.

Discounting the doubtful love potions still in use in Mexico, most clients consult herbalists for a variety of everyday ailments.

An example of the herbal enthusiast is Prisciliano López Mar, who says that while there is much superstition and danger in use of natural herbs and roots, the fact is that many of the old household herbal remedies are effective.



Herbalist, vending wares in Mexican markets, rivals doctors in prestige.

López Mar, who studied for three years at the Dominion Herbal College of Vancouver, Canada, has made a study of the approximately 500 medicinal plants which grow in Mexico.

Among the more popular herbs, according to López Mar, are:

- the leaf of a banana grown in Tabasco, Mexico, used for tuberculosis;
- seeds from a tree in Guerrero state, called xiricua, said to cure various types of skin diseases;
- a gladiolus with white borders, used as a hallucinogen;
- three Guerrero plants, known as cancer herb, cancerina and coachalalate, all used against cancer.

In pre-Columbian times, says López Mar, Indians ate a paste of moldy corn to cure infections—a form, he says, of penicillin. They also injected an extract of hot chile pepper, chile piquin, into cancer growths. Another so-called cancer cure, derived from Mayan Indian lore in Yucatan, consist of dried rattle-snake, ground to a powder and taken in a gelatin capsule.

Scientists are by no means ready to discard the claims of herbal medicine out of hand. They once did, and got burned.

Digitalis and curare are oft-cited examples of beneficial drugs found in the herbalists' armory. Digitalis is derived from the foxglove and is used as the herbalists used it, as a treatment in heart disease. Curare, used as a muscle relaxant, was so used by the South American Indians who discovered it, but in arrow-delivered doses sufficient to cause paralysis and death.

Other drugs extracted from plants long used as medicines include peruvoside, extracted from an Indian plant called peela kaner and used as a heart stimulant (SN: 6/8, p. 558); reserpine, isolated from the roots of Rauwolfia serpentina and used as a sedative and tranquilizer; and diosgenin, extracted commercially from Mexican yams, used as a precursor of the steroids pregnenolone and progesterone. (The latter is used in oral contraceptives.)

While conceding that such drugs are useful once in hand, most pharmacologists question the wisdom of spending much time determining the effectiveness of a host of supposedly curative botanicals. They point out that the beneficial ones are the exception, useless ones the well-nigh inflexible rule.

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