The Tree Of Wonders

Edgar Anaya Rodríguez*

A good plant, of so many uses to Man!¹ Friar Diego Durán









t could be a scene from a Mexican movie, photograph or painting from the first half of the twentieth century: a Mexican *charro* horseman slowly rides his mount as the dying sun goes down, highlighting the silhouettes of the maguey plants like pointy crowns. The maguey: one of Mexico's most representative plants, most closely tied to the history, art and sustenance of its people, in a word, its culture. If the eagle on the Mexican national coat of arms is not perched atop a maguey plant, that is probably only because the nopal cactus allowed it more room to sit.

From the pre-Hispanic codices to modern art, the dark green skin of the maguey and its spiky appendages have given birth to innumerable images. In the 1930s, it was even planted in buildings and gardens in large cities as part of the art deco rage. But this agave, originally from Mexico's high plateau, thrives in its natural habitat, the broad plains that stretch from the southern United States to Central America and boast more than 250 varieties.

They vary from a few centimeters to two meters in height and there are three main types: textile magueys, used for fiber, like sisal hemp from Yucatan; the *mezcaleros*, from which tequila and mescal are made; and the *pulqueros*, tapped for making the famous fermented drink *pulque*. The archetypical maguey, called the *manso* (tame) or *pulquero* maguey (*Agave atrovirens*), grows at altitudes of over 2,000 meters in the semiarid, extremely harsh conditions of Mexico's central plateau covering the states of Hidalgo, Tlaxcala, Mexico and Puebla as well as Mexico City.

The sinuous maguey has a broad trunk or *mezote* from which thick, concave leaves or *pencas* sprout, rimmed and topped with fierce thorns. Of note is the thin but resistent mesh, called *mixiote*, covering the *pencas* which retains water during the brief rains and impedes evaporation, thus allowing the maguey to survive the dry season.

Maguey plants flower once in their entire life-span. From their center bursts a tall stem, or *quiote*, up to six meters high topped with sprays of white flowers.

One of the maguey's most noteworthy qualities is that the entire plant is useful, from the root to the very last thorn, a characteristic perhaps unique in the world's flora.

In the sixteenth century the Spaniards had already been surprised by how the bountiful maguey plant accompanied Mexico's indigenous people through their lives, from cradle to grave. Friar José de Acosta had no qualms, therefore, about saying, "The maguey is the tree of wonders...that provides water and wine, and oil and vinegar, and honey and syrup, and needle and thread and a hundred other things....In New Spain the Indians hold it in very high



Pulque, a source of protein when meat or milk products are unaffordable.

esteem...and usually have one or several in their rooms...to help in their lives."^ ${2}$

Three centuries later, Humboldt concurred, saying, "The maguey is the most useful of all the products Nature has conferred on the peoples of the northern Americas."³ And praise in folklore was not wanting:

From Cradle to grave God wanted maguey In Mexico to hold sway Over even King Moctezuma the Brave.

This may all seem overstated, but the list of items the maguey offers Man, the majority in use since pre-Hispanic times, dispels that impression.

A COMPLETELY USEFUL PLANT

Let us begin with the *pencas* or leaves. Their curved form makes them useful as roof tiles, recipients, shovels and drainage canals. In Mexico's poor, dry areas, like Mezquital, very poor indigenous communities still build their houses completely with maguey *pencas*.

The fiber obtained by toasting, scraping and eliminating the *penca* pulp was of enormous importance in the past in making all types of cord, tape, nets, bags, sandals, blankets and clothing. *Pencas* were also used in crafts like feather art. Modern science has proven that among its other properties, its biochemical composition makes the soap-like substance it contains very effective and its sap very useful in healing sores and cuts as well as helping to ease sore muscles. During the colonial period, for example, maguey sap was rubbed on the back of people about to be whipped.

^{*} Contributor to several tourism and cultural publications; author of the Reader's Digest book *Maravillas Naturales de México*, (Natural Marvels of Mexico) (Mexico City: 1997). Opposite page photos: Dante Barrera.

The fiber continues to be used as a body scrub; when wet, it emits saponin, a soapy substance that removes dirt and makes suds like a detergent, but with the advantage of being more biodegradable. The fresh *pencas* are used as cattle feed, and when dry, make good firewood. Even their ashes are useful: their high potassium content makes them good fertilizer and, mixed with water, they constitute a bleaching agent for washing. Finally, mutton wrapped in *pencas* and buried in a pit oven transfer the maguey

flavor to one of Mexico's most representative dishes, *barbacoa*.

The thin, waterproof epidermis covering the maguey, the *mixiote*, was used to make clothing and the paper the codices were written on. This same fine mesh is still utilized to wrap the different spiced meats that are the ingredients in another typical Mexican dish, the *mixiote*.

The thorns that top each *penca* were made by the indigenous peoples into both utilitarian and ritual objects. They became awls, nails and needles for sewing the



The maguey's fresh pencas are used as cattle feed, and they make very good firewood when dry.

fiber itself, as well as for perforating ears, arms and legs as a sign of penitence.

The *quiotes*, the long stems of the flower, were used as stakes in cremations and as ornaments for tomb offerings. Once dried, they could be made into beams or, hollowed out, canals for water.

The maguey root is no exception. Its high saponin content makes it a good soapy brush. The seeds, too, are used for making personal ornaments and children's toys, like noisemakers. All of these items are a gift from the maguey to Man to make his life easier. The plant itself, of course, is also ornamental, as well as being used to set boundaries in the countryside and cut down erosion.

FOOD FIT FOR A KING

A whole other chapter is the food obtained from the maguey, nutritious, healthy and appreciated for its exotic flavor. For centuries it was the main source of sustenance for families in the countryside, and today it is the delight of demanding palates in fine restaurants.

The white flowers that bloom atop the quiote, waving over the maguey, and the white mushrooms that grow at its feet, have a distinctive taste. The white worms that live on the inside of the *penca* and the red worms, *chiniculles*, that live in its root, are fit for a king's table, both in price and flavor. The inside of the *quiote*, roasted, is eaten as a sweet, but the best known product of this tree of life is the sugary, nutritious liquid concentrated at its center, *aguamiel*, which, when fermented, makes pulque and when condensed makes syrup, honey and vinegar. *Pulque* itself is distilled to produce the strong spirit *aguardiente*, and its residue and foam are used as yeast for bread.

It is important to mention the important role *aguamiel* and *pulque* have played in the nutrition of poor Mexican communities. *Aguamiel* is a tonic against anemia because of its vitamin and mineral content; it is also a diuretic and helpful in fighting some urinary problems. *Pulque* —all the folk tales surrounding it notwithstanding— is an irreplaceable source of protein for people who cannot consume meat or milk products.

At the end of the nineteenth century, attempts were made to industrialize some products of the maguey to make brooms, brushes, paper currency and other types of paper, alcohol, erasers, cellulose, animal fodder, yeast, non-crystallizing honeys, industrial-use saponin, fructose, etc.

But, if this large-scale use of the maguey was unsuccessful in its golden age, the *Porfiriato* (the 30 year regime of Porfirio Díaz) with its great *pulque* haciendas, it is even less likely to happen today, when maguey crops are being replaced by other, supposedly more profitable ones, and *pulque* is being supplanted by other alcoholic drinks.

The maguey has been forgotten; the appreciation and even veneration for the plant that led the pre-Hispanic peoples to mention it in at least 18 codices before and after the conquest has been lost. Some of the codices of Aztec origin show a woman with many breasts, a symbol of fertility, seated on a maguey plant: she is Mayahuel, goddess linked to the *metl*, the word for the plant in Nahuatl.

The term *metl* is combined with others to name different parts of the maguey, objects related to it and its different species (like *teometl*, *tlacametl*, *mexcalmetl*), as well as places, like the town of Metepec, whose name comes from *metl* and *tepetl* or "hill," and means "the hill of the magueys."

The names and products of the "tree of life" are now unknown in Mexico's cities; they are part of the ramblings of old men, more and more frequently heard only in the countryside. There is one exception, however: in some places, like the plains of the state of Hidalgo, there is still no better way to start the day than in the company of an aged, resplendent maguey, embracing its *pencas* to extract the sacred juices it holds in its vitals, together with part of the essence and history of the Mexican countryside.

Notes

¹ Friar Diego Durán, *Historia de las Indias de Nueva España e islas de la tierra firme* (Mexico City: Editora Nacional, S.A., 1951), p. 272.

³ Alexander von Humboldt, Ensayo político del reino de la Nueva España (Mexico City: Porrúa, 1984), p. 281.



The food obtained from the maguey is nutritious and appreciated for its exotic flavor.

² José de Acosta, *Historia Natural y Moral de las Indias* (Mexico City: Fondo de Cultura Económica, 1962), p. 182.