

Plant Collecting in Mexico: Blood, Sweat, and Tillandsias®

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INTRODUCTION

Over the past 30 years I have made innumerable trips to Mexico to collect plants and seed, and find new plants. We have been all across the country, top to bottom, Gulf of Mexico to the Pacific Ocean, in all climate zones and elevations. Mexico has a wide range of flora. There are plants we think of as Mexican, such as cacti and agaves, but also common plants we do not think of as Mexican such as poinsettias (*Euphorbia pulcherrima*), zinnias, marigolds (*Tagetes* species), beans (*Phaseolus* species), corn (*Zea* species), many types of orchids, Swiss cheese plant (*Monstera deliciosa*), shrimp plant (*Justicia brandegeana*), and many others. There are also plants in Mexico that should be more common here in the American Southwest, like *Beschorneria yuccoides*, but for unknown reasons are not. Over the years I have been particularly interested in the Mexican orchids, *Tillandsias*, and *Echeverias*.

PLANTS, CLIMATE, AND TOPOGRAPHY

Mexico is a very diverse country in terms of climate. There are high and low elevation deserts, wet tropical areas with year-round rainfall, and many areas with seasonal rainfall, usually in the summer. These areas can be scrub lands, oak forests, high elevation pine forests, or cloud forests. The cloud forests are generally full of epiphytic plants, and often ones you do not think of as epiphytic, like cactus. Central Mexico is famous for its volcanoes with year-round snow caps, where the elevation rises well above the tree line. One good example of what we have collected over the years and why, are the *Echeveria* taxa.

***Echeveria*.** *Echeveria gibbiflora* is probably the largest growing species. In the wild it can have a trunk to 60 cm tall, and in cultivation the rosette of leaves can be to 1 m wide. It has been used as a parent in breeding programs in California, and the pure species is still very ornamental in containers and gardens. It varies greatly in its native environment, and it is still worthwhile to collect different forms to propagate and sell, or use for breeding. Who knows what the first parent plants were, and new forms could be quite useful. *Echeveria rubromarginata*, another plant that has been known from early plant collecting days, is a beautiful species, but for unknown reasons has not been in the trade in California. We collected plants several years ago and reintroduced it. We found some attractive epiphytic echeverias, but that trip we were collecting other plants and will have a look at them during a future trip.

Agaves. Agaves are another plant genus of great interest in the American Southwest and common in Mexico. They grow in deserts of course, but also in dry pine forests, in various mountain ranges, on cliffs, in cloud forests, and even in lowland seasonally dry tropical areas. Some of the high elevation species are surprisingly cold hardy and useful in the colder areas of the American Southwest.

Agave isthmensis is a species that we have collected which is very interesting because of its bluish color and compact size. Mature plants are less than 25 cm wide! The Japanese have taken to this small species, selecting variant forms and ones with variegated leaves.

Tillandsia. Mexico is full of *Tillandsia* species, and again species exist in dry to wet areas. We have collected *T. roseospicata* from desert cliffs; *T. albida* from high dry canyon cliffs, from which it falls to the canyon floor where you gather it while looking out for banditos (bandits); and *T. carlsoniae* from dry mixed pine and deciduous oak forests. These forests are in mountains south of San Cristobol de las Casas, and are a prime example of the problems many Mexican plants face. The area where these plants are native covers only a few tens of square kilometers, but most of it has been cleared in the past few years for corn fields. The trees are used for fuel, the epiphytes are fed to the sheep and goats, and the land yields meager crops of corn for a few years. This is steep, rocky land, which usually erodes badly after the corn quits producing. There are also large, green-leafed, showy tillandsias in the cloud forests, and small, grey-leafed ones on the taller cactus in some of the deserts. Mexico contains hundreds of *Tillandsia* species.

Seed Collecting. We also collect seed in Mexico. Some like *Ficus petiolaris*, we collect from plants in the wild, but others we collect (with permission) from people's yards. There is a rare palm, *Chamaedorea plumosa*, which we can no longer find in the wild because its small native range has been cleared for crops. We find it instead in the yards of people in the near-by town. It is a very attractive palm with fluffy fronds, and we pay the local women to take seed from their plants. My friend does this every 6 months or so, and the locals have come to expect him. Mexico is famous for *Salvia* species, and over the years we have brought back several new species. Salvias have been quite the rage in California, but many species turn out to be too weedy looking, too big, or too brittle.

The Tropics. In tropical moist areas you find *Philodendron*, *Monstera*, *Dracaena*, and *Dieffenbachia* species in various forms. The genera *Cuphea* and *Ipomoea* are widespread, as are some sedums and ferns. There are even tough desert ferns, and others that shrivel up to almost nothing during the dry season. Various genera of tree ferns are common in moist areas, including some very attractive dwarf ones.

This is not to mention the various species of dry season deciduous, but very showy, smaller trees native along the south west coast, the *Pinguicula* species in the dry mountains, and the orchids and cacti everywhere. The orchids and cacti are all protected by the Convention on International Trade in Endangered Species (CITES) and cannot be collected now, but there are still plenty of other undiscovered or forgotten beauties still to be found.

CONCLUSION

You still cannot drink the water, digestion can be a problem, the roads can be a thrill a minute, and Mexico City cab drivers are bandits, but it is still worth having a look around. Some of the best stuff can be found in local retail nurseries, in the weekly markets, or in people's yards. That is where we have found some mighty interesting plants.