Cacti and Other Succulents of Eastern Brazil

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With 3.3 million square miles Brazil is the largest country in South America, comprising nearly half of the continent. It has the fifth largest landmass of all countries. It is the largest country with most of its area lying within the tropics. It has a diverse topography from sea level to mountains approaching 10,000 ft. elevation. And it has a diversity of vegetation types, including Amazon rain forest (largest by area), Atlantic semi-deciduous rain forest, Restinga (coastal sandy grasslands, shrublands, and forests), Pantanal (inland tropical wetlands), Cerrado (dry woody savanna) (second largest by area), Caatinga (thorny scrub), the Pampas (grassland), and tiny bits of true desert. All of this size and diversity make Brazil the most biodiverse country on the planet. It ranks first in the number of species of amphibians, second in mammals, third each in fish, reptiles, and birds, and first in vascular plants with about 34,000 species. The eastern bulge of Brazil is the driest area and the home to the greatest diversity of cacti and other succulents, though succulents can be found throughout much of the country, especially when considering epiphytic types inhabiting the rain forests.

As originator, and for 20 years director, of the Field Trips Program of the Cactus and Succulent Society of America, my problem was never trying to find a place to take CSSA members to view plants in habitat, my problem was trying to decide which of the multitude of places from which to pick would be botanically rewarding and interesting, and also would be safe for travel. Long-time South American cactologist and author Graham Charles was one of the experts I coerced to guide our 2004 trip to Chile. During that trip he lobbied tirelessly for Brazil as a future destination; specifically eastern Brazil. So in 2008 that became our destination, once again with Graham as a guide, along with the young Brazilian botanist Marlon Machado. This talk will be a sampling of the richness of cacti and other succulents encountered during the trip.

The succulent-rich region of eastern Brazil is huge – much larger than the American Southwest and nearly two-thirds the size of the entire country of Mexico. Obviously, we had to pick and choose our spots. The trip focused on just two adjoining Brazilian states: Bahia and Minas Gerais. We flew into Salvador, the capital of Bahia, and then spent nearly three weeks doing a long, complex loop trip, west from Salvador, then south into the state of Minas Gerais, then back west, and north again to Salvador. The trip took much of the month of June; it was scheduled for the dry season, though rain was not uncommon throughout the trip. Although there were a few days we stayed two nights in the same location, with a local day trip in between, most of the time we changed locations every night, so unpacking suitcases in the evening was neither practical nor logical. Each day in the field we made a number of botanical stops, ranging from 2-3 up to 6-8, depending on the richness of our stops and the distances between. Most of the itinerary, including specific plant stops, was pre-planned by Marlon and Graham, but deviation was not uncommon, and we tried to budget enough time each day to make unscheduled stops when we encountered promising locales. In total, we made 57 plant stops in 20 days.

After a brief introduction to the country and the trip, the program will be presented in a site-by-site manner, looking at the succulent plant diversity of about 20 of our 57 stops. These 20 stops are spread throughout the trip and have been picked to represent three major vegetation types. Time permitting, participants will see examples of 67 species of cacti in 23 genera (notably *Melocactus*, *Uebelmannia*, *Discocactus*, *Pilosocereus*, *Micranthocereus*, *Tacinga*, and *Arrojadoa*) and approximately 30 species of other succulents in nine plant families, including Bromeliaceae (*Encholirium*, *Neoglaziovia*, *Tillandsia*, *Orthophytum, Aechmea*, and *Bromelia*), Burseraceae (*Commiphora*), Euphorbiaceae (*Euphorbia*, *Jatropha*), Fabaceae (*Erythrina*), Malvaceae (*Ceiba*, *Cavanillesia*, *Pseudobombax*), Moraceae (*Ficus*), Orchidaceae (*Cyrtopodium*, *Laelia*), Portulacaceae (*Portulaca*), and Velloziaceae (*Vellozia*).

Those participants who have been long-time CSSA members can preview the trip by looking at the May-June 2009 issue (No. 3) of the *Cactus and Succulent Journal*. The entire Special Issue is devoted to a summary of the trip, and goes into greater detail than will be possible during the presentation.