Once again the CSSA Field Trip Committee has engaged Mexico Nature Tours to organize and lead a pre-convention botanical eco-tour to southern Mexico, notably the states of Oaxaca and Puebla; a region of unparalleled scenic beauty and diversity of cactus and succulents (Fig. 1). Featuring high deserts, island-mountains, isolated specialized habitats and a wealth of spectacular xerophytes, this tour will be sure to please and fulfill everyone’s botanical fantasies!

The marquee specialties we hope to see are detailed below. Along the route we will encounter such sought-after groups as: mammillarias, agaves, echeverias, columnar cactus, beaucarneas, dasylirions, cycads, tillandsias, hechtias, palms, fouquierias, yuccas, and burseras—among many others. Moreover, a number of roadside annuals, trees and shrubs will be in bloom and commonly seen.

Trip details

- This is a pre-convention trip: priority registration will be given to convention attendees.
- All participants must be CSSA members or associate members with dues paid through 2019. You must have a passport valid through the end of 2019 and necessary visa if required by citizenship.
- Approximate dates are July 5–16, 2019 (12 days total; 10 full days in the field). Our return to the U.S. will be on Tuesday, July 16, one day before the start of the convention on July 17.
- CSSA Field Trips are not collecting trips. All U.S. and Mexican laws and regulations must be observed.
- Registration is limited to 18 participants (not including guides, drivers, or support staff) and will be on a first-come, first-served basis.
- Travel will be in a comfortable air-conditioned minibus and each participant can have a window seat if desired.
- Price: $4484 per person double occupancy; single occupancy supplement add $574 (single

1. High desert panorama in the Cañada de Cuicatlán.
occupancy may be limited to a first-come first-served basis depending on demand).

- **Price will cover:** All lodging. All meals and beverages including welcome and farewell banquet. Many lunches will be in the field; these will consist of substantial but not elaborate field food. Gratuities for restaurant staff and local guides. Ground transportation, tolls, fuel, and airport transfers. All entry fees. A $200 donation/person to the CSSA.

- **Price will not include:** Air travel to and from Oaxaca. Alcoholic beverages. Gratuities for botanical guides or drivers. Personal items. Trip insurance (recommended).

Arrival and departure will be through Oaxaca City, Oaxaca, Mexico. We will explore cactus and succulent habitats in the Mexican states of Oaxaca and Puebla. Tour operator and one of our botanical guides will be Jeff Chemnick, owner of Mexico Nature Tours and leader of previous CSSA tours to Mexico in 2010, 2015, and 2017. Jeff has been leading highly acclaimed botanical tours in Mexico for 30 years, and images from previous trips can be found online at www.mexiconaturetours.com. In addition Greg Starr, owner and operator of Starr Nursery and author of *Agaves* will be our other botanical guide. Greg has assisted Mexico Nature Tours several times previously and is not only one of the premier field botanists in Mexico but is always popular with tour participants.

Note that aspects of this trip will be relatively rigorous and challenging at times. We will be travelling in a region of varied terrain and elevations. Although many of the plants will be within a short, easy hike from the vehicle, many choice species will be on steep rocky slopes. Be aware of your own abilities to negotiate such conditions. Good balance and physical conditioning will be important.

**ITINERARY**

The itinerary will be subject to change both prior to departure and during the trip, depending on unforeseen circumstances. Note that there will be multiple plant stops in the field each day depending on travel distances, floristic richness, weather, and other factors. Plants listed in the following itinerary are a few of the many likely possibilities and though they cannot be guaranteed, they do serve as examples of the taxa likely to be seen during the trip. It is expected that we will see in excess of 120 taxa of cacti and other succulents. A detailed itinerary and plant list will be distributed prior to the start of the trip.

2. Meals in Oaxaca are famously delicious and always put a smile on everyone’s face.

**DAY 1.** (Friday, July 5, 2019). Arrive in Oaxaca, Oaxaca. Welcome Banquet at 7:30 PM (Fig 2). Night in Oaxaca.


3. A remarkable hike takes us to a locality of *Echeveria laui*, shown here in bloom.
**Day 3.** Cuicatlán to Teotitlán. In the heart of the Cañada. From the Río Grande of the Cañada to the Río Salado in Puebla state. Stops at various elevations to see *Mammillaria flavicentra*, *M. crucigera*, *M. huitzilopochtli*, *M. mystax*, *Echeveria laui* (Fig. 3), *E. nodulosa*, *Dioon californiense*, *Dasyllirion acrotrichum*, *Agave seemanniana*, *Agave “FO-76”*, *Sedum versadense* subsp. *villadioides*, *Cephalocereus columnar-trajani*, *Pachycereus grandis*, *Echeveria multicaulis*, *E. pulvinata*, *Fouquieria purpusii*, *Pedilanthus tehuacanus*, *Parkinsonia praecox*, *Fouquieria formosa*. Night in Teotitlán Flores Magón, Oaxaca.

**Day 4.** Teotitlán to Tehuacán. Low desert to high desert including "Derek’s Hill on the border with Veracruz state. Various stops for *Agave salmiana*, *Sedum stabilis*, *Echeveria coccinea*, *Ferocactus haematacanthus*, *Coryphantha retusa*, *Mammillaria mystax*, *M. napina* (note: some of the species from the preceding day may be visited today instead depending on the timing). Night in Tehuacán, Puebla.

**Day 5.** Tehuacán to Santiago Chazumba. Travel through the Puebla half of the Cañada Biosphere Reserve (it’s a huge reserve) to see: *Agave stricta*, *A. macroacantha*, *A. peacockii*, *A. titanota*, *A. kerchoveei*, *A. marmorata*, *A. triangularis*, *Bursaria submoniliformis*, *B. aptera*, *B. arida*, *B. schlechtendalii*, *Ipomoea pauciflora*, *Opuntia olmeca*, *Sedum compactum*, *Villadia imbri- catum*, *Bursera cinerea*, *Echeveria purpureum*, *Dioon capitatum*, *Mammillaria mystax*, *M. polyedra*, *Hylocereus undulatus*, *Polaskia

**Day 6.** The Mixteca Region of Western Oaxaca. A day of different habitats; desert to elfin forest. Stops along the way to see *Furcraea mcdougalii*, *Sedum allantoides*, *S. hensleyanum*, *S. compactum*, *Agave consuallis*, *Ficus petiolaris*, *Agave petrophila*, *Pinguicula moranensis*, *Mammillaria albilanata*, *M. solisioi- des*, *Coryphantha retusa*, *Pittocaulon* (*Senecio*) *praecox*, *Neobuxbaumia macrocephala*, *Pachycereus marginatus*, *Dioon planifolium*, *Opuntia olmeca*, *Echeveria gigantea*, *Beaucarnea gracilis* in Puebla.

**Day 7.** The Mixteca Region of Western Oaxaca. A day of different habitats; desert to elfin forest. Stops along the way to see *Furcraea mcdougalii*, *Sedum allantoides*, *S. hensleyanum*, *S. compactum*, *Agave consuallis*, *Ficus petiolaris*, *Agave petrophila*, *Pinguicula moranensis*, *Mammillaria albilanata*, *M. solisioi- des*, *Coryphantha retusa*, *Pittocaulon* (*Senecio*) *praecox*, *Neobuxbaumia macrocephala*, *Pachycereus marginatus*, *Dioon planifolium*, *Opuntia olmeca*, *Echeveria gigantea*.
DAY 7. Back to the valley of Oaxaca and into the Sierra Norte to see *Agave karwinskii*, *A. atrovirens*, *Furcraea bedinghausii*, *Mammillaria rekoi*, *M. karwinskiana* (Fig. 5), *M. deherdtiana var. dodsonii* (Fig. 6), *Sedum oaxacana*, *S. frutescens*, *Echeveria montana*, *E. gibbiflora*, *E. juarezensis*, *Opuntia pubescens*, *O. parvidens*.

Night in Mitla (ruins are optional).

DAY 8. Driving down to the Isthmus. We will visit the Albaradas canyon north of Mitla then work our way down to sea level in the Isthmus. Along the way we'll look for: *Cephalocereus totolapensis*, *Dioon sp. nov.* Oaxaca, *Nopalea auberi*, *Hechtia conzattiana*, *Tillandsia xerographica*, *Echeveria moranii*, *Combretum fruticosum* and a host of other forms of species we've already encountered elsewhere. Night in Tehuantepec.

DAY 9. The Dry forest coast to the Macdougal Limestone Reserve. We'll start the day driving to the Pacific Coast and then to an amazing but small reserve of limestone outcropping loaded with endemics. Plants we'll be looking for include: *Cochlospermum vitifolium*, *Acanthocereus horridus*, *Melocactus sp.*, *Sabal mexicana*, *Agave isthmensis*, *Agave sp. nov.*, *Hechtia huameltzanaensis*, *Nyctocereus oaxacensis*, *Enterolobium cyclocarpum*, *Selenicereus testudo*, *S. coniflorus*, *Epiphyllum phyllanthus*, *Hylocereus*, *undatus*, *Mammillaria voheurnensis* subsp. collinsi, *Pilosocereus collinsi*, *Cephalocereus nizandensis*, *Agave nizandensis*, *Tillandsia nizandensis*, *Beaucarnea sanctomariana*, *Cephalocereus pecten-aboriginum*, *Opuntia puberula*, *Agave ghiesbrechtii*, *Jatropha oaxacana*, *Bombax ellipticum*, *Erythrina lanata*, *Cyrtopodium punctatum*. Night in Tehuantepec.


DAY 11. Drive back to Oaxaca via the Pan America Isthmus Highway with several stops en route. An earlier than usual arrival back will enable participants to prepare for departure the following day and perhaps get in a bit of souvenir shopping, mezcal tasting, and sight-seeing in the old colonial center of the city. Night in Oaxaca.

DAY 12. Transfer to the airport and adios! Back to California and the CSSA Conference in San Luis Obispo … see cssaconvention.com for more details.

7. *Hechtia lanata*, a range restricted favorite on Cerro de las Flores in the Isthmus of Tehuantepec.

**Reservations are now being accepted.**

Registration for this tour will be handled directly by Jeff Chemnick of Mexico Nature Tours LLC. The deadline is March 1, 2019. To make your reservation, please send a deposit of $500 per participant, with full contact information (address, phone number, email address) to:

CSSA Mexico Field Trip 2019
c/o Jeff Chemnick
114 Conejo Road,
Santa Barbara, CA 93103

Make checks payable to Mexico Nature Tours LLC. Contact Jeff directly for electronic bank transfer details. For further information on the logistical and/or botanical aspects of this trip, contact Jeff Chemnick at the address above, call (805) 705-3397 or email jeffchemnick@cox.net