A New Sky Island Persimmon

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In April 2014, 55 botanists, entomologists, herpetologists, and ornithologists, as well as agency biologists, photographers, journalists, and college students from the United States and Mexico went on a biological Expedition sponsored by GreaterGood.org and Sky Island Alliance to the Sierra Huérfana (also called the Sierra de Mazatán). Over a thousand records of plants and animals were made to help establish the mountain as a federally-protected natural area in the Comisión Nacional de Áreas Naturales Protegidas (the Mexican Park Service) system.



Sierra Huérfana and Cañada el Yuguito. Photos by Van Devender and Charles Hedgcock.

A smaller group returned to the area in July to see the plants and animals during the monsoon rainy season. Ana Lilia Reina-G., Sky Jacobs, and Robert Villa found a shrub with hairy leaves and small flowers in Cañada el Yuguito. Specimens were sent to Dr. Bruno Wallnöfer, a botanist at the Naturhistorisches Museum Wien in Vienna, Austria, who is working on a monograph on the *Diospyros* of the world. This genus of over 700 species are mostly native to the tropics of the world, where they are called persimmon or ebony. The scientific name is derived from Greek words that mean 'divine fruit'. In the fall of 2015, he described it as a new species *Diospyros reinae* in the German botanical journal Stapfia -- named for Ana Lilia! I suggest the common name 'Mazatán persimmon' (*guayparín de Mazatán*) for the new species. It is only known in these canyons. The nearest species of persimmon is the *guayparín (D. sonorae*), a tall tree in tropical deciduous forest near Álamos in southern Sonora (160 mi southeast).



Diospyros reinae. Photos by Sky Jacobs.

The Sierra Huérfana is the southwestern most Sky Island in Sonora, and is 80 km west of Hermosillo, a city of about a million inhabitants. It is called the Sierra Mazatán by the residents of the town of Mazatán (from a Nahuatl Indian word meaning "place of deer" – the same as Mazatlán, Sinaloa). But people in Pueblo de Álamos on the other side of the mountain called it the Sierra Huérfana -- Orphan Mountain in English, a good name for an isolated Sky Island!



Dioon sonorense, Ana Lilia Reina-G., and *Perityle reinana*. Photos by Ana Lilia Reina-G. and Van Devender.

It is surrounded by tropical foothills thornscrub east of the Sonoran Desert, with oak woodland in a whitish granite boulder landscape on top. Jesús Sánchez, Curator of the Universidad de Sonora Herbarium, has been studying the plants of the Sierra Huérfana for many years. Howard S. Gentry was a pioneering botanist who worked in the Río Mayo Region of tropical southern Sonora in the 1930s. He collected a cycad in the Sierra Huérfana in 1957, which later was described as *Dioon sonorense*. It only occurs in Sonora and northern Sinaloa , and the Sierra Huérfana *palma de la vírgen* or *peine* (the serrated leaf edge looks like a comb) are the northernmost cycads in the world. During the Triassic and Jurassic geologic periods 200

to 145 million years ago, cycads were dominants with conifers and ginkgoes in dinosaur forests all over the Earth, including Alaska and Antarctica, but they are reduced to a few species today.

Ana Lilia has been studying the plants of Sonora for 25 years. Four other plants have been named in her honor (*Dalea analiliana, Erigeron reinana, Perityle reinana, and Stevia reinana*). The Mazatán rock daisy (*P. reinana*) is also only known from the Sierra Huérfana.