## FEROCACTUS JOHNSTONIANUS

## by Sue Haffner

This species is probably the least-seen ferocactus in general plant collections. The reason may be due to its isolated and restricted habitat, Isla Angel de la Guarda (Guardian Angel Island) in the Gulf of California. It's the largest island in the Gulf—the body of water between the Baja California peninsula and the west coast of Mexico—also called the Sea of Cortez. Together with the other so-called Midriff Islands, it comprises the Islas del Golfo Biosphere Reserve, designated by UNESCO as a World Heritage Site.

Isla Angel de la Guarda is uninhabited, with no fresh water, and *Ferocactus johnstonianus* is one of a number of endemic plants that grow there. Given the island's remoteness and the difficulty of access, its botany hasn't been thoroughly explored. Even today, the only access is by small boat from Bahia de los Angeles and a permit is required for landing, because it is part of the biosphere reserve.

Britton and Rose named the species in honor of Ivan Murray Johnston, a botanist who collected plants on the island in 1921. They considered *F. johnstonianus* to be closely related to *F. diguetti*, while other authors consider it to be just an island variety of *F. cylindraceus*. Most knowledgeable cactophiles, however, accept it as a distinct species. John Pilbeam, in his book on the genus, agrees with the designation.

The picture below is from Larry Homan's collection.



The pictures of *F. johnstonianus* in the Pilbeam book are of plants belonging to Mark Muradian. Years ago, when Mark was collecting ferocacti, he spotted two unnamed goldenspined feros in a nursery in southern

California. Knowing the genus quite well, he immediately figured they had to be *johnstonianus*. He has conducted controlled pollination between his two plants and given seeds to me for the CSSA Seed Depot. I, in turn, have sent them to people all over the world. It is still considered a rare plant.

In the December 2009 issue of *Cactus world*, the journal of the British Cactus & Succulent Society, Ian Woolnough writes about a March 2008 expedition he and several others made to Isla Angel de la Guarda in search of Ferocactus johnstonianus. They approached the island from the east: "As documented reports suggest that the ferocacti on the island grow either in the mountains or in a wash behind a lagoon, on approaching a large flat, boulder-strewn, raised beach, I was therefore somewhat surprised to see some large golden barrels dotted in amongst the boulders behind the ridge amongst sparsely scattered plants of Pachycereus pringlei. We were duly put ashore, and with great expectation I headed back towards the barrels that I had spotted from the boat to see if these were indeed the elusive *Ferocactus johnstonianus*. I was not disappointed as I was greeted by, first, a two-foot tall golden-spined plant, and then many more up to four feet in height, scattered fairly evenly across the boulder-strewn area and extending almost to the sea, although not on the true beach itself of course. These could only be Ferocactus johnstonianus and they were very numerous."

The author noted that some of the smaller plants had very yellow spines while others had spines that were more reddish-brown. This seems to be a characteristic of the species. When you grow them from seed, *F. johnstonianus* seedlings exhibit both colors. A Seed Depot customer in Japan was very disturbed by this, thinking the seeds he'd received were hybrids. I replaced his order, but assured him that the seeds were true. I checked with Mark and Larry Homan, and both reported similar results with seeds of this species. Now we know that plants in habitat show the same variation. The mature specimens have bright golden-yellow spines.

*Ferocactus johnstonianus* is usually solitary, occasionally offsetting, spherical to cylindrical, up to 100cm in height; 30-35 cm. in diameter. The numerous spines are golden-yellow, reddish on the new growth, turning brownish with age. Flowers are yellow-red. Growth is slow, and they require little care once they've reached flowering size.