
A giant in the genus: *Discocactus diersianus* from Goiás, Central Brazil

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A giant in the genus: *Discocactus diersianus* from Goiás, Central Brazil

Pierre J Braun & Eddie Esteves Pereira

The largest discocactus in Brazil is introduced. Alarming it is now believed to be in serious danger of losing its habitat, along with other discocacti that may well have already been completely destroyed by the same process of inexorable economic expansion.

Photography by the authors.

D*iscocactus diersianus* is one of the most outstanding species in the genus. It is characterized by large, flattened, globular plants with strong ferocious spination. With its well defined morphology, the plant differs significantly from *Discocactus heptacanthus* (Rodrigues Barbosa) Britton & Rose.

As we have stressed many times in the past 25 years, it was an error to synonymize this species with the latter

as in several papers by Taylor, the current second edition of the *CITES Cactaceae checklist* (1999) and Anderson's *Cactus family* (2001), including the revised German version edited by Eggli, *Das Große Kakteen-Lexikon* (2005). Apart from the bigger stems and the characteristic spination, *Discocactus diersianus* can also be distinguished by its very slender, acute, light yellowish flower buds, very slim linear perianth leaves and its white, long and slender fruits. Fortunately, in the



Fig. 1 Eddie Esteves Pereira with a huge specimen of *Discocactus diersianus*, in spring 2006



Fig. 2 Adult plants of *Discocactus diersianus* with impressive strong and blackish spination

most recent handbook, *The new Cactus Lexicon* (2006: 75), *Discocactus diersianus* was restored to the rank of a distinct species. It has a distinct relationship with the small-sized *Discocactus lindanus* Diers & Esteves (1981) and *Discocactus cephaliacicululosus* Braun & Esteves (1995), with its unique cephalium spination, but the authors disagree completely with the proposal to synonymize these two characteristic species from northern Goiás with *Discocactus diersianus* as has been proposed in *The new Cactus Lexicon*.

It seems probable that *Discocactus diersianus* was discovered about half a century ago. A few plants of uncertain origin arrived in Rio de Janeiro in the 1950s and were sent by Voll from the Rio Botanical Garden to Curt Backeberg in Hamburg, Germany. He described them as a new species, *Discocactus paranaensis* Backeberg (1960: 2628-2629), illustrated with a photo of a group of three plants in cultivation in his handbook *Die Cactaceae* (1960: fig. 2506).

The Latin description together with the single illustration are sufficient for valid publication under the present ICBN, although for many years the pundits have been dismissing most of Backeberg's names as invalid. So if you believe them to represent the same species,

then *Discocactus paranaensis* Backeberg would have to be adopted as its correct name.

The plants illustrated by Backeberg definitely did not come from the state of Paraná (where the genus does not occur), but the place name could have been confused with the Serra Geral do Paraná, north of the distribution area of *Discocactus diersianus*. This is south of the Rio Paranaíba valley and we do know that the collector of Backeberg's plants had crossed this river. But all this is speculation...

In the early 1970s, Eddie Esteves found several new discos in the southern part of his homeland, Goiás, including Esteves collection numbers 10, 10a, 29 (the most similar to Backeberg's *D. paranaensis*), 72, 74, 87 and others. Two of them were formally described: first *Discocactus diersianus* (Esteves 87) in 1979, and one year later *Discocactus goianus* (Esteves 10) which turned out to be no more than a subspecies.

Since the discovery of *D. diersianus*, the species remains a rare plant, not only in cultivation but also in the wild. Fortunately the holotype locality is situated in a National Park, but the population is small and very restricted to some places near an old volcano. Farmers do not appreciate these spiny balls, because cattle



Fig. 3 *Discocactus diersianus* Braun 306



Fig. 4 *Discocactus heptacanthus*

injure their feet on them. Ever since those early days, Eddie has observed that the farmers clear out the cacti from time to time. Other populations that are not protected by the park fences (eg ssp. *goianus*) were dramatically over-collected in the early 1980s for commercial reasons (Braun & Esteves 2002).

Now in spring 2006, we have found a new, virgin habitat of *Discocactus diersianus*. Not far from an old farm in the same National Park are some outcrops of granite bearing this discocactus in great abundance, together with velozias and *Dyckia* species Esteves 355. This habitat is completely undisturbed by man, and there are hundreds of plants from seedlings to old, mature plants. Diameters of 30-40cm are quite common. The biggest plant we know is a real giant of approximately 50cm. As we have seen all known *Discocactus* species in hundreds of populations across Brazil, Bolivia and Paraguay, we are convinced that *D. diersianus* produces the biggest plants of the genus.

Although we are glad to have discovered this wonderful new habitat, unfortunately we also have to report that there are still some very dark clouds on the horizon. The small, unmade, dirt road near the habitat has assumed some infrastructural importance, and may be upgraded very soon. Due to a lack of rock material, we are very afraid that the few available granite outcrops, which are home to this discocactus, will be cleared and used for the resurfacing in the not too distant future.

More and more of the campo cerrado (lightly wooded grassland) is being destroyed systematically, in the past mainly by fires, today by tractors to prepare pastures and the production of soya bean, eucalyptus, sugar cane and renewable biodiesel. In many municipalities of Goiás, less than 10% (and even down to zero) of the native cerrado remains. With the disappearance of the cerrado, *Discocactus* will also vanish forever. Since about 1984, we have been unable to find *D. subterraneo-proliferans* Diers & Esteves again. In 1998 we probably saw the last few plants of *D. prominentigibbus* Diers & Esteves, and also since the same year we have not found a single specimen of *D. squamibaccatus* Buining &



Fig. 5 Comparison of the flowers of *Discocactus diersianus* (left) with *Discocactus heptacanthus* (right)

Brederoo at the type locality or from the surrounding areas. Our prediction is that in Goiás, *Discocactus estevesii* L. Diers and *D. diersianus* will be the next species of this unique genus to become extinct.

LITERATURE CITED:

- Backeberg, C (1960) *Die Cactaceae* 4. FischerVerlag, Jena.
 Braun, P & Esteves Pereira, E (1993-1995) Aggregationen in *Discocactus*. *Kakt. and. Sukk.* 44(3): 62-65, (5): 103-105, (6): 112-117, 46 (3): 64.
 Braun, P & Esteves Pereira, E (1995) Validierung von *Discocactus cephaliaciculosus* und der Unterart *Discocactus cephaliaciculosus* ssp. *nudicephalus*. *Kakt. and. Sukk.* 46(3): 63.
 Braun, P & Esteves Pereira, E (2002) Cacti of Brazil with remarks on other succulents and xeromorphic bromeliads. *Schumannia* 3: 1-235.
 Diers, L & Esteves Pereira, E (1980) *Discocactus goianus* Diers & Esteves spec. nov. *Kakt. and. Sukk.* 31(3): 73-79.
 Diers, L & Esteves Pereira, E (1981) *Discocactus lindaiianus* Esteves spec. nov. *Cact. Succ. J. (US)* 53(2): 56-60.
 Esteves Pereira, E (1979) *Discocactus diersianus* Esteves spec. nov. *Cact. Succ. J. (US)* 51(4): 170-183.

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