

SULCOREBUTIA LUTEIFLORA AGAIN

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Recently a friend drew my attention to the new issue of the online journal "The Cactus Explorer." There was an article on *Sulcorebutia* that would interest me. Indeed! In the article, the authors tried to show that *Sulcorebutia luteiflora* De Vries was so related to *S. cantargalloensis* Gertel, Jucker & De Vries that they had no other choice than to combine it to the rank of variety of *S. cantargalloensis*. The new name would be *S. cantargalloensis* var. *torrepampensis*. As a start, we can conclude that authors approve the special status of *S. luteiflora*. The question remains: how can we say that a "closer" relationship between the two species causes that the only status of variety is justifiable. The authors themselves say that both species are each of them at one end of a conglomerate of plants. In this area between the two sites, there are populations of slightly different plants having more or less some characteristics of the two species. Is this sufficient evidence?

Before making a decision, it would be wise to take a look at the overall geographic distribution and variability of *Sulcorebutia*. What we see as enthusiasts, are the apparent characteristics: spines, flowers, plant body, colors, seeds, etc. All these features appear in varying combinations throughout the *Sulcorebutia* range. In my view, this is not where we will find coherent main lines. In other words, at the moment I cannot establish lines of development on the basis of physical characteristics. It goes in all directions. Considering that there must have been an original spot from which started the development and the dispersal, and it might have been

all kinds of external influences, one might conclude that the most distant populations could sometimes be more related than closer ones having experienced more external influences. Just growing in the vicinity of each other (principle of geographical areas) is insufficient to demonstrate (more) relationship. The real relationship is demonstrated by genetic research (criteria??); regarding the cactus, this technique is still in its infancy. What can we do then with *Sulcorebutia*: describe clearly identifiable populations. The description as a species even promotes the recognition of diversity.

The conventions cited by the authors of this article are they sufficient evidence? No, "living" in the vicinity of each other is insufficient evidence. Is finding intermediates sufficient evidence? No! At most this means that genetic material might have been exchanged. *S. luteiflora* seems sometimes much more related to *S. crispata* (a common species not so far). Apparently, the color of the flower is the only distinguishing factor between these two taxa. This factor is not a problem to consider *S. hertusii* and *S. patriciae* as varieties of *S. tarabucoensis*. According to the "principle of geographical areas", I can imagine that if *S. luteiflora* would have been found in the distant Ayopaya region, the authors would probably have tried to transfer this taxon in *S. muschii* for example. If its origin was near Pasorapa, it would have been a variety of *S. cardenasiana*.

The great interest of the article is, in my opinion, the description of the area and the accompanying photos. This question of relationship is doubtful. Doubtful also,

any attempt to identify the varieties of the genus *Sulcorebutia* based on some kind of neighborly relations. Enthousiasts do not have the necessary skills. The picture as a whole is then neglected. Based on the arguments used by the authors, it is not difficult to consider all *Sulcorebutias* as a single species. I often wonder what is the real background of these taxonomic exercises with unproven assumptions coming true. Self-reflection and ethics can help moving in the right direction.

So you will not be surprised that I consider the name *Sulcorebutia cantargalloensis* Gertel, Jucker & de Vries var. *torrepampensis* Gertel & Jucker as an obsolete synonym for *Sulcorebutia luteiflora* de Vries.

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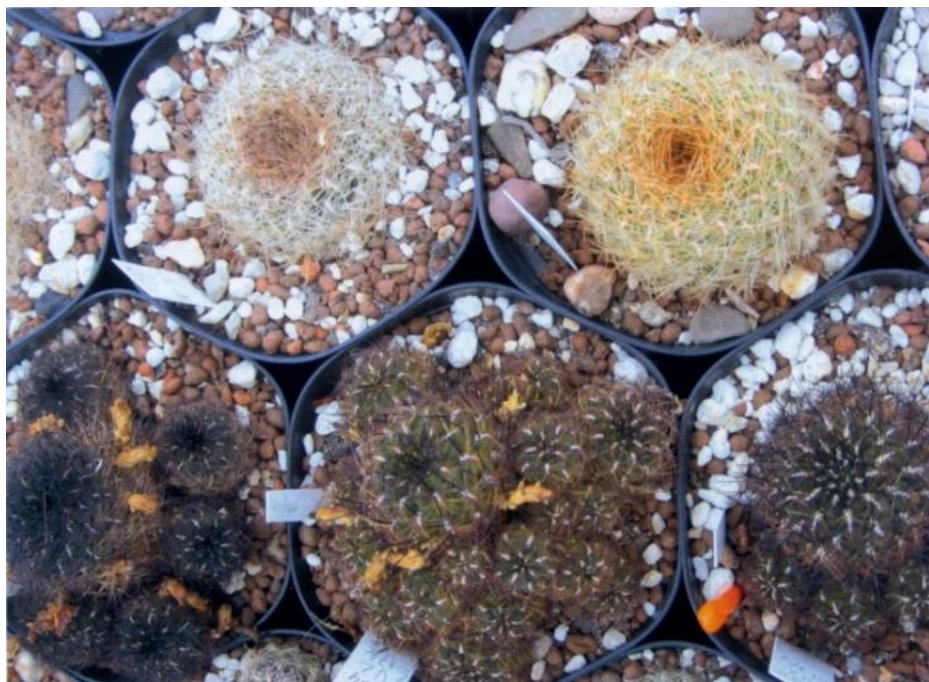
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Sulcorebutia luteiflora (above 2x) and *Sulcorebutia cantargalloensis* (below 3x). Cultivation Johan de Vries
(Foto Johan de Vries)

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