

# SOUTH AMERICAN CACTUS LOG

## PART XVI

ALFRED B. LAU

Cochabamba at last! I had heard so much about that city in the heart of Bolivia. Because of the very difficult road, rail and plane connections, almost every large town in Bolivia is like an enclave or a town-state within a republic. Many people have never left such cities and have no idea about life in the capital city of La Paz. Here in the town of Cochabamba, as in other towns in the center of Bolivia, the population is mostly mixed with Quechua. Many European immigrants are seen and the German element is especially evident. In spite of the abject poverty in the countryside, it seems that foreigners, especially the Europeans, have not fared badly.

In the shops one finds many more imported goods than anywhere else because Bolivia has very little industry of its own. For me it meant that I could buy luxuries that I could not have found elsewhere in South America - such things as Swiss chocolate, Peruvian D'Onofrio ice cream cones and Norwegian sea food cans.

At first I lodged with the New Tribes Mission. A very lively spiritual atmosphere dominated the area - not the clannish or legalistic attitude that so often dominates fundamental Christianity. Those missionaries sometimes live in the depths of the jungle for years and dedicate their lives to tribes that may number only a hundred people. Learning the language and committing their own lives totally to the people's spiritual as well as physical needs, they have seen far too much of the reality of life, cut off from society as we know it, to be critical or harshly doctrinaire.

In that family atmosphere I met a young German doctor from West Berlin - a contact that would prove to be a vital link in saving our precious cactus plants from falling into the wrong hands later on. Dr. Hans Steudemann, a young and enthusiastic medical doctor, single, had a vision of establishing a hospital in the Beni district of Bolivia - a vast expanse of almost impenetrable jungle surrounding the tributaries of the upper Amazon. He had many influential friends in the country. His search for the truth led him to the New Tribes mission where, as I guest, he listened to the messages, saw the films of the tremendously different life of the Indians in the savage jungle, and was accepted although he was not a professional Christian. The missionaries tried to win him and had been quite successful. Such a man could have been a great asset to the life in Bolivia.

Then there was the German family of Ruehrig (who really had lived in the Saxony of Siebenbuerger, a German settlement in Rumania). They were pioneers and wrested a plot of land from the wilds near Arce to cultivate lucerne (alfalfa). Both in their home in Cochabamba and at their ranch, where I stored the plants meanwhile, we had the kind

of conversations and friendship that will never be forgotten. Pioneer life is always unique and nostalgic. Their little son, Heijo, was a bundle of energy that is hard to describe. I wonder whatever became of him. I could imagine him as a drag racer or a circus acrobat. But I cannot linger here as we have to return to our subject of cactus.

There were two people in Cochabamba I wanted to know, Mrs Wilke and Dr. Cardenas. Others whom I, came to know later, Mr. Vasquez and Dr. Puna. lacked the fame during those days that later came to them. Being proteges of Prof. Dr. Cardenas, who guarded his reputation of being "the botanist of Bolivia", they were the apple of his eye.

My visit to Mrs. Wilke and the succeeding visits were always a great event. I could not forget her charming husband who shared her warm welcome, but I am speaking of her because of the connection with cactus. For instance, *Pseudolobivia wilkeae* was named after her. The Wilke home had a special ambience and that was the typical German "Gemuetlichkeit". One felt at home there. She taught me a lot, especially concerning the harvesting of seeds. With parodias the problem is that seeds fall through the opening in the base of the fruit and could easily be lost unless one uses the tube method by which the seeds could be sucked into a filter container. Otherwise a plant could be severely harmed by cutting into the apex of the stem. Mrs. Wilke, who was quite advanced in age, never gave me the impression that I imposed on her time; on the contrary, she was always very eager to meet me and to converse about our subject of desert plants.

How very different was my encounter with the illustrious Prof. Dr. Cardenas. I had absolutely no prejudices nor did I know anything about him personally. I had not heard anything good or bad in connection with him. All I knew were his publications which naturally attracted me. When I phoned him and explained that I had plants for his botanical garden as I had promised to the officials at the Agricultural Department in La Paz, he quite gruffly ordered me to see him the next day at 5:pm in his home. I tried to dismiss my first impression, hoping that the phone was in bad order, or maybe the man was ill that day - not feeling too well.

Had I known what was in the making, I would never have contacted Dr. Cardenas. Others avoided him whenever they could but I did not know that then. He had a very nationalistic view of Bolivian cactus and thought only a Bolivian national had the right to discover and publish a new species.

Exactly at the agreed time, I arrived at the home of Dr. Cardenas, bringing with me Shawintu and Rafael so that these jungle Indians could be in the

presence of an illustrious and famous botanist. Almost simultaneously the bell rang and a young student of Botany from France entered the study. Was he invited purposely for the same hour? Dr. Cardenas pointedly ignored me and focused his whole attention on the French student. The conversation was absolutely boring and lacked any substance - partly because the student spoke but little Spanish. He wanted to know the practical use of Bolivian cactus plants. The hour was occupied almost entirely with a long and detailed account of the virtues of neocardenasia. It had been used by the native people to construct their sturdy huts. There was a strong and pointed emphasis that this important plant bore his name.

We sat in the background and tried to listen. Finally, he demanded our plants. I ventured to ask whether I could see his famous botanical garden of which the government officials in La Paz spoke so highly. This request was denied. I never bothered to investigate whether such a garden really existed - all I wanted was to leave Cochabamba as quickly as possible before something could be invented to bar me from my expeditions.

Dr. Cardenas showed much irritation on seeing the collection number of *Lobivia hermanniana*, Lau 1002, which he said would be impossible as I was only an amateur in cactology. I do not know whether all visitors were treated in this same fashion of discourtesy or whether this wrath was reserved only for rivals in his field - and that was something he could not tolerate. The example of the French student proved that he could be charming to those that did not place his prestige in question.

As Dr. Cardenas is no longer among us I would rather refrain from criticizing him. I never bore him ill will and even after that encounter I always spoke highly of him to others, trusting that his attitude might change. It is only for the record and for the final dramatic episode in Bolivia, a land of political changes in less than a year's time, that I must tell the story in detail.

Mount Tunari (5,200 m) looms to the north of Cochabamba. We are on our way to Independencia. As we pass close to the high cordillera we leave

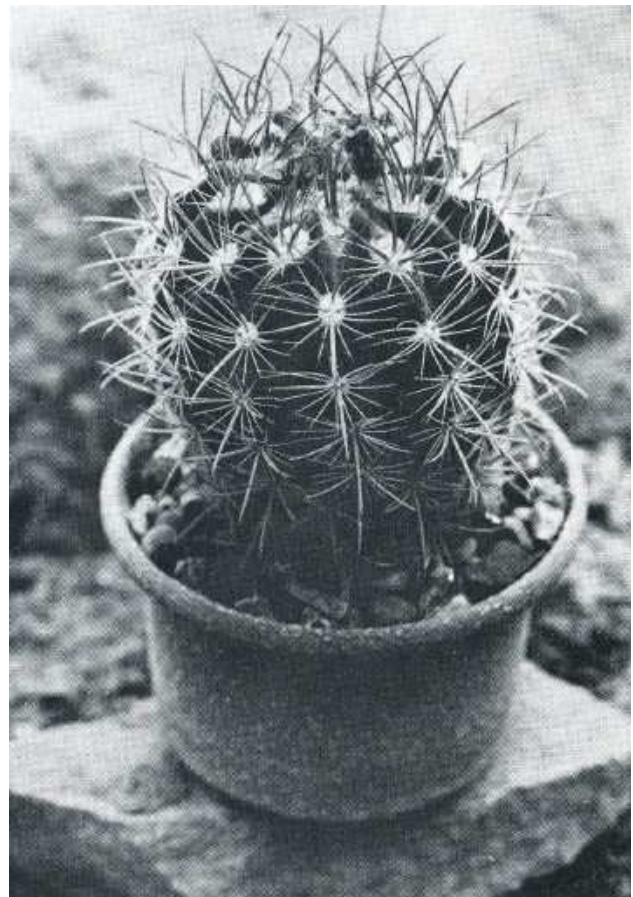


Fig. 124. *Parodia taratensis* in cultivation. Photo Abbey Garden.

the car and search for *Sulcorebutia tunariensis* which we soon find without difficulty (Lau 971). We are getting into the kind of terrain where *Sulcorebutias* grow - mostly on rocky ridges that are not too steep. To the northwest we try to reach Puente Pilato where, I am told, *Parodia ayopayana* grows.

Although we found several specimens of this species at Puente Pilato we soon realized that the whole area down the Rio Santa Rosa, which occupies a very wide and long valley, all the way to the confluence of the Rio Ayopaya was studded with thousands upon thousands of this beautiful orange flowered *Parodia ayopayana*.



Fig. 125. A handsome form of *Sulcorebutia tunariensis* in cultivation, Abbey Garden #69-617.



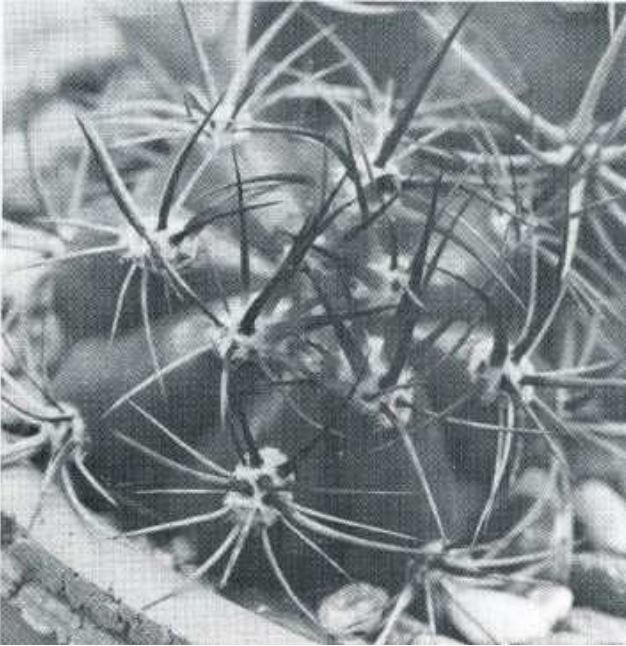


Fig. 126. A small offset of *Lobivia caineana*, a plant sent to Abbey Garden by Dr. Cardenas in 1969.

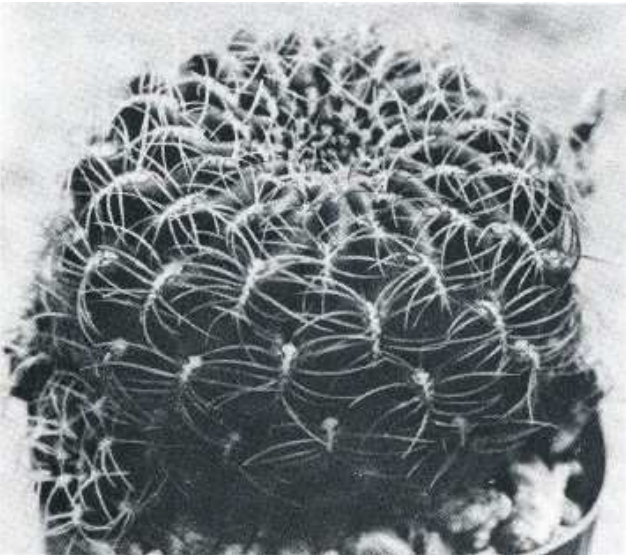


Fig. 127. *Sulcorebutia candiae* in cultivation at Abbey Garden.

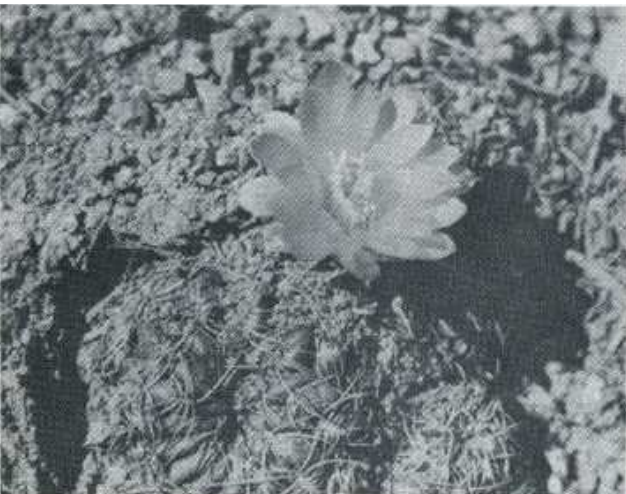


Fig. 128. *S. candiae* in flower in habitat. Note how plant is retracted into the ground. Photo by author.

We chose to stay at Santa Rosa (2,800 m) which served a threefold purpose. Apart from the parodia, one of the most beautiful of all sulcorebutias grows there - *S. candiae* (Lau 963). The light brown to orange, beautifully pectinate spines and the well spaced, several millimeter long areoles make the plant unique. Flower color ranges from yellow to orange and it has been reported to me that even white flowered specimens have been found. The plant hardly ever branches in the wild and the single stems sit deep in the ground, this species is easy to grow and is quite common in collections. Farther down in the valley is where *Sulcorebutia arenacea* grows but we never found it.

This is a vast expanse of land, the few houses show as many as four or five crosses on the roof, sometimes interspersed with clay pots. I never tried to find the significance of such customs.

Also growing in the same region are *Echinopsis ayopayana* (Lau 973) and a form of *Lobivia caespitosa* (Lau 310).

At Independencia we stopped with the German priests who have developed a very fruitful work there - establishing a horticultural trial station where the local natives learn how to grow many kinds of vegetables that the priests have introduced from Germany with more success. This was a show-case of what can be done in such a revolution-torn country in which one program after another is abandoned because of the changes of governments and the different approach to the country's needs by every new president and cabinet. The country could be rich in spite of the lack of an access to the ocean if only it could be governed in a sane and constructive way.

We were allowed to stay and take a shower - rare luxuries in such regions. Later we were invited to share their meals.

Most of the German priests there belong to the order of Redemptorists. They have hardly any or no images in their churches and preach a gospel that is practically identical with our Evangelical convictions. I have never felt that I was an outsider with them or that I belonged to a different religion. Later, in other areas, I was even urged and persuaded to preach in their congregations which all have a missionary appeal. We returned deeply impressed by the devotion of these men and we saw a certain similarity between their efforts and our own in assisting the people of the third world to overcome their plights.

This South American Cactus Log is not designed for the purpose of giving the reader much scientific data - that is being set aside for descriptions of new species - but whenever there is an occasion to go into detail, I shall do so. These articles, which are read by a crosssection of nature enthusiasts, including young people and children, should serve to give the reader an all-around view of cactus in South America while relating the search for cactus to the different people, landscapes, adventures

and discoveries.

The topography of the Rio Caine valley is of intense interest to geologists. Coming from Cochabamba, the first town of any importance is Tarata - and that is where our excitement begins. *Lobivia taratensis* (Lau 312) with large carmine-red flowers and whitish spines are seen here and there and we begin our descent into the wide, large valley. The next lobivia is *L. acanthoplegma* (Lau 979) which we did not see in flower and thus did not draw much of our attention in the dry season.

Several miles before reaching La Vina we started west and soon came upon colonies of *Sulcorebutia breviflora* (Lau 980). There has been no consensus about the validity of this name by all sulcorebutia specialists. Some say that this should be *S. taratensis*, if this name has any standing, others pledge for *caineana*, again others suggest the name of *haseltonii*. To me these are all forms of the same taxon.

We also found *Parodia taratensis* (Lau 586) at that particular locality. Again, I believe that this belongs to the same group as *P. comosa*, *borealis* and *echinus*, with the spines a beautiful honey yellow. Altitude, environment, etc. is the same, slate rock, steep grades.

Behind La Vina, a small village with a handful of adobe huts, the valley comes into full view. I was tempted to proceed upstream but found out that it was impossible. Going downstream, *Lobivia caineana* (Lau 311) came into view near Calahuata, another tiny village. It occurs there in masses. This species is quite different from all other lobivias in that the flower has a different structure, a beautiful purple, medium sized, and opening to an almost horizontal position, thus exposing the whole perianth. At this moment I have not been surprised if, in his many combinations and new establishments of groups, this plant received the name of a new genus.

The Rio Caine is shallow - one can wade through it in the dry season of the year. Looking all the way to the southeast the mountains all have the same appearance with their 40 degree slant - like a table that, through some tremendous earth movement

Fig. 129. *Sulcorebutia taratensis*, Lau 314, from the Rio Caine. Photo Abbey Garden Press.

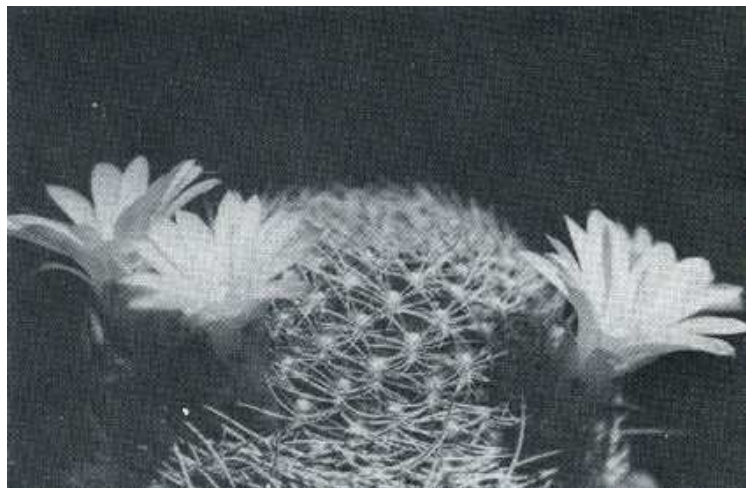


Fig. 130. *Sulcorebutia breviflora* (Lau 315). Photo by author.

has been tilted upwards. This mountain chain is interrupted in several places by smaller, dry river valleys.

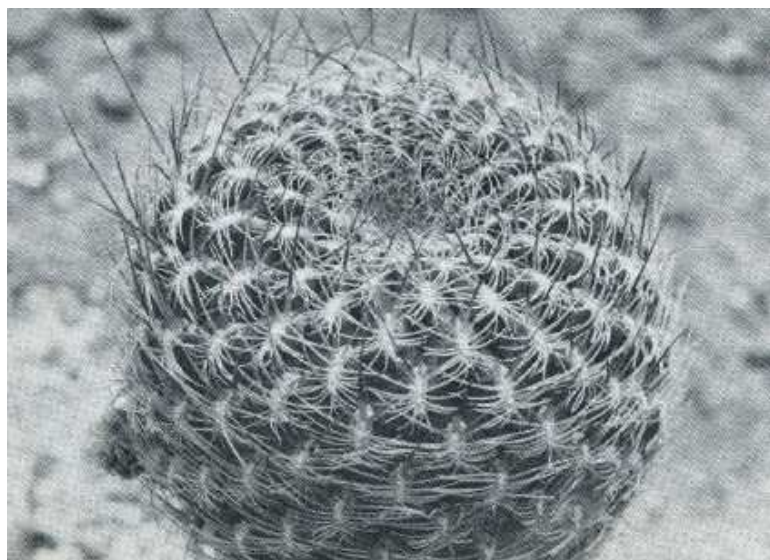
Not seeing the region during the flowering season, I gave the *Sulcorebutia breviflora* populations three numbers as they were found on separate tilted mesas, each one about 5 miles apart, the numbers were Lau 313, 314 and 315.

Great was my surprise when plants from the population 314 produced beautiful dark purple flowers. Others to whom I had sent specimens of this number found that there were yellow flowered clones among them, just as I had assumed. From one source I even received word that one plant produced white flowers. Here again is a case that could tempt amateurs in the field to make themselves "famous" by publishing three different species solely on the basis of difference in flower color. These are beautiful forms of one species that deserve to be propagated and circulated in collections. They will enhance any sulcorebutia collection, should be enjoyed and serve as a conversation piece but they should never be described as separate taxa, flower structure, generic peculiarities, fruit and seed are identical with *S. breviflora*.

Farther southeast, I had been told, there is another possibility of reaching the Rio Caine via Mizque and Cruce over a difficult and almost untraveled dirt road. Gazing at the many hills and valleys, the abrupt changes in topography, climate and soil conditions, there should be many surprises in store. This was to prove correct as we found out on a later visit.

Dr. Puna, whom I had never met, was responsible for the dental work among the miners of Mina Asientos and had found a number of interesting new plants in that vicinity close to the Rio Caine. Today a lively exchange of letters and opinions reveal many mutual observations. Someday I hope to meet this kind gentleman in person - there is much to discuss. Few people have penetrated the wilds beyond Mina Asientos.

(to be continued)



---

*Originally published in C. & S.J.(US) 1981:53 (p. 137-140)*  
*Reproduced with the permission of the author and the publisher.*

---

Note about the Fig. 129 : the original text says "Sulcorebutia taratensis Lau 314".  
The clone Lau 314 is of course a *Sulcorebutia breviflora*.