## Finding Sulcorebutia christiei

Bill Christie recounts an eventful plant hunting trip to Bolivia with Brian Bates, when he discovered what appears to be a new *Sulcorebutia* which has been named after him. Photography by the author

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suppose most cactophiles dream of finding a new cactus in habitat and being immortalized by having it named in their honour. My dream has just come true after a recent trip to Bolivia.

The trip did not have an auspicious start. I arrived to find that I was on the last plane in and there were no planes out, because the country was in the midst of a revolution and La Paz was under siege. The good news was that my guide Brian Bates was waiting for me – the bad news that his car was 30 km away and there was no means of transport other than on foot at an altitude of nearly 4,000m. Six hours later, having endured bitter cold, sleet, thunder, lightning, and high winds we reached the car, frozen to the bone. The town of Viacha where the car was parked was also blockaded, but we slipped out at 11pm when all were

asleep to head across country to the main La Paz-Cochabamba road. Apart from being stopped by armed soldiers and being stuck in a ditch for 3 hours until Brian jacked us up enough to get out, we reached that road safely. We needed an armed escort through a crowd of stone-throwers at one hamlet, but thereafter kept ahead of the protests until we reached Sucre, where the revolution caught up with us.

Thankfully, Brian's local knowledge enabled us to avoid the blockades and get out into the countryside and see the local cactus flora, mainly Sulcorebutias of various kinds. After a week, we heard that the President had fled the country, leaving 80 protestors and soldiers dead and hundreds injured, and the revolution was over. Our ambitious plans to go as far south as Tarija, and possibly over the border into the



Figure 1 A fine clump of Sulcorebutia christiei in flower



Figure 2 A species of *Fuchsia* growing among the rocks in this "alpine" habitat



Figure 3 A mature *Sulcorebutia christiei* showing its attractive bicoloured flower. This plant was only 4 cm in diameter yet had a tap-root 25 cm long

Argentinian Yavia habitat had to be curtailed, but we spent a marvellous few days travelling down to such evocative places as Camargo and Culpina to see lobivias, parodias, rebutias, oreocerei, and not forgetting *Cintia knizei*, in habitat. The sun shone, the plants were in glorious flower, and all the previous tribulations were forgotten.

Eventually we had to head for home again, first to Sucre and then a two-day journey through country that Brian had only explored briefly. This was via Ravelo to Uncia and then on to Oruro, before the relatively short journey back to La Paz. It was overcast when we left Brian's house in Sucre, which is at an altitude of 2,850m, and began the climb up into the high Altiplano, but as we crossed over the first pass,

the skies brightened and we could enjoy the plants and the beautiful mountain scenery. At our first significant stop (BB 1204, 3,650 m), we found a Sulcorebutia sp. of doubtful affinity - akin to S. losenickyana but also resembling S. steinbachii. Most plants had dark red flowers, but at least one had a magenta flower. Most plants were only 1cm in diameter, though we did find two growing in moss in a sheer rock face that were somewhat wider (about 3cm).

Usually Brian would say that "he could smell Sulcorebutias", and we would stop and sure enough there they would be, usually on a rocky ridge on top of a wind-swept hill. Often it meant going on hands and knees to find tiny single bodies only a centimetre or so across, rarely the big clumps you see in British collections. If you are lucky and they are in flower, they are easy to see of course. I could usually spot the trichocerei first. However, a few kilometres before Ocuri in the Department of Potosi and Province of Chayanta (BB 1205 3,740 m), I noticed an attractive landscape of giant sandstone boulders, which I suggested were worth a look, especially as we were due a "comfort stop".

The first plant of note was an attractive shrub over 1m



Figure 4 A general view of the site where we found the new Sulcorebutia



Figure 5 A clump of mature plants of Sulcorebutia christiei at the higher site

25cm long and 3cm in diameter for most of its length. On a subsequent trip with some Czech cactophiles a few weeks later, they found lants with taproots up to 50cm long!

Two voung farm workers ("campesinos") came over to see what interested us, and Brian explained our botanical interests. They immediately climbed up a giant boulder 3-4m high and invited us to join them. If I had been 20 years younger, I might have tried, but I could not see why they wanted us to make the attempt until they came down from it with a clump as big as a dinner plate consisting of hundreds of small plants. There must have been thousands of plants up there in shallow soil, all hidden from sight. As these plants had now been dug up, Brian was forced to accept the offering in exchange for two bottles of soft drinks. Brian later climbed this rock with the Czechs and found that it had both S. christiei and S. losenickyana in quite large numbers.

high growing out of a cleft in the rock, which Brian invited me to inspect - a Fuchsia with small purplish flowers and thick hairy leaves. This was quickly forgotten when we noticed small bicoloured flowers, red with a yellow centre, at ground level or in clefts in the rock.

These were attached to an interesting Sulcorebutia with quite different spination from anything I had seen before, and Brian was immediately convinced that it was something new. The first plants we found had single heads, the largest up to about 5cm in diameter, but then we found plants with two, four and more heads.

Brian is committed to conservation of the Bolivian flora, and often on my two trips has given impromptu lectures to local people on the value of their local plants, which they treat as weeds. On the other hand, he always collects a few plants for study at each location, and on digging up one single-headed plant we were amazed for find a tap root

We had a long way to go still that day, so we had to set off again, but about a kilometre beyond Ocuri (BB 1206, 4070m) Brian could smell Sulcorebutias. We crossed a rough grassy area where llamas were grazing to a rocky ridge to the east of the road. At first



Figure 6 A group of plants of *Sulcorebutia christiei* not yet in flower. The individual heads are only 1-2 cm across

we thought we had drawn a blank, but near the top, we found a small patch of about 20 *Sulcorebutia sp.*, all single heads only a centimetre or so in diameter in an area of about 30cm x 30cm growing in stony soil sheltered on all four sides by rocks. One flower was about to open, and it appeared to be the same as the previous find. Then, we found a clump with four large heads with the same spination as at the previous site to confirm this.

Two days and many cactus species later, I was in a plane returning home. Because of the "revolution", we had to change our itinerary greatly to cover much less ground (though we still drove more than 2,500km) and we saw fewer plants than planned. Yet Brian's profound knowledge of the country and its plants, together with his driving and navigational skills, enabled me to see a great range of cacti nonetheless. At least, we encountered no earthquakes, volcanoes or plagues.

As I mentioned briefly above, Brian returned to the site with some Czech cactophiles a few weeks later to study the plants in greater detail. They were convinced that it was indeed a new Sulcorebutia species from its flower, geographical distribution, altitude, spination and the distinctive taproot, which only appears to develop

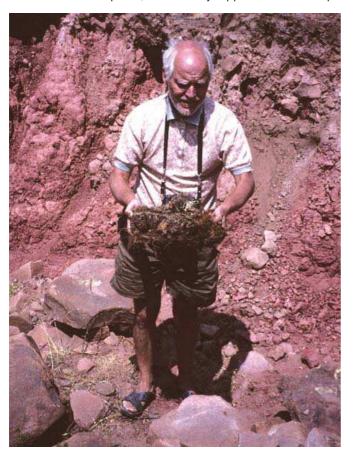


Figure 7 Brian Bates with a huge clump of Sulcorebutia christiei



Figure 8 Sulcorebutia christiei in cultivation

its considerable dimensions on mature plants. The second site is higher than any Sulcorebutia habitat that I can find in the literature. I feel greatly honoured and flattered that this plant has since been described as *Sulcorebutia christiei*. The road we travelled has apparently not been much used by cactophiles in the past, but it seems that the plant has been seen before, and I understand that it is called *Sulcorebutia* sp. *Ocuri* in Augustin's book and a plant depicted on page 42 of "A Sulco Gallery" by John Pilbeam and David Hunt, (no. 42.3 VZ 095/1, identified by Johan de Vries as S. vasqueziana v. losenickyana) looks similar. If the finders only examined seedling plants, they would not have observed the characteristic taproot.

I suppose that some day soon, someone will rename the plant *Sulcorebutia vasqueziana* var. *christiei*, or if they have had a bad day they may drop my name altogether. However, I have had my moment of glory.

## References

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