

The HS field list has been written in the mid-eighties by Karl Augustin. His most important source was the account of his trips that Heinz Swoboda himself gave him and he has also used some written notes of the traveller.

In 2009 Johan Pot has received all those notes from K. Augustin and decided to translate them into English. He has added some observations and the coordinates of the sites.

These can be used in Google Earth : it's very funny to locate all those sites and to get a vague idea of what is the environment of those plants !!!

In Google Earth, you will have to use the J. Pot's coordinates in the other way round.

For example : the coordinates in the field list for HS 1 are 65°20.5' - 18°59.3'

In Google Earth you will have to type : 18°59.3'S 65°20.5'W

Nevertheless, there is a certain difference between the spots found in Google Earth and in the maps of the Instituto Geografico Militar in La Paz. So be careful if you want to use the coordinates when you will be in the field !!!

Some more notes :

- ❖ When you will see “xxxx” in the text, this means that Johan Pot has been unable to decipher the Augustin's handwritten text.
- ❖ In the list you will meet the word “Estancia”. An estanciero is a cattle breeder. So probably an estancia is the place, where the cattle breeder lives. Many small villages of only a few houses are called Estancia.
- ❖ You will also meet the word “Cuesta” : a cuesta is a slope. Those places are indicated on the maps : for example “Cuesta Santiago” (usually known as “Cuesta de Santiago” by travelling Sulco enthusiasts !).

I would like to thank Mr Karl Augustin for his permission to publish this document and Mr Johan Pot for his English translation and his annotations.

Heinz SWOBODA (written by Karl Augustin after verbal statements of Swoboda)

List of fieldnumber Heinz Swoboda (HS)

BOLIVIEN

Field Nr.	Habitat	Genus/species	Observation
	Names written in red according to SulcoMania 2009 or Augustin 1997. Coordinates written in red according to Pot 2009. Written in blue : Data later adaption. Written in green : Observation Pot 2009.		
HS	Nr.1 - 12 were collected along the road Sucre to Ravelo, the indications of Km are related to the airport of Sucre		
1	12,5 km after the airport, right of the road	Sulcorebutia spec. SUCRE W.spec.Sucre	65°20.5' - 18°59.3'
1a	11 km after the airport, directly next to the road	Sulcorebutia losenickyana W.spec.Sucre	only one plant 65°19.9' - 18°59.2'
2	13,3 km after the airport, directly next to the road	Sulcorebutia spec. Sucre W.spec.Sucre	65°20.7' - 18°59.4'
3	like Nr. 2, but on top	Sulcorebutia spec. Sucre W.spec.Sucre	65°20.6' - 18°59.3'
4	like Nr. 2, but a bit further below the road	Sulcorebutia spec. Sucre W.spec.Sucre	65°20.5' - 18°59.5'
5	13,5 km after the airport, left almost near the river, growing in gras	Sulcorebutia spec. Sucre W.spec.Sucre	65°20.7' - 18°59.4'
6	16 km after the airport, then 1 km left, growing in gras	Sulcorebutia spec. Sucre W.spec.Sucre	65°21' - 18°58.6'
7	16 km after the airport, then right along the road, after 1 km at 3150 m	Sulcorebutia spec. Sucre W.spec.Sucre	65°21.3' - 18°58.2'
8	like Nr. 7, but after 2,2 km, right at 3240 m, very stony	Sulcorebutia spec. Sucre W.spec.Sucre	65°21.5' - 18°57.8'
9	like nr. 7, but after 3 km, growing in loam	Sulcorebutia spec. Sucre W.spec.Sucre	65°21.9' - 18°57.4'
10	like Nr.7, but after 5 km, at 3150 m	Sulcorebutia spec. Sucre W.spec.Sucre	65°22.8' - 18°57.6'
11	18,5 km after the airport, close to a well, in moss	Sulcorebutia spec. Sucre W.spec.Sucre	65°21.6' - 18°57.6'
12	14 km after the airport, left and right of the road	Sulcorebutia spec. Sucre W.spec.Sucre	65°21.6' - 18°57.6'
13	between MIZQUE and AIQUILE, close to the crossing of the railway with the road, about 20 km after Aiquile, before the tunnel on the right mountain at 2450 m ca. 10 km after Aiquile (di Mizque) at crossing road/railway, next to the tunnel, right mountain, 2450 m	Sulcorebutia santiaginiensis W.albissima	also collected the 17 10 83, flowers 65°13.9' - 18°8.1'
14	road MIZQUE to ARANI, about 5 km after MIZQUE, through the river on right mountain at 2800 m, flowers the 01 12 82	Sulcorebutia mentosa W.sp.Mizque-Tatora	also collected the 19 10 83 65°18.6' - 17°51.9'
14a	together with Nr. 14	Weingartia spec. W.multispina var.	also collected the 12 10 83 65°18.6' - 17°51.9'

Field Nr.	Habitat	Genus/species	Observation
14b	together with Nr.14 not many plants	Sulcorebutia spec. mentosa var. <i>W.sp.Mizque-Totora</i>	also collected the 2. 65°18.6' - 17°51.9'
15	road MIZQUE to ARANI, 17 km after MIZQUE, right of the road at 2600 m (flower the 02 12 82)	Sulcorebutia spec. <i>W.mariana</i>	also collected the 20 10 83, flowers 65°24' - 17°51.4'
15a	like Nr.15	Lobivia mizquensis? <i>L.spec.</i>	
16	road MIZQUE to ARANI, at km 41,5 (approximately in the middle of the route),right of the road, rocky mountain at 3150 m km 41,5: altitude 3600 m	Sulcorebutia steinbachii Form <i>W.mariana var. prantneri</i>	one plant was very big ca 11 cm 65°31.2' - 17°43.5'
17	road MIZQUE to ARANI, 44 km after MIZQUE, left of the road at 3300 m km 44: altitude 3700 m	Sulcorebutia spec. <i>W.sp.Yacuparticu</i>	only a few plants 65°32.4' - 17°42.1'
17a	like Nr 17,a little further, same mountain-ridge, get some more coarse than Nr.17	Sulcorebutia spec. <i>W.sp.Yacuparticu</i>	collected during the 2. trip
18	road MIZQUE to ARANI, 52 km after MIZQUE, right of the road at 3300 m you can see VACAS km 52: Höhe 3500 m	Sulcorebutia spec. <i>W.sp.Rodeo</i>	only a few plants 65°37' - 17°38'
18a	like Nr. 18	Lobivia spec. <i>L.sp.Rodeo</i>	only a few plants
19	road COCHABAMBA to St.CRUZ (asphalt road), at km 107 Road Cochabamba-St.Cruz, at km 103	Sulcorebutia steinbachii Form <i>S.tiraquensis</i>	one plant was very big, perhaps S.tuberculata- chrysantha? 12 cm Ø 65°21.8' - 17°32.2'
20	directly at the crossing of streets EPIZANA - TOTORA, growing in the meadow Epizana, around the school and slope behind it	Sulcorebutia sp. EPIZANA <i>W.sp.Epizana</i>	ident with R 602 also collected during the 2. trip. Flower the 08 10 83 65°13.4' - 17°38.4'
20a	like Nr.20	<i>Sulcor.spec. Epizana klein W.sp.Epizana</i>	65°13.4' - 17°38.4'
21	3 km south of TOTORA at 2800 m, growing in the meadow	Sulcorebutia oenantha <i>W.oenantha</i>	65°12.5' - 17°44.9'
21a	3 km before TOTORA, right on the hill, only on top like Nr.21. right on the hill, only on top	Sulcorebutia oenantha <i>W.oenantha</i>	collected during the 2.trip 65°12.7' - 17°44.7'
22	road TOTORA to MIZQUE, 10 km after TOTORA at 2800 m, in very fine gras (like a carpet)	Sulcorebutia spec. <i>W.oenantha</i>	also collected during the 2. trip flower the 09 10 83 65°11.3' - 17°47.7'
23	road TOTORA to MIZQUE, 14 km after TOTORA, right of the road, very rocky mountain Rancho Pampa Grande is 14 km south of Totora, but on the road road Totora- Aiquile	Sulcorebutia pampagrandensis <i>W.pampagrandensis</i>	65°10.3' - 17°50.9'
23a	road Mizque - Totora, 7,5 km after Mizque, left of the road in stones, get very big The road Mizque-Totora was blocked over several years.	Weingartia spec. <i>W.spec</i>	

Field Nr.	Habitat	Genus/species	Observation
24	road AIQUILE, 1 km after Aiquile, then turn to the left, after following 7,5 km at 2450 m, small hill road Aiquile-Mizque, 2 km after Aiquile, then road to the left, after following 7,5 km left small hill, difficult to find	Sulcorebutia mentosa Var. W.albissima	also collected the 13 10 83 (2.trip) 65°13.4' - 18°12' later collected as well
24a	like Nr.24	Lobivia spec. L.spec.	
25	like Nr.24, but after another 24 km at 3200 m (summit)	Sulcorebutia purpurea Var. W.santiaginiensis Form	collected during the 2.trip as well, but them from km 24,6 to km 26, also at 2900 m, flowers and buds the 13 10 83 65°18.9' - 18°9.9'
25a	like Nr.25, but after 52 km, highest mountain close to REIKA PAMPA (Cerro Condorgaga grow from 2800-3000 m, very stony Cerro Condor Khakha is over 10 km out of Hacienda Racay Pampa	Sulcorebutia purpurea W.purpurea ??	2.trip the 14 10 83 65°26.7' - 18°11.3'
25b	like Nr.25a, but further along the ridge (very bad road) direction REIKA PAMPA, summit, before road to SAN VINCENTE (Mine Asientos) goes into the valley. You can see left in the depth the mine.	Sulcorebutia purpurea W.purpurea ??	2.trip the 14 10 83 65°26.2' - 18°11'
26	like Nr.25, but 2 km further	Sulcorebutia spec. W.santiaginiensis Form	ident with Nr.25 65°18.7' - 18°10.7'
27	between MIZQUE and AIQUILE, 4,5 km after Nr.13, exactly at the bordermark of the district of MIZQUE at 2400 m, very gritty soil, small habitat, at the edges with ca 2 m heigh shrubs road Aiquile-Mizque, about 5 km after Nr.13, at the border mark of the district, right small Estancia, over the rails on the hill 2400 m, very stony, small habitat, only at the backside (east side) of the hill, shrubs 2 m	Sulcorebutia swobodae W.swobodae	collected as well the 2. trip the 16 10 83, very hot 65°14.5' - 18°06.2' rarely brown-spined plants as well
27a	AIQUILE-near REIKA PAMPA (approximately direction MOLINERO) at 2450 m, is smaller, finer and also caespitose is found with white, red and yellow spines. This habitat is about 14 km apart from the location of Nr.27 like Nr.24, 1000 m further, right and left of the road, very many plants, mostly yellow spines but also many brown, red and white spines, 2450 m	Sulcorebutia swobodae var. W.swobodae Form	collected the 2.trip, at 13 10 83 flowers 65°13.8' - 18°11.9'
28	COCHABAMBA - direction MOROCHATA - St.ROSA (AYOPAYA), 41,5 km after MOROCHATA at 2100 m, growss before St.ROSA very often	Parodia ayopayana P.ayopayana	2.trip,at 06 10 83
28a	directly at St.ROSA at 2700 m	Parodia ayopayana Form P.ayopayana	2.trip,at 06 10 83
29	3 km after St.ROSA, between 2700 - 2800 m in roilly stones, arid field, hardly vegetation.After another 4,5 km plants are found in grass.	Sulcorebutia candiae W.candiae	2.trip,at 06 10 83 buds 66°42.6' - 17°07.2'

Field Nr.	Habitat	Genus/species	Observation
30	like Nr.29, but fully down near the river at 1800 - 1900 m, fine rolyly stones, no other vegetation	Sulcorebutia arenacea <i>W.arenacea</i>	2.trip, at 06 10 83 few plants with flowers, mostly buds 66°41' - 17°06.8'
30a	Mount Tunari at 4000 m, direction MOROCHATA	Tephrocactus spec. <i>T.spec.</i>	at 08 10 83
30b	like Nr.30a	Lobivia spec. <i>L.caespitosa</i>	at 08 10 83
30c	down MOROCHATA, near PARANGANI at 2600 m	Acantorhipsalis paranganiensis <i>A.paranganiensis</i>	at 08 10 83
31	road COCHABAMBA - St.CRUIZ, at km 117, 2,5 km from the road, first rocky mountain at 2900 m, there are plants with yellow and dark spines road Cochabamba-St.Cruz, km 107 right of the road, first rocky mountain, all forms from light to dark km 107: Lopez Mendoza, 3000 m km 117: behind village Monte Punco 2900 m	Sulcorebutia tiraquensis <i>W.tiraquensis</i>	the 08 10 83 65°17.2' - 17°34.3'
32	like Nr.31, but at km 173 near COPACHUNCHO at 2950 m, in cracks in the rocks, strong growth of moss <i>Copachuncho</i> = ± km 148	Sulcorebutia totorensis <i>W.sp.Copachuncho</i>	the 10 10 83 64°58.8' - 17°44.4'
33	further direction St.CRUIZ, near COMARAPA at bridge left direction ASSERADERO, after 11 km in the grass (few plants), after another 1,5 km on rocks (very many), always at 2400 m	Sulcorebutia krahni <i>W.krahni</i>	the 10 10 83 flowers 64°34.4' - 17°50.9'
33a	2 km after Comarapa in direction St.Cruz, north of the village about 4 km auf 2300 m	Sulcor.krahni var. small <i>W.krahni</i>	
34	road COMARAPA - SAIPINA - AIQUILE 2 km after COMARAPA, left of the road at 1850 m, is found as well with Nr.37,37 and 38, at km 22,5 cristates	Gymnocalcium pflanzii var zegarrae <i>G.pflanzii v.zeg.</i>	the 11 10 83 buds, is often found all the way to the Rio Mizque
35	like Nr.34, in spiny undergrowth near Benado <i>Benado</i> ≈ <i>Bañados de la Cruz?</i>	Weingartia BENADO pulquinensis spec. <i>W.pulquinensis Form</i>	flower the 11 10 83 64°32.7' - 17°54.6'
36	12 km after COMARAPA the 1700 m.	Parodia spec. <i>P.columnaris</i>	the 11 10 83 remainder of flower
36a	like Nr.36 near Chilca <i>Chilca</i> not found, perhaps was meant <i>Estancia Conchita?</i>	Weingartia CHILCA pulquinensis spec. <i>W.pulquinensis Form</i>	the 11 10 83 64°35.1' - 17°58.8'
37	43,5 km after COMARAPA (already after SAIPINA) at 1400 m, together with Nr.34	Weingartia spec. (yellow spines) new <i>W.pulquinensis var. augustini</i>	the 11 10 83 64°36.2' - 18°05.9'
38	1,5 km after Nr.37 at 1400 m together with Nr.34	Weingartia pulquinensis Forma <i>W.spec.</i>	the 11 10 83
38a	9 km after Nr.38 at 1400 m, in moss on plates of stone, along the river like Nr.38 (ident)	Weingartia pulquinensis Forma <i>W.spec.</i>	the 11 10 83
39	crossed the Rio Mizque the 12 10 83, 30 km after PENA CALORADA (coming from AIQUILE = 96 km after COMARAPA), at 1500 m waded near broken bridge about 30 km before Pena Calorada 1500 m	Weingartia spec. <i>W.corroana</i> völlig	the 12 10 83 64°41.7' - 18°5.4'
40	like Nr.39 Many plants, an Echinopsis Forma as well	Parodia spec. <i>P.columnaris</i>	the 12 10 83

Field Nr.	Habitat	Genus/species	Observation
41	36,5 km after PENA CALORADA direction PASORAPA, on the pass (summit), about 1 km from the road, left	Sulcorebutia cardenasiana <i>W.cardenasiana</i> Form	the 12 10 83 flowers and buds 64°43.9' - 18°18.1'
41a	like Nr.41, but 4 km further and right of the pass	Sulcor.spec. form of HS 41 <i>W.cardenasiana</i> Form	64°43' - 18°18.7'
42	straight before the location of Nr.41	Weingartia spec. (black-grey spines) <i>W.neocumingii</i> Forma	the 12 10 83 flowers and fruits 64°44.1' - 18°18.4'
42a	in the neighbourhood of PUENTE ARCE, direction CHUQUICHUQUI (between Rio Grande and SURUMI not much after Puente Arce, between Rio Grande and Surima, 1750 m many plants, reddish soil <i>Surima = Zurima</i>	Weingartia spec. <i>W.longigibba</i> Weingartia longigibba	the 12 10 83 in red soil
42b	close to CHUQUICHUQUI at 1750 m 1730 m	Weingartia lanata <i>W.lanata</i>	the 12 10 83 65°06.9' - 18°49'
42c	Road SUCRE direction Rio Chico, 21 km after Sucre right and left of the road, very slates, 2500 m (coming from Rio Chico)	Weingartia sucrensis <i>W.sucrensis</i>	the 24 10 83
43	near REIKA PAMPA at 2700 m, grows on the slopes of the edges and at the riverbed as well	Parodia spec. <i>P.spec.</i>	the 14 10 83 flower
44	near the railway station CRUCE (Cerro Morangmorang Punta), at 2450 m right and left of the road, very many, always on deeper spots <i>Cerro Morangmorang: a river Rio Mara Mara is found at Cruce</i>	Sulcorebutia vizcarrae Sulcoreb.spec. <i>W.cylindrica</i> var.	the 15 10 83 flower 65°31.3' - 18°03.6'
44a	like Nr.44, but white flower	Sulcorebutia vizcarrae var. albiflora <i>W.cylindrica</i> var.	the 15 10 83 flower white 65°31.3' - 18°03.6'
45	further along the road direction REIKA PAMPA, along the gas line, at Cerro Puccara Punta at 2500 m, stony hill, always below <i>Cerro Puccara Punta = Cerro Pucara</i>	Sulcorebutia spec. <i>W.cylindrica</i> var.	the 15 10 83 flower 65°26.3' - 18°04'
46	about 1,5 km before CAUTA at 2350 m, along a small river bed in rolling stones a bit before Cauta, pipeline, near the Cauta, but grows more often on the left slope of the river in direction Tintin, only below	Sulcorebutia breviflora (L 314?) Sulcor.spec. <i>W.cylindrica</i> var.	the 15 10 83 65°26.3' - 18°04.9'
47	further direction AIQUILE, at 2600 m above Nr.27, you can see the Orkho Abuelo (about 5 km as the ctow flies)	Sulcorebutia spec. Sulcor.flavissima <i>W.flavissima</i>	the 16 10 83 flower 65°13.9' - 18°06'
47a	like Nr.48 but a bit higher	Sulcor.flavissima <i>W.mentosa</i>	mixed population, mostly jxxx but red until brown spined
48	north of AIQUILE (direction MIZQUE) at the foot of the Orkho Abuelo, at 2400 m overgrowth with small willowish shrubs	Sulcorebutia flavissima <i>W.mentosa</i>	the 16 10 83 flower 65°13.1' - 18°08.2'
49	over Nr.13 and Nr.50, at 2600 m until 2700 m. On this location flavissima and mentosa grow together	Sulcorebutia mentosa <i>W.mentosa</i>	the 16 10 83 flower
50	somewhat below Nr.49, from 2400 m until 2700 m	Lobivia spec. draxleriana var. <i>L.draxleriana</i> Form	the 16 10 83

Field Nr.	Habitat	Genus/species	Observation
51	road MIZQUE to TOTORA, about 30 km after Mizque, summit left Cerro Pedro, grow at the foot of the mountain and almost in top (not in the middle) always in rocks	Weingartia spec. <i>W.multispina</i> var.	the 18 10 83
52	like Nr.51, but in the middle of the mountain (Cerro Pedro) at 2500 m - 2700 m, at the steep slope, high grass and rocky, together Nr.54 Mizque - Totora 30 km is found a mountain, what is called Cochabamba Loma at 2500 m. Indeed summit. Cerro Pedro? Swoboda writes „rocky“. Spanish Piedra = stein. Did he hear this word perhaps?	Sulcorebutia mentosa <i>W.sp.Mizque-Totora</i>	the 18 10 83 flower 65°16.5' - 17°46.7'
53	like Nr.52, but in top at the crest	Lobivia spec. <i>L.spec.</i>	the 18 10 83
54	like Nr.52, in the middle of the mountain, only in rocks, also orchids are found	Parodia spec. <i>P.spec.</i>	the 18 10 83 few plants
55	near Nr.15, perhaps ident with Nr.14a, and Nr.51	Weingartia spec. <i>W.multispina</i> var.	the 19 10 03 flower
56	near Nr.15. about 3 km further direction crevice	Parodia spec. <i>P.spec.</i>	the 19 10 03
57	road TINTIN to ARANI, almost at the summit, at 2750 m, stony hill, plants very small, caespitose, only few plants found	Sulcorebutia spec. <i>W.spec.</i>	the 20 10 83 buds 65°30' - 18°.04'
57a	like Nr.57, but a bit further, directly at the ridge at 3050 m	Sulcorebutia spec. <i>W.tintiniensis</i>	the 20 10 83 flower 65°31.6' - 17°58.6'
57b	like Nr.57a, but much bigger, directly along the road, at 3150 m, very rocky	Sulcorebutia spec. <i>W.tintiniensis</i>	the 20 10 83 flower 65°33.5' - 17°56.1'
58	like Nr.57, but somewhat further near UAN KHUNI at 3550 m, stony hill, is situated about in the middle between TINTIN and ARANI, few plants <i>Uan Khuni ≈ Piujuni? „j“ as pronounced in Spanish like like „g“</i>	Sulcorebutia polymorpha <i>W.sp.Arani-Tintin</i>	the 21 10 83 flower 65°37.3' - 17°50.4'
59	road TINTIN to ARANI about 15 km before ARANI (road goes downhill), 3 single Eucalyptustrees, 1 group	Sulcorebutia polymorpha <i>W.sp.Arani-Tintin</i>	the 21 10 83 flower 65°44' - 17°39.8'
60	like Nr.59, a bit furter at 3400 m, left of the road, small plants, but very big flowers	Sulcorebutia spec. <i>W.sp.Arani-Tintin</i>	the 21 10 83 flower 65°44.3' - 17°38.9'
61	like Nr.60, a bit further at 3250 m	Lobivia spec. <i>L.oligotricha</i>	the 21 10 83
62	near ARANI, in rocks, is found everywhere around ARANI	Parodia spec. <i>P.spec.</i>	the 21 10 83
62a	like Nr.62	Weingartia spec. <i>W.spec.</i>	the 21 10 83
63	road CLIZA to CRUCE (direction Villa Villa), 10 km after CLIZA near the bridge of the railway at 3000 m	Lobivia spec. <i>L.spec.</i>	the 22 10 83
64	near SAIBINGANI (direction like Nr.63) near the railway station, chain of hills, at 3000 m over the railway station <i>Saibingani = Sivingani</i>	Sulcorebutia markusii <i>W.markusii</i> Form	the 22 10 83 flower 65°41' - 17°55.3'
64a	like 64, etwa 3 km vor Villa Villa	<i>Sulcor.markusii</i> v. <i>longispina</i> ? <i>W.markusii</i> Form	14.7.85

Field Nr.	Habitat	Genus/species	Observation
65	near the railway station PASJCHA (right way to write) = location of the first diagnose, grow in rolling stones.	Sulcorebutia cylindrica W.cylindrica	the 22 10 83 65°33.5' - 18°02.5'
65a	like Nr.65, but 800 m further direction Cruce	Sulcor.cylindrica W.cylindrica	14.7.85 65°33.1' - 18°02.5'
66	before TINTIN at 2200 m, summit (small river)	Parodia spec. P.spec.	the 22 10 83
67	road AIQUILE to LAGUNA, near Cerro Quischaloma, at 2900 m Quischaloma = Jiskhaloma ("J" like "G")	Sulcorebutia spec. W.sp.Molineri	the 23 10 83 flower 65°22.2' - 18°14'
67a	like Nr.67, but a little further in direction LAGUNA, at 3050 m	Sulcorebutia spec. W.sp.Molineri	the 23 10 83 65°22.1' - 18°14.2'
68	like Nr.67a, but at 3100 m, a bit further direction direction LAGUNA	Sulcorebutia jolandae (yellow spines) W.jolantana n.n.	the 23 10 83 65°21.8' - 18°15'
68a	like Nr.68, but a bit higher	Sulcorebutia jolandae var. (brown and red spines) W.jolantana n.n.	the 23 10 83 65°21.8' - 18°15'
69	like Nr.68, but at 2950 m, on the slopes on both sides of the basin of the river	Sulcorebutia spec. W.sp.Molineri	the 23 10 83 65°20.7' - 18°15.7'
69a	like Nr.69	Lobivia spec. L.spec.	the 23 10 83
70	directly near LAGUNA GRANDE, left on the stony hill at 3050 m, right huts	Sulcorebutia spec. W.sp.Laguna	the 23 10 83 65°20' - 18°18.6'
71	north of SUCRE, 5 km after the cement factory, left, stony mountain, at 2850 m	Sulcorebutia canigueralii W.canigueralii	the 24 10 83 flower (magenta and red-yellow) 65°12.2' - 18°59.9'
71a	like Nr.71	Lobivia draxleriana L.draxleriana	the 24 10 83
72	road SUCRE to RAVELO (via ALAMOS) directly at BARRANCA, 2900 m	Sulcorebutia vasqueziana W.vasqueziana	the 25 10 83 65°19.1' - 18°57.9'
72a	like Nr.72	Lobivia spec. L.spec.	the 25 10 83
73	about 2,5 km after Nr.72 about 1 km after Nr.72, right of the road	Sulcorebutia spec. Sulcor.alba var. W.alba var.	the 25 10 83 65°19.4' - 18°57.4'
73a	somewhat after BARRANCA, 1 km from the road, another mountain, perhaps ident with Nr.73	Sulcorebutia spec. W.alba var.	the 26 10 83 65°19.4' - 18°58'
74	before ALAMOS, at 2950 m at the summit 1 km before Alamos, summit, left a chain of eucalyptustrees, only left part of the hill Old list: 2950 m = summit (like JK and VZ). However that is not 1 km before Los Alamos.	Sulcorebutia alba W.alba	the 25 10 83 flower 65°19.9' - 18°53.5'
75	like Nr.74 but only right side of the hill	Sulcorebutia frankiana W.frankiana	the 25 10 83 65°19.9' - 18°53.5'
75a	a bit after ALAMOS, near the 1. bridge, right of the road at 2750 m, stony	Sulcorebutia franiana v.aureispina W.frankiana Form	the 26 10 83 65°20.1' - 18°52.1'

Field Nr.	Habitat	Genus/species	Observation
76	on the peaks of the mountain near CHIMORI, at 3100 m, above the mine	Sulcorebutia pedroensis <i>W.alba</i> var.	the 26 10 83 65°24.6' - 18°48.8'
77	Road CHUQUICHUQUI to PRESTO, 20 km after CHUQUICHUQUI, fully in top on the ridge, at 2600 m, about 2 km before Nr.78, pipeline	Weingartia spec. <i>W.spec.</i>	the 27 10 83 65°03.5' - 18°47.5'
77a	like Nr.77	Lobivia spec. <i>L.spec.</i>	the 27 10 83
78	a bit further from Nr.77, at 2750 m, along the gaspipeline, very bare and stony. Together with Nr.78c	Sulcorebutia pulchra var. <i>W.pulchra</i>	the 27 10 83 flower 65°02.8' - 18°48.3'
78a	about 20 km before PRESTO, at 2800 m stony hill	Sulcorebutia pulchra var. new <i>W.pulchra</i>	the 27 10 83 flower 65°02.7' - 18°48.7'
78b	like Nr.78, but at 3000 m	Sulcorebutia pulchra var. <i>W.pulchra</i>	the 27 10 83
78c	like Nr.78	Parodia spec.	the 27 10 83
79	Road PUENTE ARCE, direction POROMA, 10 km after PUENTE ARCE am Cerro Kaspichancha at 2800 m, below grow Parodia (Nr.79a) south of <i>Copa Willkhi (Copavilque)</i> on Cerro Copaj Yaya. Estancia Khaspi Cancha (altitude 1900 m) is found east of the mountain	Sulcorebutia spec. <i>Sulcor.fischeriana</i> <i>W.fischeriana</i>	the 28 10 83 flower 65°16.9' - 18°38.8'
79a	like Nr.79 near Rio Grande direction Copavilque, many plants, together with Nr.79b, 1600-1700 m	Parodia spec. <i>P.ocampo</i>	the 28 10 83
79b	like Nr.79, along the Rio Grande, grows together with Parodia Nr.79a like Nr.79a, 1650 m, until the exit to Copavilque all the time, also in the area of the mouth of Rio Chico into the Rio Grande, on the other side of the river as well	Weingartia spec. <i>Weingartia riograndensis</i> <i>W.riograndensis</i>	the 28 10 83
80	road MIZQUE to ARANI, about 30 km after MIZQUE, before de road rises near the bridge, left stony mountain at 2750 m, few plants	Sulcorebutia spec. <i>W.sp.Arani-Mizque</i>	the 29 10 83 65°27.8' - 17°49.4'
81	like Nr.80, but down at the river in stones	Sulcorebutia spec. <i>W.mariana</i> var. <i>prantneri</i>	the 29 10 83 65°27.8' - 17°49.6'
81a	like Nr.80	<i>Sulcor.spec.</i> <i>W.mariana</i> var. <i>prantneri</i>	
82	ident with Nr.16, flowerd red (dark) with yellow throat, somewhat after the village, at 3000 m (12 km before the village is found Nr.80)	Sulcorebutia steinbachii Forma (big plants) var. <i>australis</i> <i>W.mariana</i> var. <i>prantneri</i>	the 29 10 83 65°31.1' - 17°43.6'
83	near SOMBRERITA KINGRAY, a little bit further there is an exit to the left and to the right, at 3650 m <i>Sombrerita Kingray ~ Cerro Inca Pekhe?</i>	Sulcorebutia spec. <i>W.mariana</i> var. <i>lauii?</i>	the 29 10 83 65°34.3' - 17°40.8'
83a	like Nr.83	Lobivia spec. <i>L.spec.</i>	the 29 10 83
84	about 1 km before Nr.18, near Rodeo at 3500 m, together with Nr.84a	Sulcorebutia spec. <i>W.sp.Rodeo</i>	the 29 10 83 65°36.2' - 17°39.1'

Field Nr.	Habitat	Genus/species	Observation
84a	like Nr.84	Lobivia spec. <i>L.sp.Rodeo</i>	the 29 10 83
85	somewhat after Rodeo at 3450 m, supposed ident with Nr.84	Sulcorebutia spec. <i>W.sp.Rodeo</i>	the 29 10 83 65°38.4' - 17°37.2'
85a	somewhat after Rodeo, directly along the lake at 3400 m	Lobivia spec. <i>L.sp.Rodeo</i>	the 29 10 83
86	road COCHABAMBA to EPIZANA, at km 50 at 2900 m, the habitat of Sulcor. hoffmanniana has to be in the neighbourhood	Lobivia spec. <i>L.obrepanda</i>	the 29 10 83
87	like Nr.86, but different species	Lobivia spec. <i>L.obrepanda</i>	the 29 10 83
88	directly at Aiquile mountain directly at Aiquile (behind the hospital) and also in the direction of Nr 104, always at 2400-2500 m	Weingartia spec. <i>Weingartia multispina</i> <i>W.multispina</i>	the 24 10 83 65°09.5' - 18°12.6'
89	COCHABAMBA direction Mount Tunari, further direction nature park, at km 15 few plants	Sulcorebutia steinbachii Form <i>W.sp.Tunari</i>	the 06 10 83
90	road COCHABAMBA - St.CRUIZ at km 53, at 3000 m	Sulcorebutia hoffmanniana <i>W.hoffmannii</i>	the 18 05 84 65°45.8' - 17°28.1'
90a	road COCHABAMBA - St.CRUIZ at km 51, left of the road, should be the original-location of the species (according to Aguilar)	Sulcorebutia hoffmanniana Form <i>W.hoffmannii</i>	1987
91	road COCHABAMBA - St.CRUIZ at km 66, left of the road at 3200 m	Sulcorebutia steinbachii v.horrída <i>W.steinbachii var.horrída</i>	the 18 05 84 65°40.1' - 17°27.6'
92	road COCHABAMBA - St.CRUIZ at km 111 (4 km before MONTE PUNCU) at 3050 m The plants grow in rocks together with a tillandsia	Sulcorebutia tiraquensis v.bicolorispina <i>W.tiraquensis Form bicolorispina</i>	the 18 05 84 65°19.8' - 17°34.2'
93	road SUCRE - QUILLA-QUILLA, 2 km before the exit to Estancia Tomapampa at 2800 m old street Sucre-Ravelo, direction Quillaquilla, exit to the Estancia Tomapampa, 2700-2800 m	Weingartia neocumingii var.trollii <i>W.neocumingii</i>	the 20 05 84 65°17.2' - 19°03.4'
93a	like Nr.93, but 500 m before the exit to the, at 2850 m	Weingartia neocumingii v.koehresii <i>W.neocumingii</i>	the 20 05 84 65°17.4' - 19°03.8'
94	road SUCRE - ZUDANEZ at km 16,5, at 3000 m	Parodia spec. <i>P.spec.</i>	the 21 05 84
95	road SUCRE - ZUDANEZ, not far before YAMPAREZ on the right mountain at 3200 m	Tephrocactus spec. <i>T.sp.Yamparaez</i>	the 21 05 84
96	near SUCRE at the cement factory at 2900 m, together with Nr.97	Sulcorebutia canigueralii <i>W.canigueralii Form applanata</i>	the 22 05 84 65°14.3' - 19°.02'
97	like Nr.96	Parodia spec. <i>P.sp.Sucre</i>	the 22 05 84
98	road PUENTE ARCE - SUCRE (in the valley of the Rio Chico), 7,3 km after CHUQUI-CHUQUI, 55 km before SUCRE 7,5 km before Chuquichuqui, 1900 m	Weingartia <i>W.lanata</i> <i>Weingartia lanata</i>	the 23 05 84 65°08.3' - 18°50.9'
98a	like Nr.98, but just after 2 km Chuquichuqui, at the narrow place 1870 m	Weingartia lanata fein <i>W.lanata</i>	12.7.85 65°07' - 18°49'

Field Nr.	Habitat	Genus/species	Observation
99	like Nr.98, but 5 km after CHUQUI-CHUQUI	Parodia spec. <i>P.compressa</i>	the 23 05 84 flower yellow
100	road AIQUILE - PASORAPA at the summit (10 km after AIQUILE), then to the right 40 Min by foot at 2600 m summit would be at Cerro Rodeo	Sulcorebutia spec. <i>W.sp.Villa Grenado</i>	65°05.9' - 18°12.5'
100a	like Nr.100 but 500 m further	Sulcorebutia spec. <i>W.sp.Villa Grenado</i>	65°05.9' - 18°12.8'
100b	like Nr.100a = ident	Sulcor.spec. <i>W.sp.Villa Grenado</i>	65°05.9' - 18°12.9'
101	near PASORAPA at 2150 m	Weingartia spec. <i>W.neocumingii</i> Form	
102	just after PASORAPILLA at 2400 m on Cerro Pukawasi Cerro Pukawasi not found	Weingartia spec. <i>W.neocumingii</i> Form	64°36.2' - 18°18.1'
103	like Nr.102	Lobivia spec. <i>L.sp.Pasorapilla</i>	
104	road AIQUILE - RODEO, between 6 - 10 km after AIQUILE at 2500 - 2800 m about 5 km east of Aiquile, direction Rodeo (through brook) 2500-2800 m	Sulcorebutia mentosa <i>W.mentosa</i>	yellow and darb spination, tubercles more coarse than the forms of MIZQUE 65°08.5' - 18°12.6'
104a	like Nr.104, but 1,5 km before left near the school	Sulcor.flavissima <i>W.flavissima</i>	12.7.85 65°08.5' - 18°12.6'
104b	like 104a	Lobivia obrepanda <i>L.sp.Aiquile</i>	
104c	like Nr.104a	Echinopsis huottii var. <i>E.sp.Aiquile</i>	
105	Near ANZALDO (Rodeo) at 2800 m, fully in top, directly behind the churchyard 5 km after Anzaldo, direction La Vina, right fully in top, small churchyard	Sulcorebutia verticillacantha v.minima <i>W.taratensis</i> var. minima	65°58' - 17°48.3'
105a	1 km south of Anzaldo, 3000 m	Sulcor.taratensis var.minima <i>W.taratensis</i> var. minima	
106	somewhat west of AIQUILE 12 km east of Aiquile (after Nr.100) supposition: along the mainroad	Sulcorebutia spec. <i>W.sp.Villa Grenado</i>	65°05.1' - 18°11'
107	2 km north of the edge of the town of COCHABAMBA	Sulcorebutia <i>W.glomerispina</i>	
108	road AIQUILE - PUENTE ARCE, just before NOVILLERO (about 15 km south of Aiquile)	Sulcorebutia spec. <i>W.flavissima</i>	only few plants dark and yellow forms
109	Road Questa de Santiago to NOVILLERO, 3 km after the Questa, along the Pipe-line at 2800 m	Sulcorebutia purpurea Forma <i>W.santiaginiensis</i> Form	together with Lobivia's 65°17.8' - 18°13.7'
109a	like Nr.109	Lobivia spec. <i>L.spec.</i>	
110	like Nr.109, but on the opposite mountain (Cerro Tranka Khasa) at 2600 - 2900 m	Sulcorebutia santiaginiensis <i>W.santiaginiensis</i> Form	65°18.8' - 18°13.6'
111	together with Nr.78, but somewhat further direction PRESTO, at 2650 m ident with Nr.78c (near Presto)	Parodia spec. <i>P.spec.</i>	supposed ident with Nr. 78c
112	like Nr.100	Lobivia spec. <i>L.spec.</i>	
113	like Nr.100	Echinopsis spec. <i>L.draxleriana</i>	big red flower
114	valley of the Rio Chico, near ZURIMA at 1700 m (along the river)	Parodia spec. <i>P.ocampoii</i>	

Field Nr.	Habitat	Genus/species	Observation
115	like Nr.109, but 5 km after the Questa, before the exit at 2800 m	Sulcorebutia purpurea Form <i>W.santiaginiensis</i> Form	65°17.5' - 18°14.5'
115a	like Nr.115, but 1 km further	Sulcorebutia purpurea Forma <i>W.santiaginiensis</i> Form	65°17.1' - 18°14.6'
116	at the start of the Questa de Santiago near ILINTSCHUPEIJU at 2500 m on rocky plates in moss <i>Ilintschupelju ≈ Linkhu Pampa ??</i>	Sulcorebutia spec. <i>W.santiaginiensis</i> Form	65°16.5' - 18°16.4'
117	between Laguna and MOLLINERO (about half way) at 2750 m	Lobivia spec. <i>L.spec.</i>	
118	like Nr.117	Sulcorebutia spec. <i>W.sp.Laguna-Moliner</i>	65°17.9' - 18°17'
119	south of VILLA GRANADO near PIRHUA-PIRHUA at 2500 m	Sulcorebutia bruchii n.n. <i>W.sp.Pirhua-Pirhua</i>	similar Nr.100 64°59' - 18°19.9'
120	like Nr.41a	Lobivia spec. <i>L.sp.Pasorapa</i>	
121	ZUDANEZ, on Cerro Flor de Aikampa at 2700 m <i>Co. Flor de Aikampa = Co.Ayrampo</i>	Sulcorebutia rauschii <i>W.rauschii</i>	64°41.6' - 19°06'
122	on the mountains around ZUDANEZ from 2550 m	Parodia spec. <i>P.sp.Zudañez</i>	red flower
123	like Nr.121, but at 2500 - 2700 m	Lobivia spec. <i>L.sp.Zudañez</i>	
124	like Nr.122, at 2500 m	Tephrocactus spec. <i>T.sp.Zudañez</i>	red flower
125	Cordillera Mandinga (southwest of ZUDANEZ) at 2700 m, very moist, parallel with the Rio ISKYHASI <i>Iskyhasi = Iscay Huasi</i>	Sulcorebutia spec. <i>W.hertusii</i>	magenta flower (1 plant) 64°43.7' - 19°08.7'
125a	like Nr.125, but in top at 3000-3200 m, together with a very tiny Dyckia (also with Nr.105a)	Sulcorebutia spec. <i>W.sp.Mandinga</i>	magenta and red-yellow flower 64°44.4' - 19°08.8'
126	like Nr.125	Rebutia fiebrigii Forma <i>var.vulpes</i> <i>A.fiebrigii var.</i>	
127	like Nr.50	Echinopsis spec. <i>E.spec.</i>	red flower
128	like Nr.78	Lobivia spec. <i>L.spec.</i>	ident with Nr.77a
129	somewhat south of AIQUILE, directly along the road 2300 - 2400 m <i>5 km south of Aiquile</i>	Echinopsis spec. <i>E.sp.Aiquile</i>	pink flower
130	nordöstlich Cochabamba, nach dem Bot.Garten Cardenas, left, forest of Eucalyptus, there where less grass is, somewhat above the last houses	Sulcor.kruegerii <i>W.kruegerae</i>	66°08.9' - 17°21'
131	like Nr.130	Echinopsis huottii <i>E.huottii</i>	
132	road QUILLACOLLO - MOROCHATA, about 7 km after QUILLACOLLO, where the first high mountains begin, left of the road, between 3200 - 3300 m	Sulcor.tunariensis <i>W.tunariensis</i>	66°17.7' - 17°17.5'
133	Somewhat south of TOTORA, directly along the road, very many	Lobivia obrepanda <i>L.obrepanda</i>	
134	road CLIZA - ANZALDO, about 1 km after CLIZA, left of the road (pipeline), slope, only on the summit, there also lobivia's and parodia's	Sulcor. spec. <i>W.sp.Cliza</i>	65°55.7' - 17°35.9'

Field Nr.	Habitat	Genus/species	Observation
134a	like Nr.134	Lobivia acanthoplegma <i>L.acanthoplegma</i> Fa	
134b	like nr.134a	Lobivia acanthoplegma var. <i>L.acanthoplegma</i> Fa	
135	road ANZALDO - LA VINA, about 8 km before LA VINA, left after the red rocks, vally of the river	Parodia spec. <i>P.sp.Anzaldo</i>	26.6.85
136	like Nr.135, but at the right more than 500 m over the valley, strongly varying	Lobivia obrepanda <i>L.obrepanda</i>	
137	just before LA VINA, between road and bed of the river	Lobivia caineana <i>L.caineana</i>	
138	about 2 km before Torotoro, left of the road, on the slope below, 2900 m	Lobivia obrepanda <i>L.obrepanda</i>	
139	like Nr.138, but in the middle of the slope, 2900 - 3100 m, very many	Sulcor.torotorensis <i>W.torotorensis</i>	65°45.1' - 18°07.1'
139a (224)	flower red with yellow throat, grows on the same mountain as HS 139, but on the edge at 2500 m	Sulcor.torotorensis <i>W.torotorensis</i>	flower red with yellow throat 1987
140	like Nr.138 and Nr.130, but on the summit, 3200 m	Sulcor.spec. <i>W.sp.Torotoro</i>	65°45.1' - 18°07.1'
141	like Nr.140 (together) few plants, one very long spines	Lobivia laeae (?) <i>L.laeae</i>	
142	like Nr.141	Tephrocactus spec. <i>T.sp.Torotoro</i>	
143	In the vally of Rio Caine, about the height of JULIO GRANDE, 2200 m <i>Julio Grande = Julo Grande</i>	Cleistocactus spec. <i>C.sp.Torotoro</i>	
144	directly above LA VINA, 2700 m	Sulcor.breviflora <i>W.breviflora</i>	65°53.5' - 17°56.8'
144a	like Nr.144, but next slope	Sulcor.breviflora long spines <i>W.breviflora</i>	
145	half way LA VINA - ANZALDO, left near village ALCHOMAYA, 2800-2900 m <i>Alchomaya = Jaya Mayu? If so then altitude not correct</i>	Parodia spec. <i>P.spec.</i>	
146	like Nr.145	Lobivia acanthoplegma <i>L.spec.</i>	
146a	like Nr.145, but somewhat higher and about 500 m in the direction ANZALDO	Parodia spec. <i>P.spec.</i>	
147	road ANZALDO - CLIZA, 11 km after ANZALDO at PACTSCHA PATA, left high mountain, 3000 - 3100 m, small and big plants mix <i>Pactscha Pata = Pajcha Pata</i>	Sulcor.taratensis <i>W.taratensis</i> var. <i>minima</i>	65°56.9' - 17°42.3'
148	road COCHABAMBA - St.CRUZ, at km 104, along the road	Lobivia obrepanda <i>L.obrepanda</i>	
149	road TOTORA - OLMEREQUE, 11 km nach TOTORA, rechts and links der road, 300 m, mit Nr.150 <i>Olmereque = Omereque</i>	Sulcoreb.spec. <i>W.totorensis</i>	65°06.6' - 17°46.7'
150	like Nr.149	Lobivia calorubra <i>L.calorubra</i>	
151	like Nr.149, but at km 22/23 above the pumping-station. 2750 - 2800m	Sulcor.spec. <i>W.spec.</i>	65°03.8' - 17°51.3'
151a	like Nr.151, but at km 34	Sulcor.spec. <i>W.spec.</i>	65°.05' - 17°53.9'

Field Nr.	Habitat	Genus/species	Observation
152	like Nr.151, but at km 46, near UANA KUNI CHICO, 2500 m, right and left of the road <i>Uana Kuni = Huanacuni</i>	Sulcor.spec. <i>W.augustinii</i>	64°59.3' - 17°56.6'
153	like Nr. 152, but Km 53, in the forest	Echinopsis spec. <i>E.spec.</i>	
154	like Nr.153	Lobivia obrepanda <i>L.obrepanda</i>	
155	like Nr.39	Parodia spec. <i>P.columnaris</i>	
156	like Nr.39 (Nr.155)	Echinopsis spec. <i>E.spec.</i>	
157	like Nr.38a	Echinopsis spec. <i>E.spec.</i>	
158	40 km south-east of AIQUILE near TUNA PAMPA in the valley of the Rio Lager, 1800 m always in steep rocks, together with a Deuterochomia <i>Tuna Pampa = Tunas Pampa</i>	Weingartia spec. <i>W.pulquinensis var. hentzscheliana</i>	65°03.5' - 18°23.2'
159	like Nr.158, directly at the river	Echinopsis spec. <i>E.spec.</i>	
160	10 km after TUNA PAMPA in direction Rio Grande, just before LARGER PAMPA, left in front of the river 1600 m <i>Larger Pampa = Lagar Pampa</i>	Weingartia spec. <i>W.pulquinensis var. lagarpampensis</i>	64°59.7' - 18°26.8'
161	like Nr.160	Parodia spec. <i>P.augustinii</i>	6.7.85 flower
162	mountain directly at COPAVILQUE, half way the slope, hookshape spines, only between 2400 and 2600 m <i>Copavilque = Copa Willkhi</i>	Parodia spec. <i>P.copavilquensis</i>	
163	like Nr.162, grows on the whole mountain also in top , 2300 - 2700 m	Lobivia obrepanda <i>L.obrepanda</i>	
164	like Nr.162, fully in top, 2700 m red flower	Weingartia spec. <i>W.spec.</i>	65°17.5' - 18°38'
165	road SURIMA - PRESTO, but then turn off to the Rio Grand, (1 km after the pipeline), always in rocks	Parodia spec. <i>P.ocampo</i>	
166	like Nr.165	Blossfeldia liliputana	
167	somewhat south of CAUTA, 2500 m 5 km before Nr.46 direction CRUCE	Echinopsis spec. <i>E.spec.</i>	
168	like Nr.167	Lobivia obrepanda <i>L.obrepanda</i>	
169	like Nr.167	Tephrocactus spec. <i>T.spec.</i>	
170	road LA PAZ - COCHABAMBA, 23 km after exit CARACOLLO, right of the road, 3800 - 3900 m	Mediolobivia orurensis? <i>M.orurensis Form</i>	with Opuntia and manu forms Lob.pentlandii and small Tephrocactus (yellow)
170a	like HS 170	Opuntia <i>O.spec.</i>	
171	road COCHABAMBA - St.CRUIZ at km 92, right of the road, big rock in river bed, 3250 m	Sulcor.tiraquensis var. longiseta <i>W.tiraquensis var longiseta</i>	just before LOPEZ MENDOZA 65°27.7' - 17°29'
172	like HS 171, but at the base of the rocks	Tephrocactus spec. <i>T.spec.</i>	with Passiflora
173	3 km west of MIZQUE, north of the river, 2300 m	Parodia spec. <i>P.spec.</i>	
174	like HS 173, jedoch 2800 m	Echinopsis spec. <i>E.spec.</i>	

Field Nr.	Habitat	Genus/species	Observation
175	like HS 174	Lobivia spec. <i>L.spec.</i>	
176	road to MOROCHATA (from QUILLACOLLO), small village just before MOROCHATA, left rocky mountain, 3400 m	Lobivia caespitosa <i>L.caespitosa</i>	
177	road COCHABAMBA - COLOMI near SACABA, right of the road in the forest of Eucalyptus, 3500 m, km 21 from C.	Sulcor.cochabambina Forma <i>W.steinbachii</i> Form	65°58.6' - 17°24.6'
177a	like HS 177	Tephrocactus spec. <i>T.spec.</i>	
178	like HS 177	Lobivia obrepanda <i>L.obrepanda</i>	
179	like HS 177	Sulcor.glomerispina <i>W.glomerispina</i>	S.steinbachii Forma 65°53.2' - 17°24.4'
180	just before COLOMI (from COCHABAMBA), km 34, 3500 m	Sulcor.steinbachii <i>W.steinbachii</i>	viele Formen
181	like HS 180	Lobivia caespitosa <i>L.caespitosa</i>	
182	like HS 181	Lobivia <i>L.caespitosa</i>	
183	road COLOMI - AGUIRRE - TIRAQUE (turn to the right at km 48) = AGUIRRE) directly after the village right, 3500 m	Sulcor.steinbachii <i>W.steinbachii</i>	Pflanzen werden zum Teil recht groß 65°49.3' - 17°22.1'
184	directly at AGUIRRE, hill xxxx of the houses	Lobivia neocinnabarina <i>L.neocinnabarina</i>	
185	road COCHABAMBA - LA PAZ, at SAYARI (BOMBEO) km 70 3250 m	Sulcor. verticillacantha <i>W.verticillacantha</i>	66°27.1' - 17°38.2'
185a	like HS 185 (left of the road)	Lobivia pentlandii <i>L.pentlandii</i>	
186	like HS 185, right of the road, km 78	Lobivia pentlandii <i>L.pentlandii</i>	
187	like HS 185, but at km 73, right of the road, 3800 m	Sulcor. verticillacantha <i>W.verticillacantha</i>	km 73 66°27.6' - 17°38.9'
187a	like HS 187, but neighbour summit, 3850 m	Sulcor. verticillacantha <i>W.verticillacantha</i>	
188	north of Kami, behind the settlement CHARAHUATO 3950 m xxxx	Sulcor. spec. <i>W.spec.</i>	66°47.4' - 17°15.4'
189	north of HS 188, at settlement KHALA SINDRO 3750 m (Co.Dawinga xxxx) <i>Co. Dawinga...= Cerro Tahuña.</i> Altitude maximal 3461 m instead of 3750 m.	Sulcor.spec. <i>W.spec.</i>	66°51.6' - 17°11.8'
189a	like HS 189 (distance ≈200 m)	Sulcor.spec. <i>W.spec.</i>	66°51.7' - 17°11'
189b	like HS 189a	Tephrocactus spec. <i>T.sp.Kami</i>	
190	directly at KAMI	Lobivia caespitosa <i>L.caespitosa</i>	along the road very many
191	above the mine village KAMI (xxxx) 3950-4000 m	Sulcor.spec. <i>W.sp.Kami</i>	66°48.2' - 17°21.8'
191a	like HS 191, but below the village, below the churchyard 3550 m	Sulcor.spec. <i>W.sp.Kami</i>	not very many plants
192	road COCHABAMBA - LA PAZ km 107, 4000 m	Lobivia caespitosa <i>L.pentlandii</i>	
193	like HS 192, km 120, 4200 m	Lobivia pentlandii <i>L.pentlandii</i>	
193a	road COCHABAMBA - LA PAZ about 10 km before HS 170	Tephrocactus spec. <i>T.spec.</i>	

Field Nr.	Habitat	Genus/species	Observation
194	like HS 193a grow along the road all the time	Lobivia pentlandii <i>L.pentlandii</i>	
194a	like HS 194, flower yellow	Tephrocactus spec.	
195	road ISCAYACHI - TARIJA directly after the village (on the plain) 3400 m	Oreocereus trollii <i>O.trollii</i>	
196	like HS 195, but ca 2 km further direction TARIJA	Lobivia spec. <i>L.sp.Iscayachi</i>	
197	like HS 196	Aylostera spec. <i>A.sp.Iscayachi</i>	in cracks in the rocks, very fine
198	Questa de Sama, 3300 m	Aylostera spegazziniana <i>A.spegazziniana</i>	with HS 200
199	Questa de Sama, 3500 - 3500 m, become very big	Lobivia chrysochete <i>L.chrysochete</i>	with HS 200
200	Questa de Sama, grow between 3200 - 3600 m	Sulcor.tarijensis <i>W.tarijensis</i>	get bigger above
201	like HS 195, flower yellow	Tephrocactus spec. <i>T.spec.</i>	
201a	like HS 195, flower rot	Tephrocactus spec. <i>T.spec.</i>	
202	Questa de Sama, with HS 200, 3200 m	Aylostera spec. <i>A.spec.</i>	
203	Questa de Sama, with HS 200, 3400 m	Aylostera spec. <i>A.spec.</i>	
204	road TARIJA - ISCAYACHI at km 18	Lobivia tiegeliana <i>L.tiegeliana</i>	
205	like HS 204	Parodia spec. <i>P.spec.</i>	xxxx
206	like HS 204	Aylostera muscula <i>A.muscula var.</i>	
206a	just before TARIJA, 1900 m	Echinopsis mamillosus <i>L.mamillosa</i>	
207	at PUERTO PEREZ, at Titicaca 3850 m	Lobivia pentlandii <i>L.pentlandii</i>	
207a	like HS 207	Tephrocactus spec. <i>T.spec.</i>	wächst in der ganzen Gegend
Nr.208 - 237 were distributed under other number as well. These are written in brown between brackets.			
208	Flußtal des Rio Cotacajes bei der Ansiedlung CHORO auf 1200 - 1250 m	Echinopsis spec. <i>E.spec.</i>	
209 (219)	near COLOMI, 3600	Sulcor.steinbachii <i>W.steinbachii</i>	flower yellow
210	like HS 208	Sulcor.menesesii <i>W.menesesii</i>	66°48.9' - 16°49.9'
211 (209)	like HS 208	Parodia ayopayana <i>P.ayopayana</i>	
212 (225)	mountains like HS 139, but direction Rio Caine - MINE ASIENOS (SAN VICENTE), 2700 m	Sulcor.species <i>W.sp.Torotoro</i>	flower red 65°40.9' - 18°08.5'
213 (222)	near Torotoro, direction San Pedro, is found on the whole mountainchain, 3100 m	Sulcor.species <i>W.sp.Torotoro</i>	flower yellow
214 (227)	mountain between TOROTORO and the Rio Caine, below at the river, steep rocks, 2000 m	Parodia spec. <i>P.sp.Torotoro</i>	
215 (233)	road COCHABAMBA - St.CRUIZ, 7 km after EPIZANA, 2800 m 7 km after Epizana direction Santa Cruz the altitude is 3100 m instead of 2800 m	Sulcor.species <i>W.spec.</i>	65°09.1' - 17°40'

Field Nr.	Habitat	Genus/species	Observation
216 (229)	exactly north of the Rio Caine, near Mine Asientos (xxxx between Rio Caine and SAN VICENTE) near PUNILA KHASA, 2750 m <i>Punila Khasa = Punillas</i>	Sulcor.spec. <i>W.spec.</i>	65°33.1' - 18°10.8'
217 (211)	road COCHABAMBA - St.CRUZ just before exit to CLIZA, left of the road (just before you see the barracks at the left) above a small church, xxxx slope, 2900 m: TOLATA	Sulcor.clizensis (WR611) <i>W.sp.Tolata</i>	65°58' - 17°31'
218 (228)	xxxx 25 km from CLIZA to VILLA VILLA, at 2800 m, Cerro Huachani, near SACABAMBA <i>Co. Huachani = Co. Humalchani</i>	Sulcor.taratensis v.minima <i>S.sp.Sacabamba</i>	65°46.6' - 17°48.3'
219 (230)	just before habitat HS 81 (bridge) left mountain, 2600 m (coming from MIZQUE)	Sulcor.spec. <i>W.spec.</i>	
220 (235)	near POJO, 2900 - 2950 m	Sulcor.spec. <i>W.aguilarii</i>	was discovered before by Aguilar 64°48' - 17°46.4'
221	near TOROTORO, direction San Pedro de Buena Vista, fully in top on xxxx, 3050 m	Sulcor.spec. <i>W.sp.Torotoro</i>	65°46.3' - 18°9.4'
221a	like HS 221	Sulcor.spec. <i>W.sp.Torotoro</i>	
222 (213)	near TIRAQUE 2900 m	Sulcor.steinbachii Forma <i>W.hoffmannii</i>	65°51.4' - 17°29.3'
223 (213a)	like HS 222, 3000 m	Sulcor.steinbachii Forma <i>W.hoffmannii</i>	65°51.4' - 17°29'
224 (213b)	like HS 222, 3100 m summit, ESTANCIA HOTCHI Habitats of HS 222-224: road COCHABAMBA to St.CRUZ, left mountains, opposite mountain with Tillandsia cardenasianus near SAN BENITO <i>Estancia Hotchi = Estancia Kochi Pampa</i>	Sulcor.steinbachii Forma <i>W.hoffmannii</i>	65°51.4' - 17°28.7'
225 (231)	= HS 16 at 2900 m	Sulcor.spec. <i>W.spec.</i>	
226 (236)	COCHABAMBA - St.CRUZ, km 88/89 left of the road. 2900 m should be typelocation of the species	Sulcor.polymorpha <i>W.polymorpha</i>	65°29.2' - 17°28.4'
227 (214)	from PUNATA to VILLA RIVERO, then left direction ARANI (= JANAPUNI), 3000 m, Habitat is near HS 58 and HS 60 <i>Janapuni ≈ Estancia Puca (Orkho)</i>	Sulcor.spec. <i>W.spec.</i>	65°29.2' - 17°28.4'
228 (218)	Nähe TIRAQUE, 3200 m	Sulcor.spec. <i>W.steinbachii Form</i>	
229 (216)	10 km after HS 227, direction TINTIN, 3300 m (=CONVENTO) right on the mountain	Sulcor.spec. <i>W.spec.</i>	65°44' - 17°39.4'
230 (217)	= HS 59	Sulcor.spec. <i>W.spec.</i>	65°44' - 17°39.8'
231 (212)	near PUNATA, at RIO DE LOS FLORES ZAPATA, 2850 m just after CLIZA, left xxxx = ca. 4,5 km to PUNATA	Sulcor.spec. <i>W.spec.</i>	65°53.5' - 17°33.8'
232 (234)	near Pojo at 2900 m	Lobivia calorubra v.pojoniensis <i>L.pojoniensis</i>	
233 (215)	like HS 227, 3200 m	Sulcor.spec. <i>W.sp.Punata</i>	

Field Nr.	Habitat	Genus/species	Observation
234 (232)	road TOTORA - MIZQUE, somewhat south of HS 23, near ANTANASI at 2600, you can see Mizque <i>Antanasi ≈ Olle Khasa Loma ???</i>	Sulcor.spec. <i>W.spec.</i>	65°16.8' - 17°48.5'
235 (220)	TOROTORO, directly behind the airstrip, 2600 m	Sulcor.spec. <i>W.sp.Torotoro</i>	flower red with yellow throat 65°46.5' - 18°7.9'
236 (226)	like HS 214, but at 2200 m below at the river	<i>P.spec.</i>	
237 (223)	like HS 213, grow partially together, left on the mountain, mostly somewhat lower 2600 m	Weingartia spec. <i>W.spec.</i>	flower yellow
238	grows along the Rio Caine all the time, discovered 3 km before TOROTORO	Lobivia caineana <i>L.caineana</i>	xxxx
239	road COCHABAMBA - St.CRUZ, at km 159 (= 35 km after EPIZANA), 2950 m CRUCE KILLA ORKHO, Prov.Carrasco, TOTORA similar to HS 220 <i>Cruce Killa Orkho ≈ Cerro Quilla Orkho</i>	Sulcor.spec. <i>W.spec.</i>	65°05.3' - 17°45.2'
240	between MUYURINA and VALLEGRANDE, 8 km before VALLEGRANDE, 2000 M	Sulcor.langeri <i>W.langeri</i>	xxxx 64°07.1' - 18°25'
241	like HS 240	Lobivia spec. <i>L.spec.</i>	
242	between MOROMORO and Co. El Mojon, CHACO PATA, 2500 m	Aylostera spec. <i>A.spec.</i>	
243	like HS 242	Parodia spec. <i>P.spec.</i>	
244	like HS 242	Lobivia spec. <i>L.spec.</i>	flower weiß
245	near SANTANA (=north of PUCARA, 2600 m	Lobivia spec. <i>L.spec.</i>	
246	like HS 245	Lobivia spec. <i>L.spec.</i>	
247	like HS 245, but at 2800 m	Aylostera spec. <i>A.spec.</i>	
248	between LA HIGUERA and Rio Grande, lowest place 1200 m	Vatricania guentheri <i>V.guentheri</i>	
249	like HS 248	Parodia spec. <i>P.spec.</i>	
250	like HS 248	Gymnocalycium spec. <i>G.spec.</i>	red flowers
251	near NUEVO MUNDO at 2200 m (= Chuquisaca, Prov. B.Boeto) = north of VILLA SERRANO	Sulcor.spec. <i>W.crispata</i>	64°17' - 18°59.6'
252	like HS 251	Lobivia spec. <i>L.spec.</i>	
253	coming from NUEVO MUNDO, 20 km before VILLA SERRANO, 2500 m	Sulcor.spec. <i>W.crispata</i>	64°20.2' - 19°01.4'
254	like HS 253	Lobivia spec. <i>L.spec.</i>	
255	coming from NUEVO MUNDO, 7 km before VILLA SERRANO, 2300 m	Sulcor.spec. <i>W.crispata</i>	64°20.9' - 19°04.2'
256	10 km after VILLA SERRANO near ESTANCIA MOLLE PAMPA, 2400 m	Sulcor.spec. <i>W.crispata</i>	64°18.1' - 19°10.4'
257	like HS 256	Lobivia spec. <i>L.spec.</i>	
258	directly at PADILLA, 2300 m	Sulcor.spec. <i>W.crispata</i>	xxxx buds 64°19' - 19°18.9'
259	like HS 258	Lobivia spec. <i>L.spec.</i>	
260	near SILLIANI (= 4 km after PADILLA in direction SOPO SOPO = TOMINA) 2400 m	Sulcor.spec. <i>W.crispata</i>	64°21.1' - 19°16.8'

Field Nr.	Habitat	Genus/species	Observation
261	directly bei TOMINA	Gymnocalycium spec. <i>G.spec.</i>	
262	9 km north of TARABUCO in direction PRESTO, at 3150 m	Sulcoreb.spec. <i>W.tarabucoensis</i>	all plants long, thin roots 64°54.1' - 19°7'
263	21 km north of TARABUCO in Rio Presto, near Yora Toga, 3100 m <i>Yora Toga = Yuraj Punco</i>	Sulcor.spec <i>W.tarabucoensis</i>	64°55' - 19°4.3'
264	from TOROTORO direction SAN PEDRO, at 3000 m, = same mountain as HS 213 and 237	Sulcor.spec. <i>W.spec.</i>	flowers red and red with yellow throat
265	15 km south of TOROTORO near SACAVILQUA, 3300 m <i>Sacavilque = Saca Willkhi</i>	Sulcor.spec. <i>W.spec.</i>	similar with HS 139 65°43.6' - 18°11.9'
266	above the MINA ASIENTOS near Palla Palla	Sulcor.spec. <i>W.spec.</i>	only 4 Pflanzen 65°31.5' - 18°19'
267	Slope south of TOROTORO at La Grutta, 3000 m <i>The Umalajantacave is located north west of Torotoro</i>	Sulcor.spec. <i>W.spec.</i>	supposed ident. with <i>S. vertic. var cuprea</i> WR 65°44.9' - 18°9.9'
268	between TOROTORO and SAN PEDRO, near OVEGERIA, 3200 m <i>Ovegeria = Estancia (or Rio?) Vaqueria, 3300 m instead of 3200 m.</i>	Sulcor.spec. <i>W.spec.</i>	65°52.3' - 18°7.8'
269	like HS 268, but near YONGOMA, 3000 m <i>Yongoma = Estancia Yunguma</i>	Sulcor.spec. <i>W.spec.</i>	65°52.6' - 18°6.5'
270	near TOROTORO at ARARIA KUNOMA, 3000 m <i>Araria Kunema = Estancia Ararian ?</i>	Sulcor.spec. <i>W.spec.</i>	65°50.1' - 18°8.9'
271	like HS 270	Lobivia spec. <i>L.spec.</i>	
272	in the neighbourhood of TOROTORO at PALLA PALLA (not ident. with P.P. near MINE ASIENTOS), 3000 m <i>Palla Palla ≈ Cerro Payachata?</i>	Sulcor.spec. <i>W.spec.</i>	65°39.1' - 18°10.3'
273	near TOROTORO at HAWAS CASA, 3000 m <i>Hawas Casa = Abascasi</i>	Sulcor.spec. <i>W.spec.</i>	65°49.2' - 18°12'
274	near TOROTORO at LUPE LUPE at 3100 m <i>Lupe Lupe = Estancia Lupi Lupi</i>	Sulcor.spec. <i>W.spec.</i>	65°50.7' - 18°10.8'