

Expedition to Peru and Bolivia, 1970/71.

Collections of Potato species. J.G.Hawkes, J.P.Hjerting, P.J.Cribb
and Z. Huamari.

- 4114 S. acaule Peru, dept. Puno, 145 km from Arequipa on road to Puno, above La Escalera. Alt. 4,450m. 9/1/71. $70^{\circ}45'W$. $15^{\circ}55'S$. Wet high puna. Rich damp soil by stream at base of large rocks. Small rosettes, one with flower. (Mother tubers. H.T.) *prov. San Román.*
- 4116 S. acaule Peru, dept. Puno, Juliaca. Alt. 3820m. 10/1/71. $70^{\circ}10'W$. $15^{\circ}32'S$. Ditch in front of Hotel Juliaca. H.T.S.
- 4117 S. canasense? Peru, dept. Puno, prov. Puno, 5km from Puno on road to Juliaca. Alt. 4,000m. 12/1/71. $70^{\circ}3'W$. $15^{\circ}47'S$. Wet puna. Amongst stones and at bases of walls near road. Small plants. Also S. acaule, Urtica, Cajophora, Stipa, etc. present. H.T. $2n = 24$.
- 4118 S. canasense? As No. 4117 but 100m from it, on other side of road. H.T.
- 4125 S. sparsipilum Bolivia, dept. La Paz, prov. Murillo, road from La Paz to Palca, ± 10 km. from Ovajes, Ovijuyo. ± 3,000m. 15/1/71. $68^{\circ}0'W$. $16^{\circ}33'S$. In and around potato fields in banks and hedges, etc. Close to a plantation of andigena, with similar calyx and corolla but different leaf dissection. Fls dark purple. H.
- 4135 S. ajanhuiri Peru, dept. Puno, prov. Huancané, Taraco, 1 km on road to Huancané from village. ± 3,850m. 12/1/71. Potato field by road, rich soil. Growing with other frost-resistant species - S. juzepczukii, S. curtilobum, and apparently frost resistant varieties of andigena and S. stenotomum. Leaves large, in rosettes, with decurrency of upper pair of laterals. Flowers blue-violet. H.
- 4136 X S. juzepczukii As No. 4135. Very "primitive" form. Could this be a backcross to S. acaule? H.
- 4159 S. yungasense Bolivia, Dept. La Paz, prov. Sud Yungas, road from La Paz to Chulumani, Puente Villa. Alt. 1250m. 16/1/71. $16^{\circ}23'S$. $67^{\circ}40'W$. Growing among subtropical vegetation and as a weed of sugar cane field. One plant (3 sheets) about 1m tall. Flowers creamy white, turning pale yellow on drying. H.
- 4162 S. yungasense Bolivia, dept. La Paz, prov. Sud Yungas, Chulumani, Vivero Experimental del Ministerio de Agricultura. Alt. 1400m, ult. 10/1/71. $16^{\circ}28'S$. $67^{\circ}30'W$. Growing as a weed in a hedge under shade. Plants to 90cm. Flowers deep cream. H.T.

Bolivia. 1970/71

Collections of potato species.

- 4168 *S. yungasense* Dept. La Paz, prov. Sud Yungas, road from La Paz to Chulumani, Puente Villa. Alt. 1200m. 17/1/71. $16^{\circ}23' S.$ $67^{\circ}40' W.$ Bushy places under shade of trees by river and suspension bridge. Plants to 60cm; flowers deep cream. H. T. u.
- X
- K
- 4181 *S. tuberosum* ssp. *andigena* "Papa negra". Dept. La Paz, prov. Andes, Palcoco market. 19/1/71. Black tubers of Chiar imilla type. T.
- 4182 *S. tub.* ssp. *andigena* "Papa negra". Collection data as for 4181. Black tubers of Chiar imilla type but with white eyes. T.
- 4183 *S. sp.* (Cultivated) Collection data as for 4181. Black tubers of Chiar imilla type, but splashed pink. T.
- 4184 *S. sp.* (Cultivated) Collection data as for 4181. Pale pink tubers of imilla shape with red eyes. T.
- 4185 *S. sp.* (Cultivated) Collection data as for 4181. Red tubers of imilla type. T.
- 4186 *S. sp.* (Cultivated) Collection data as for 4181. Yellow concertina tubers, flushed purple at eyes. T.
- 4187 *S. sp.* (Cultivated) Collection data as for 4181. Red tubers, white spectacled. T.
- 4188 *S. sp.* (Cultivated) Collection data as for 4181. Yellow tubers of imilla type with purple eyes. T.
- 4189 *S. sp.* (Cultivated) Probably *S. phureja*. Collection data as for 4181. Red long tubers with a touch of yellow at the eyes. T.
- 4190 *S. phureja* ? Collection data as for 4181. Yellow tubers with pinkish flush. T.
- 4191 *S. phureja* ? Collection data as for 4181. Red isodiametric tubers with white spectacles. T. $2n=24$
4192. *S. phureja* Collection data as for 4181. Oval or irregular tubers, + spectacled, purple, but with pink or yellow splashes and purple eyes. T. $2n=24$ ~~26~~
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Note: Imilla type tubers are more or less rounded but shorter in the axial dimension than they are laterally. The eyes are normally deep.

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Bolivia. 1970/71

Collections of potato species.

- 4193 *S. ajanhuiri* ^{juzepczukii} Dept. La Paz, above Achacachi on road to Sorata, west facing slope. Alt. 4150m. 19/1/71. Cultivated field, dry poor soil. Infected with Spongospora. Flowers blue; plants small. H.T.
- 4194 *S. achacachense* ^{*S. spumiferum*} Dept. La Paz, prov. Larecaja or Omasuyos, 23 km from Achacachi on road to Sorata, east facing slope. Alt. 4150m. 19/1/71. 15°49'S. 68°39'W. Damp rock ledges in cliffs not far from road. Wet puna formation. Flowers rotate, purple. H.T.
- 4195 *S. acaule* Locality etc., as for 4194. On damp rock ledges and slopes, rich soil. Rosettes; flowers blue-purple. H.T.
- 4198 *S. curtilobum* Dept. La Paz, prov. Murillo, Calacoto, garden of Sr. Humberto Gandarillas. Alt. 3300m. 18/1/71. 16°30'S. 68°49'W. Growing as a garden weed amongst planted potatoes. Flowers purple; articulation high. H.
- 4199 *S. achacachense* Dept. La Paz, prov. Omasuyos, 25km from Achacachi on road to Sorata, east facing slopes. Alt: 4100m. 19/1/71. 15°49'S. 68°39'W. Damp rock ledges. Small plants. T.
- 4200 *S. phureja* Dept. La Paz, prov. Larecaja, road from Achacachi to Sorata, 30km from Achacachi. Alt: 3900m. 19/1/71. Flowers deep magenta purple. H.T. Cult. field.
- 4201 *S. phureja* Dept. La Paz; collection data as for 4200. Flowers deep pinkish-purple. H.T.
- 4202 *S. phureja* Dept. La Paz; collection data as for 4200. Flowers bright pinkish purple. H.T.
- 4203 *S. phureja* Collection data as for 4200. Flowers white. H.T.
- 4204 *S. stenotomum*? Collection data as for 4200. Tall narrow plants with irregular calyx and blue-purple flowers. H.T.
- 4205 *S. juzepczukii* Collection data as for 4200. Rosettes. Flowers purple. H. T.
- 4206 *S. circaeifolium* Dept. La Paz, prov. Larecaja, 9.5 km from Sorata on road to Tacacoma (turning to left). Alt: 3,100m. 19/1/71. 15°43'S. 68°42'W. In damp hedgebanks amongst bushes. Small plants, no flowers. H.
- 4212 *S. mixtecum virgatum* ^{15°43' S. 68°42' W.} Dept. La Paz, prov. Larecaja, road from Sorata to Tacacoma, 16.5 km from Sorata. Alt: 3,500m. 19/1/71. 15°43'S. 68°42'W. Shade of small lichen-covered trees and bushes by road in open scrub with ground flora of Pernettya, ferns, mosses, etc. No flowers. H.T. (Some living plants). ^{2 n = 24}

Bolivia. 1970/71

Collections of Potato Species.

- vio lf
- 4214 S. virgultorum Dept. La Paz, prov. Larecaja, road from Sorata to Tacacoma, 17.5km from Sorata. Alt: 3500m. 20/1/71. 15°43'S.
68°40'W. Amongst trees and bushes by road. T.H.L.
- 4215 K S. virgultorum As 4214 but 500m further on. Alt: 3550m T.H.L. (Atilaya) ---
- 4217 K S. virgultorum Dept. La Paz, prov. Larecaja, 38km from Sorata on road to Tacacoma, just by river crossing. Alt: 3600m. 20/1/71. 15°38'S. 68°40'W. In bushes on left hand side of road. Tall plants with bright purple-blue flowers. Mother tuber 2 x 3 x 2 cm. H.T.L.
- 4218 K S. candolleanum (?) As 4217 but 38.5km from Sorata. Growing with № 4219 at bottom of potato field. Alt: 3570m. H.
- 4219 S. phureja (?) As 4218, and growing with it at bottom of potato field. H.T.
- 4222 K S. virgulorum As 4217 but 39km from Sorata. Alt: 3550m. Three tubers. No flowers. H.T.
- 4224 S. phureja "Aikka phureja" Dept. La Paz, prov. Larecaja, road from Millipaya to Achacachi, Chilcapampa. Alt: 3600m. 21/1/71. Cultivated field. Isodiametric tubers or slightly elongated with purple skin and yellow spectacles. T.
- 4225 S. phureja "kkello phureja" As 4224. Tubers yellow, with purple eye spots. T.
- 4226 S. chaucha (?) Dept. La Paz, prov. Larecaja, road from Sorata to Achacachi at the turning to Millipaya at about 30km from Achacachi. Alt: 3900m. 21/1/71. Cultivated field. Long red tubers. H.T.
- 4227 S. chaucha (?) As 4226. Purple oval tubers. H.T.
- 4228 S. phureja As 4226. Dark purple tubers of imilla type. Flowers purple. H.T.
- 4229 S. tub. ssp. andigena As 4226. Tubers pale, flushed purple at eyes; flowers blue. H.T.
- 4230 S. tub. ssp. andigena As 4226. White tubers and flowers. H.T.
- 4231 S. phureja As 4226. Tubers pink, ± isodiametric. (H)T.
- 4232 S. phureja As 4226. Tubers oval to isodiametric, red, spectacled. (H)T.
- 4233 S. phureja As 4226. Tubers oval to elongated; white skin. (H)T.
- 4234 Oxalis tuberosa "Huaña kaya". Bought in Palcoco market, dept. La Paz, prov. ~~Cochabamba~~. Dried elongated tubers. 19/1/71
Andes

5.

Bolivia. 1970/71. Collections of Potato Species.

Andes

4235 Oxalis tuberosa "Uma Kaya" Dept. La Paz, prov. ~~Cochabamba~~, bought in Palcoco market, came from Huarina. "Chuño de oca." Dried tubers. 19/1/71.

4236 K S. acaule Dept. La Paz, prov. Aroma, Baños de Vis cachani. Alt: 3800m. 23/1/71. 17°10'S. 67°58'W. Amongst stones or low wall in bathing enclosure. H.S.

4239 K S. megistacrolobum Dept. La Paz, prov. Aroma, road to Luribay at 8km from main road from La Paz to Oruro. Alt: 3800m. 23/1/71. 17°24'S. 67°33'W. Among stones by roadside. Pentagonal purple flowers. H.T.

4240 K S. leptophyes ? Dept. La Paz, prov. Aroma, road to Luribay at 11 km from main road from La Paz to Oruro (turning at 152km). Alt: 3900m. 23/1/71. 17°22'S. 67°33'W. Among stones in full sun; flowers rich purple, pentagonal. H.T.

4241 K S. leptophyes ? Collection data as for 4240 but shade form. H.

4242 K S. sparsipilum Dept. Cochabamba, prov. Cercado, near Cerro San Pedro ~~on~~ on edge of Cochabamba, in grounds of Botanic Garden. Alt: c. 600m 25/1/71. Amongst grass and weeds. Flowers blue-purple. H.

4243 K S. acaule Dept. Cochabamba, prov. Arani, Koari, 87km from Cochabamba on road to Santa Cruz. Alt: 3550m. 26/1/71. By wall in enclosed field of Hacienda amongst other tall plants. Long stems and leaves. Berries. H.S.

4244 S. tub. ssp. andigena ?? Data as for 4243. "Kkipa papa". Weed in field of ssp. andigena. Leaves 3-4-jurate. Tubers flushed mauve, brownish. H.T.

4246 K S. acaule Data as for 4243. From semi-open habitat. Stems of medium length. H.S.

4247 K S. toralapanum Dept. Cochabamba, prov. Arani, Hacienda Toralapa, turning of the Cochabamba to Santa Cruz road between km 71 & 72. Alt: 3500m. 26/1/71. In fallow (first year, with some cereals) Rosettes with only the inflorescence above ground surface. Some with elliptic leaves, others with several leaf lobe pairs. H.

4249 K S. sparsipilum Dept. Cochabamba, prov. Cliza, 30km from Cochabamba on Santa Cruz road, San Benito, Estación Frutícola Nacional. Alt: 3750m. 26/1/71. Shade and light forms; shade forms with lighter green less dissected leaves. Fls blue-purple. No berries. H.

4251 K S. liriunianum or S. sparsipilum Dept. Cochabamba, prov. Quillacollo, Baños de Liriuni, 14 km from Quillacollo on road to Morochata. Alt: 3100m. 27/1/71 Waste stony place outside baths. Some large plants, some small; with rich purple large flowers and some berries. Plants to 30cm. H.S. 2n-24

6.

Bolivia, 1971.

Collections of Potato Species

J.G. Hawkes, J.P. Hjerting, P.J. Cribo and Z. Huamán.

- 4253 *S. sparsipilum* (*S. liriunianum*) Dept. Cochabamba, prov. Quillacollo. 1 km below Liriuni, 13 km from Quillacollo. Alt: 3000m. 27/1/71. Abundant weed of maize field below road. Stem (10-) 20-30cm; fls purple. H. *b*
- 4254 *S. sparsipilum* (*S. liriunianum*) As 4253 but growing as a weed of potato field above road, together with andigena, stenotomum, etc. H. *b*
- 4255 *S. sparsipilum* (*S. liriunianum*) As 4254. Another collection. H. *b*
- 4257 *S. liriunianum* ? Dept. Cochabamba, prov. Quillacollo, on road from Cochabamba to Morachata, 14 km from Quillacollo. Alt: 3150m. 27/1/71. Among stones by roadside. Much narrower leaflets and more interjecteds than 4253, 4254, etc; probably closer to type of *S. liriunianum*. H. *b*
- 4261 *S. toralapanum* Dept. Cochabamba, prov. Quillacollo, 20.5 km from Quillacollo on road to Morachata. Alt: 3500m. 27/1/71. On a scree below the road. Flat rosettes. H. *b*
- 4262 *S. cursivepaccatum* As 4261, on scree below road and among bushes. Small plants, no flowers. H. *b*
- 4265 *S. juzepczukii* (or *S. acaule*?) Dept. Cochabamba, prov. Quillacollo, 23.3km on road from Quillacollo to Morachata, between Junco Cala and Puente San Miguel. Alt: 4000m. 27/1/71. Cultivated (?) in rich dark soil. Fls bright purple. tubers white, deep eyed, round. H. T. *b*
- 4266 *S. curtilobum* As 4265, cultivated in rich dark soil. flowers pinkish-purple. H. T. *b*
- 4267 *S. tuo*. ssp. andigena. Nom. vern. "Janco Imilla". As for 4265. Cultivated in rich soil. Tubers white, compressed, deep eyed. Flowers white. H. *b*
- 4268 *S. curtilobum* As for 4265, cultivated in rich soil. Flowers bright pinkish purple. H. T. *b*
- 4269 Hybrid of *S. toralapanum* x *S. acaule* ? As 4265, but growing in stony ground amongst rocks by roadside. Leaf poorly dissected; flowers deep rich purple. H. *b*
- 4270 *S. toralapanum* ^{*syn. S. curtilobum*} As 4265, but growing in stony ground amongst rocks by roadside, very abundant. Rosettes; stems absent; peduncles erect; leaves more or less simple, some lobed; flowers deep rich purple. H. (1 tuber). *b*
- DE 4271 *S. acaule* As 4265, but growing in stony ground amongst rocks by roadside. Flat rosettes, with well dissected leaves. Flowers deep rich purple. H. S. *b*

Bolivia, 1971.

Collections of Potato Species

J.G. Hawkes, J.P. Hjerting, P.J. Cribb and Z. Huaman.

- 4272 S.ajanhuiri Dept. Cochabamba, prov. Quillacollo, 28.5 km on road from Quillacollo to Morochata, between Janco Cala and Puente San Miguel. Alt: 4000m. 27/1/71. Cultivated in rich soil. Tubers long, many-eyed, purple; fls blue-purple. H.T.
- 4273 S.stenotomum As 4272. A few plants cultivated amongst S.ajanhuiri, S.juzepczukii and S.curtilobum, in rich soil. Fls bright pinkish-purple; large calyx. H.
- 4276 S.brevicaule? Dept. Cochabamba, prov. Quillacollo, 21.7 km from Quillacollo on road to Morochata, Puente San Miguel. Alt: ± 3750m. 27/1/71. Amongst bushes above river ford. Small plants, softly hairy, with rich purple flowers. Shaded plants with broad terminals (cfr. S.gultorum). H. T.
- 4279 S.berthaultii Dept. Cochabamba, prov. Cercado, Cerro San Pedro, above botanic garden and in upper part of garden itself (natural hillside area). Dry stony hillside amongst bushes and below by road, in waste places and in far end of garden. Fls ranging from almost white to purple, and from rotate to stellate. H. Alt: 2,700m. 23/1/71
- 4280 ~~K~~ S.sparsipilum As for 4279. Weed in lower botanic garden, not far from S.berthaultii. H.
- 4290 ~~K~~ Solanum colominense? Dept. Cochabamba, prov. Carrasco, 104.5 km. from Cochabamba on road to Pojo (near river crossing). Alt: 3000m. 29/1/71. In water meadow among rocks with Sisyrinchium and Commelinaceae. Fls purple. H.
- 4292 ~~K~~ S.microdontum Dept. Cochabamba, prov. Carrasco, 107.2 km from Cochabamba on road to Pojo, just before Uchungani. Alt: 3025m. 29/1/71. Amongst bushes at roadside. One colony only, and very abundant there. Puna formation. Plants to 1 m; flowers white. H.
- 4293 ~~K~~ S.colominense or S.previcaule As for 4292. Rocky place above the road, with Cactus, Tillandsia, etc. Puna formation. Plants of S.toralapanum there also. H.
- 4295 ~~K~~ S.doddsii Dept. Cochabamba, prov. ~~Carrasco~~, 192 km from Sucre, 40 km from Aiquile, on road to Epizana. Alt: ± 3000m. 29/1/71. Rocky slopes (very steep) at and above road, among trees and bushes. Branched bushy plant with no glands. Corolla stellate to semi-rotate, white and pale mauve to fairly dark mauve. H. Mizque
- 4296 ~~K~~ S.torrecillasense? As for 4295. Growing with S.doddsii on dry stony hillsides just below road. fls purple, rotate. H.
- 4299 ~~X~~ S.chacoense As for 4295. Growing on rocky slopes above road, with S.doddsii. Plant to 1 m high; fls white, stellate. H.

Bolivia, 1971.

Collections of Potato Species

J.G. Hawkes, J.P. Hjerting, P.J. Cribb and Z. Huamán

- 129
- 4300 ~~X~~ *S. tarijense* Dept. Cochabamba, prov. Campero, ~~1000~~ km from Sucre on road to Aiquile (20 Km from Aiquile). Alt: 2,100m. 29/1/71. Summer-green xerophilous forest, shade of thorny bushes, etc. In bud; fls white. H.
- 4301 ~~X~~ *S. sucreense* Dept. Chuquisaca, prov. Oropesa, Sucre, Half km from main plaza on road to Potosí, descending a hill. Alt: 2800m. 30/1/71. Ditch by road. Stem 1m. Fls purple. H.
- 4302 ~~X~~ *S. spegazzinii* (*S. pachytrichum*) ? Dept. Chuquisaca, prov. H. Siles Yampara, road to Potosí from Sucre, ± 19 km from Sucre. Alt: 2600m. 30/1/71 Thorn scrub by road. Fls purple, pentagonal-rotate. H. (See 4565)
- 4303 ~~X~~ Probable hybrid of *S. spegazzinii* x *S. chacoense* As 4302. Pubescence as 4302. Fls varying in shape from stellate to rotate and in colour from very pale to medium purple. H. (See 4566)
- 4304 ~~X~~ *S. tarijense* Dept. Chuquisaca, prov. Yampara, road from Sucre to Potosí at 25km from Sucre. Alt: 2700m. 30/1/71. Thorn scrub. Plants to 50cm, with dense glands and hairs. Fls white. H. (See 4567)
- 4305 ~~X~~ Probable hybrid of *S. chacoense* x *S. spegazzinii* As for 4304 but 26.8 km from Sucre. Alt: 2750m. 30/1/71. Weed in potato field. Pale blue fls, some glands on inflorescence (*S. tarijense* in vicinity.) H.
- 4306 ~~X~~ *S. chacoense* (?) (*S. spegazzinii* - see later collection) (See 4572) Dept. Potosí, prov. Saavedra, 7km before Millares, about 2km from Puente Sucre, 53km from Sucre. 30/1/71 Alt: 2350m. Under Dunalia bushes by roadside, near construction camp. In bud (white), with pigmented stem and rhachides. H.
- 4307 ~~X~~ *S. tarijense* Dept. Potosí, prov. Saavedra, 83km from Sucre on road to Potosí, just below Retiro. Alt: 2750m. 30/1/71. Amidst Opuntia by side of maize field. Plant 30 cm. Fls white; no berries yet. (See 4574). H.
- 4308 ~~X~~ *S. berthaultii* As 4307, but 100m. backw on roadside. In dense thorn hedge below maize field. Fls medium blue-purple, pentagonal. H. (See 4575)
- 4310 ~~X~~ *S. leptophyes* (?) Dept. Potosí, prov. Saavedra, 87km from Sucre on road to Potosí. Alt: 3050m. 30/1/71. Amongst bushes. Small plants, no fls. (H.) (See 4579). *Not found*
- 4311 *S. tub. ssp. andigena* Nom. Vern. "Sipancachi" Dept. Potosí, prov. Frías, road to Lecherías, potato field. Alt: 3950m. 31/1/71. Mixed field with stn and magenta fld adg; Fls white, very slightly pale blue. H. S. (see also 4586).

9.

Bolivia, 1971. Potato Collections.

J.G. Hawkes, J.P. Hjerting, P.J. Cribb and Z. Huamán

andigena

4313 S. sucrense? Dept. Potosí, prov. Frías, Lecherías, below Potosí. Alt: ± 3900m. 31/1/71. At base of rough stone wall, some way below farm building; well fertilized. Corolla blue-purple, rotate. Leaf less dissected. H. S. (See 4585a-d)

 $\angle n=48.$

4314 S. sparsipilum As 4313. Corolla rotate, blue-purple; leaf well-dissected, ± folded. H. S. (see 4584). ~~4585~~

4315 K S. opiocense? As 4313. Dark purple pentagonal corolla. (See 4583) H.

 $\angle n=48.$

~~DE~~ 4316 S. sparsipilum? As 4313. Very rotate corolla; berries green, slightly white verrucose. (See 4585e-f) H. S. $\angle n=48.$

4317 K S. megistacrolobum Dept. Potosí, prov. Frías, below Potosí on road to Lecherías. Alt: 3950m. 31/1/71. Weed of cereal field and in grassland nearby. Flat rosettes in grassland, semi-rosettes in cereal field. A few berries. H.S. (See 4589)

4318 S. tub. ssp. andigena Dept. Potosí, prov. Frías, Añangaro, 17 km from Potosí on road to Don Diego. Alt: 3800m. 31/1/71. In a wall near cultivated fields. Fls blue. H.

4319 K S. opiocense Dept. Potosí, prov. Frías, road to Don Diego, Samasa, field before Cooperativa Samasa, 21 km from Potosí. Alt: 3700m. 31/1/71. On wall under Salix babylonica and in field behind. Fls rotate, palish. H. (See 4580).

4320 K S. sparsipilum / sucrense As 4319. Near wall by river. Fls rotate, blue-purple. H. (See 4580)

Linares

4321 K S. infundibuliforme Dept. Potosí, prov. Frías, 35km from Potosí on road to Camargo. Alt: 3800m. 1/2/71. Dry valley with columnar cacti, Mutisia, Adesmia, barrel cacti, etc. more or less prepunaña (c.f. Tilcara). Fls sub-stellate, purple. (Also mga and unknown sp., not collected) H. (See 4609)

4322 S. opiocense or sucrense Dept. Chuquisaca, prov. Nor Cinti, 126 km on road from Potosí to Camargo, near Padcoyo (just north). Alt: 3500m. 1/2/71. Edges of potato and bean field below road and in field itself. Fls deep rich purple, rotate. (See also 4615). H.

4323 K S. megistacrolobum As 4322. H.S. Edges of field only.

~~DE~~ 4324 K S. acaule As 4322. On edges of field only. H.S. $\angle n=48.$

4325 K S. vidaurrei Dept. Chuquisaca, prov. Nor Cinti, 1 km north of Muyuquiri, 160 km from Potosí on way to Camargo. Alt: 3400m. 1/2/71. Below bushes on lower side of road. Three plants, one collected; 1 mauve flower. H.

Bolivia, 1971.

Collections of Potato Species

J. G. Hawkes, J. P. Hjerting, P. J. Cribb and Z. Huamán.

- 4333 *S. opiocense*? ^{sucrense} Dept. Potosí, prov. Frías, 2 km before Tarapaya, 23 km on road from Potosí to Oruro. Alt: 3500m. 3/2/71. Weed of maize field to left of road and around field itself. Fls rotate, rich purple. H.S. (? see 4594). B, 2n=48 A 2n=49 ✓
- 4334 *S. leptophyes*? Dept. Potosí, prov. Frías, 27 km from Potosí on road to Oruro. Alt: 3550m. 3/2/71. In cactus and acacia scrub by aqueduct. Fls rotate, purple; plants to 40cm. H. ✓
- 4335 *S. andigena* x *S. sparsipilum*? Dept. Potosí, prov. Frías, 30 km from Potosí on road to Oruro. Alt: 3600m. 3/2/71. Growing round borders of maize and potato fields (opposite Salix babylonica tree). Fls blue fls. H. ✓
- 4336 *S. sparsipilum* As 4335, on field borders. Fls large, rotate, deep blue-violet, 3-4cm diam. H. (see 4597) ✓
- 4337 *S. opiocense*? As 4335. Fls mauve, smaller than 4336. H (see 4596). ✓
- 4338 Hybrid of *S. opiocense* x *S. sparsipilum*? As 4336. Flower midway in colour between 4336 and 4337, H. ✓
- 4339 *S. leptophyes* Dept. Potosí, prov. Frías, 56 km from Potosí on road to Oruro. Alt: 3900m. 3/2/71. Puna vegetation but with shrubs and herbs. Growing amongst rocks and walls in cultivated fields. Fls medium red-purple (deep tone) H. (see 4600) ✓
- 4340 *S. opiocense* As 4339. Paler smaller flowers than *S. leptophyes*. H. ✓
- 4341 Possible hybrids of *S. opiocense* x *S. leptophyes* As 4339. Intermediates or possible hybrids of 4339 x 4340. H. ✓
- 4342 *S. opiocense* or *S. sucrense*? Dept. Cochabamba, prov. Quillacollo, 7 ± 68 km from Cochabamba on road to Oruro, 2 km below pumping station Lampaya. Alt: 3550m. 4/2/71. Under bushes by stream where it goes under road. No fls. Plants eaten by insects. mga also seen here. H.L.T. ✓
- 4343 *S. sparsipilum* (*liriunianum* type) Dept. Cochabamba, prov. Quillacollo, 59km from Cochabamba on road to Oruro. Alt: 3200m. 4/2/71. Dry road banks and in field above. Plants 20-30cm; small purple fls, dark calyx. H. ✓
- 4344 *S. sparsipilum* Dept. Cochabamba, prov. Quillacollo, 56.5 km from Cochabamba on road to Oruro. Alt: 3350m. 4/2/71. Barley field and rocks below under bushes. Medium purple fls; plants 20cm in field but 70cm under bushes. H. ✓

Bolivia, 1971

Potato Species

J.G. Hawkes, J.P. Hjerting, P.J. Cribb and Z. Huamán

- 4345 S. sparsipilum Dept. Cochabamba, prov. Quillacollo, 53.5 km from Cochabamba on road to Oruro. Alt: 3250m. 4/2/71. Under bushes by stream above road. Fls medium purple. c.f. 4344. H. ✓
- 4346 S. sparsipilum As 4345 but 46.5 km from Cochabamba. Alt: 2950m. 4/2/71. Bushy slopes under tree. Fls medium purple. H. ✓
- 4347 S. oplocense ? As 4345 but 46.5 km from Cochabamba. Alt: 2950m. 4/2/71. Dry stony bushy slopes. Fls medium purple. H. ✓
- 4348 S. sparsipilum As 4347. By road verge in fairly rich soil. Fls blue-violet; inflorescences overtopping bushy haulms. H. ✓
- 4349 S. berthaultii As 4345 but 46 km. from Cochabamba. Alt: 2950m. 4/2/71. Rocky bushy slopes, mixed with 4350. H. ✓
- X 4350 "S. tarijense" As 4349 and mixed with it. Stony bushy slopes. (possibly some spi introgression). H. ✓
- 4351 S. spp. (cult.) Dept. Cochabamba, prov. Chapare, Colomi, ascent to Incachaca. Alt: 3200m. 6/2/71. Cultivated field, rich soil. Mixed collection of 8 different clones, suspected of different chromosome numbers (a=4x; b=3x; c=3x; d=2x; e=4x; f=2x or 3x; g=2x; h=4x - all this by morphology only) H. ✓
- ? 4359 S. microdontum (S. cecropioides Stovani) Dept. Santa Cruz, prov. Valle Grande, Siberia, La Fortaleza, turning on south side of road, km 221 from Cochabamba. Alt: 2550m. 7/2/71. Ceja de monte, but scrub and secondary growth. Very frequent. Also seen on other side of road on descent to Asperadero La Fortaleza. 2n=24. H. L. T. ✓
- X 4374 S. chacoense Dept. Santa Cruz, prov. Valle Grande, Valle Grande Airport. Amongst thorn hedges. Alt: 2000m. 8/2/71. Growing with 4375. White stellate corolla. H.T. 2n=24. ✓
- X 4375 S. chacoense x ? As 4374, and growing with it. Tubers of 4374 and 4375 combined in one sample. Fls white stellate with a touch of blue. H. T. ✓
- X 4396 S. capsicibaccatum Dept. Cochabamba, prov. Carrasco, 212 km from Cochabamba on road to Santa Cruz. Alt: 2900m. 9/2/71. In Ceja de Monte; new road on damp bushy slope. H. ✓
- X 4399 S. sparsipilum Dept. Cochabamba, prov. Carrasco, 150 km from Cochabamba on road to Santa Cruz, Copachunc. Alt: 2600m. 9/2/71. At edge of maize field and under bushes below. Pale blue-violet fls, regular calyx. Plants 20-30 cm high. S.T.H.L. ✓
- X 4401 S. capsicibaccatum Dept. Cochabamba, prov. Carrasco, km 140 on road from Cochabamba to Santa Cruz, Rodeo Grande. Alt: 3000m. 9/2/71. Under Polylepis. Plts to 20 cm, not flowering. H. ✓

Bolivia, 1971.

Potato Collections

J.G. Hawkes, J.P. Hjerting, P.J. Cribb and Z. Huamán.

- 4403 S. sparsipilum Dept. Cochabamba, prov. Carrasco, km 127
on Cochabamba to Santa Cruz road, Epizana. Alt: 2850m.
K 9/2/71. On slopes near café, on border of cultivated
field in quebrada. Typical spi with blue-violet flowers. H.S. ✓
 $2n=24$.
- 4408 S. sparsipilum Dept. Cochabamba, prov. Cercado, above
Cochabamba, Cervecería Colón. Alt: 2850m. 11/2/71. On
waste ground beside path, on edges of fields, etc., common.
mix Calyx regular; flower blue-violet. H. ✓

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- 4411 S. berthaultii Dept. Cochabamba, prov. Quillacollo, between
Suticolla and Parotani, where oil pipe crosses road. Alt:
K 2450m. 15/2/71. On rocky slopes under bushes and by roadside.
Pale blue stellate flowers. H. ✓
- 4412 S. sparsipilum As 4411. Dry roadside, growing with 4411. H. ✓
mix and opiocense
- 4413 S. berthaultii Dept. Cochabamba, prov. Capinota, near
Parotani, 1-2km after turning to Capinota off the Cochabamba-
Oruro road, km 30. Alt: 2450m. 15/2/71. On roadside under
thorn bushes. Growing mixed with 4414. Pale blue-lilac
flowers. Good ber marked (a). Others with spi leaves and
ber flowers marked (b). H. ✓
- 4414 S. sparsipilum ^{sucrense} As 4413. Growing with 4413. In ploughed
field, maize field and on roadside. Also growing with 4415. H. S. Seed mixed with 4416.
no 4414
- 4415 S. opiocense As 4413. Narrow leaflets with decurrency on
first lateral leaflets. Pale blue pentagonal fls. H. S. $2n=24$ ✓
- 4416 S. sucrense ? As 4413. Under trees in ploughed field, with
4413-5. Large narrow leaflets. Seeds mixed with 4414. H.S. ✓
- 4418 S. sparsipilum Dept. Cochabamba, prov. Capinota, on road from
Parotani to Capinota, 1 km past Itapaya. Alt: 2400m. 15/2/71.
On edge of maize field and in the hedge. Some plants with
very large terminal leaflets. Blue-violet flowers. H.S. $2n=24$. ✓
- 4419 S. sparsipilum ^{scr} As 4418. Whitish flower. S.
- 4420 S. sparsipilum Dept. Cochabamba, prov. Capinota, on road from
Parotani to Capinota, 2 km past Itapaya. Alt: 2400. 15/2/71.
On edge of maize field and road amongst bushes. With 4421 & 4422 ✓
H.

Bolivia, 1971.

Potato Collections

J.P.Hjerting, P.J.Cribb and Z.Huamán

4421. S. berthaultii Dept. Cochabamba, prov. Capinota, on road from Parotani to Capinota, 2 km past Itapaya. Alt: 2400m. 15/2/71. On edge of maize field and road amongst bushes. Mixed with 4420 and 4422. H. 4
4422. S. cf. tarijense As 4421. Mixed with 4420 and 4421. H. S. 3
4424. S. sparsipilum ^{opl / ser segs} Dept. Cochabamba, prov. Capinota, on road from Parotani to Capinota, 1 km past Charamoco. Alt: 2400m. 15/2/71. By roadside. Small blue-violet fls, 1-1.5cm diam. H. S. ^{A 2n = 24} 4
4425. S. berthaultii? ^{sparsipilum} As 4424. Very wide rhachis wings on leaf; pale blue fls. May be a shade form of opl or opl x spi? H. S. 3
4426. S. oplocense ? As 4424 but on other side of road. H. 1
4428. S. sparsipilum Dept. Cochabamba, prov. Arani, 1 km past Arani on road to Mizque. Alt: 2700m. 16/2/71. In a maize field. Typical. H. S. 2n = 24. 1
4429. S. berthaultii As 4428 but 1 km further on. Alt: 2750m. Pale blue stellate flowers. H. 1
4431. Sol. (cultivated) "Condor Imilia". Dept. Cochabamba, prov. Punata ~~Citza~~, Punata market. 16/2/71. Imilia type tubers with red and white areas. 4 tubers. T. 8
4432. Sol. (cultivated) "Papa Collo" As 4431. Imilia shape, dark purple-black (one with white spectacle) 4 tubers. T.
4433. Sol. (Cultivated) "Papa Episana" As 4431. Imilia shape, red with white spectacles. 2 tubers. T. 2
4434. Sol. (Cultivated) "Luqui" As 4431. Round but bilaterally flattened red tubers. 6 tubers. T.
4435. Sol. (Cultivated) "Imilia" As 4431. Imilia shape, red with white spectacle. T. 2n=48.
4436. S. violaceimarmoratum Dept. Cochabamba, prov. Chapare, km. 104 on road from Cochabamba to Chapare and Villa Tunari, 20m before Hotel, also for 0.5km further on. On open bank above road in Ceja de Montaña. Fls blue-violet (one plant with paler lilac flowers) pentagonal-rotate. Fruits conical. H. S. 4 Alt: 3025m. 17/2/71.
4469. S. violaceimarmoratum As 4436 but at km 105. Alt: 3000m. 18/2/71. In ceja by roadside. Plant 1m. H. 1

Bolivia, 1971.

Potato Collections.

J.P. Hjerting, P.J. Cribb and Z. Huamán

- 4470 S. violaceimarmoratum Dept. Cochabamba, prov. Chapare, km 108 on Cochabamba to Tunari road. Alt: 3000m. 18/2/71. By roadside in Ceja de Montaña. Four plants, two of 1 metre, two of 15cm. H. 2
- 4471 S. violaceimarmoratum As 4470 but at km 101. 3,100m. H. 1
- 4474 S. violaceimarmoratum As 4470 but at km 100. Alt: 3150m. In ceja de montaña by roadside; in natural vegetation, not as a weed. Colony up to 1.5m high. H. S. 10
- 4476 S. sparsipilum Dept. Cochabamba, prov. Cercado, Tiquipaya, University Farm at La Violeta. Alt: 2550m. 19/2/71. In cultivated fields, very common; typical. Seed only collected. S.
- 4484 S. sparsipilum ? (weed potato). Dept. Cochabamba, prov. Quillacollo, 59 km from Cochabamba to Oruro. Locality for 4343 but 50m further down towards Cochabamba. Alt: 3200m. 24/2/71. In maize field growing with cultivated potatoes left from last year. Plant to 30cm; very open leaves with coarse leaflets, first laterals with decurrency; blue-violet fls. H. /
- 4485 Sol. (Cultivated) As 4484. Growing with 4484 as a groundkeeper. Leaves of andigena type, some with wild type coarseness. Two plants flowering, one pink, the other blue with white acumens. S.
- 4486 S. capsicibaccatum Dept. Cochabamba, prov. Quillacollo, 56.5 km from Cochabamba on road to Oruro. As 4344 but below the road. Alt: 3200m. 24/2/71. Edge of barley field among rocks and bushes. Two lateral leaflets; creamy white fls. H. /
- 4487 S. sparsipilum As 4486. (Seed collection of 4344) 24/2/71. One plant seen but not collected appeared to be hybrid with cultivar, highly dissected, no fls. S. 2. $n=24$
- DE 4498 S. sparsipilum Dept. Cochabamba, prov. Quillacollo on road from Quillacollo to Morochata at km. 14 - 14.5 (see 4257) Alt: 3150m. 26/2/71. By roadside. Some with bilabiate calyx; dark blue-violet corolla. H. S. /
- 4499 S. sparsipilum ? As 4498 but at km 15. Paler blue corolla and larger bilabiate calyx than usual for this species. spi x stn ? $2n=24$ H. S. /
- 4505 S. brevicaule ? Dept. Cochabamba, prov. Quillacollo, 21.7 km from Quillacollo on road to Morochata, Puente San Miguel. Alt: 3750m. 26/2/71. (See 4276) Very narrow leaflets, many interjecteds. H. X

Bolivia 1971. Potato Collections.

J.P. Hjerting, P.J. Cribb and Z. Huamán

- 4508 Solanum sp. Dept. Cochabamba, prov. Carrasco, on road from Cochabamba to Santa Cruz at km 104.5. Alt: 3000m. 27/2/71. (see 4290). In wet meadow and wood by river below road. Leaf like S. alandiae but 3-jugate, 1-2 interjects; flower blue-violet with purple style and green stigma 2 x width of style. Fruit heavily white spotted. (blight infected). H.
- 4509 Solanum sp. As 4508. Among bushes in wet meadow, very similar to 4510. Probable hybrid of 4508 x S. sp1. Style only just exserted; anthers splayed; fruit white-spotted; leaf 4-5-jug interjects, 4-jug primaries. Blight infected. H. 3
- 4510 S. sparsipilum As 4508. In maize field and on edge of field, 200m from 4508. Typical. H. 2
- 4513 S. alandiae Dept. Cochabamba, prov. Carrasco, road from Cochabamba to Santa Cruz at km 144. Alt: 2950m. 28/2/71. K No fls; one small plant; leaf like S. microdontum but 2 laterals. H.
- 4514 " S. vallegrandense var. pojoense) Dept. Cochabamba, prov. Carrasco, 190km from Cochabamba on road to Santa Cruz, Puente Pojo. Alt: 2100m. 28/2/71. Common. Probably ber but not unlike S. doddsii. H.
- 4519 S. sparsipilum Dept. Cochabamba, prov. Carrasco, km 144 from Cochabamba on road to Santa Cruz. Alt: 2950m. 28/2/71. R Roadside weed, no flowers. H.
- 4526 S. microdontum Dept. Cochabamba, prov. Carrasco, Incallajta, (about 20km along turning at Monte Punco from Cochabamba to Santa Cruz road). Alt: 2900m. 28/2/71. In a wood 50 m below ruins of Incallajta. Under trees and in glades by path, very wet. Plants to 1.5m; white fls, young fruits. H. S
- 4531 S. berthaultii Dept. Cochabamba, prov. Cercado, Cerro San Pedro, near Cochabamba Botanic Gardens. Alt: 2550m. 2/3/71. Each letter represents a population, i.e. 10 plants within a yard of each other. a - h: intermediate, good ber fls. i & j: white-flowered. k: sp1 flowers. l - p: no fls. S.
- 4534 S. doddsii | chc? Dept. Cochabamba, prov. Carrasco, km 192 on road from Sucre to Epizana, 40km from Aiquile (see 4295) Alt: 2600m. 3/3/71. On scree above road. H. S. Mizque
- 4535 S. torrecillasense As for 4534. (see 4296). Below road on grassy slope. Small fruit; blue-lilac pentagonal flower. H. 94735
- 4538 S. tarijense Dept. Chuquisaca, prov. Oroya, Tambokasa, from village to 0.5km past, 10km from Sucre on Zudáñez road. Alt: 2850m. 4/3/71. On sandstone slopes among rocks, thorn scrub and cacti. Some pure far, some pale pink centres H. S. K

Bolivia, 1971. Potato Collections.

J.P.Hjerting, P.J.Cribb and Z.Huamán

- 4539 S. berthaultii Dept. Chuquisaca, prov. Oropesa, Tambocasa, from village to 0.5km past, 16 km from Sucre on Zudáñez road. Alt: 2850m. 4/3/71. On sandstone slopes among rocks, thorn scrub and cacti. Hybrid of 4538 and 4540? H. k 2
- 4540 S. sucreense? As 4538 and 4539. Plants 15-50cm with rachis wings. Flower dark blue-violet to sky-blue. H. ✓
- 4541 S. opioense? Dept. Chuquisaca, prov. Yamparaez, km 48 on road from Sucre to Zudáñez. 3100m. 4/3/71. By roadside at edge of barley field. H. S. 2w=43 ✓
- 4542 S. megistacrolobum (boliviense?) As 4541. Habit of S. boliviense but flower of S. megistacrolobum. H. 3.
- 4543 S. berthaultii? Dept. Chuquisaca, prov. Yamparaez, km 96 on road from Sucre to Zudáñez. Alt: 2400m. 4/3/71. By roadside; no flowers. S. Zudáñez
- 4546 S. leptophyes ^{oploicense} Dept. Chuquisaca, prov. Oropesa, Guerraloma, 15 km from Sucre on road to Ravelo. Alt: 3250m. 5/3/71. On sandstone with little soil cover. Plants to 30cm. No fls. H. k 2
- 4551 S. sucreense As 4546 but 16 km from Sucre. Alt: 3275m. 5/3/71. By roadside among stones and bushes in a wetter area than 4546. Rotate deep violet fls. H. ✓
- 4552 S. leptophyes As 4551. Growing with 4551 and 4553. Very similar to S. opioense collected around Cochabamba, with decurrency of first lateral leaflets of lower leaves. H. ✓
- 4553 S. boliviense As 4551. Good blv. H. 2
- 4555 Sol. sp. (c.f. spegazzinii) Dept. Chuquisaca, prov. Oropesa, 29 km from Sucre on road to Ravelo. Alt: 3300m. 5/3/71. Growing among bushes in wet gully in quite luxuriant vegetation. Plant 40cm; narrow leaflets, 6-jugate, with about 7-jugate ints; Large dark violet flowers. H. (T). (One tuber above soil near plants). 2
- 4556 S. megistacrolobum ^{toralaparum} As 4555. By roadside on grassy slopes. H. S. 2
- 4560 Sol. sp. (opioense?) Dept. Chuquisaca, prov. Oropesa, 26 km from Sucre on road to Ravelo. Alt: 3200m. 5/3/71. On dry slopes beneath bushes below road. Leaf 3-4-jugate, no interjecteds; no flowers. H. k 2
- 4562 S. tarijense ^{berthaultii} Dept. Chuquisaca, prov. ~~H.~~ ^{Oropesa} on road from Sucre to Potosí, 14.5km from Sucre. Alt: 2500m. 6/3/71. In valley bottom among thorn bushes, with 4553. H.S.T. ✓

Bolivia, 1971. Potato Collections.

J.P. Hjerting, P.J. Cribb and Z. Huamán.

- Oropeza*
- 4563 *S. berthaultii*? Dept. Chuquisaca, prov. ~~H. Miles~~, on road from Sucre to Potosí, 14.5 km from Sucre. Alt: 2500m. 6/3/71. In valley bottom among thorn bushes, growing with 4562. Leaves like tar, but some fls quite blue. Few berries. Other parent possibly *S. sucreense* H. S. 4
- 4565 *S. specazzinii*? Dept. Chuquisaca, prov. H. Miles, km 19 on road from Sucre to Potosí, just past Yotala. Alt: 2575m. 6/3/71. Among thorn bushes at side of road. Growing with 4566, so seeds probably hybrid. H. S. (no seed - 14/6/71). 1
- 4566 *S. chacoense* ++ As 4565. Calyx acumens very long, 5mm. H. S. 1
- 4567 *S. sucreense*? Dept. Chuquisaca, prov. H. Miles, on road from Sucre to Potosí, at km 25 from Sucre. Alt: 2650m. 6/3/71. Under thorn bushes. Small leaflets; growing 20 m from tar but no hybrids. H. 1
- 4568 *S. oplocense* ~~sp. nov.~~? As 4567 but 25.7 km from Sucre. Alt: 2700m. 6/3/71. Under thorn bushes by edge of barley fields. Very dry area. Flower pale blue, smell of tar. H. 1
- 4569 *S. tarijense* As 4567 but 29.5 km from Sucre. Alt: 2800m. 6/3/71. By side of dried up stream. Growing with 4570. H. S? 2
- 4570 *S. specazzinii*? As 4569. Variable flower colour, from pale blue to blue. H. S. 5
- 4571 *S. sucreense*? Dept. Chuquisaca, prov. H. Miles, 35 km from Sucre on road to Potosí. Alt: 2650m. 6/3/71. In maize field and on edge of road under spiny plants. Growing across road from tar and ber - like intermediates. H. S. 1
- 4572 *S. specazzinii*? Dept. Potosí, prov. Saavedra, at km 52 from Sucre on road to Potosí. Alt: 2250m. 6/3/71. By roadside. Note: 4306 would appear to be this and not *S. chacoense*. H. 2
- 4573 *S. berthaultii* ♂ As 4572. Possibly tar x 4572. H. 1
- 4574 *S. tarijense* Dept. Potosí, prov. Saavedra, Retiro, 0.5 km before the village itself, 84 km from Sucre on road to Potosí. Alt: 2750m. 6/3/71. (see 4307) In thorn hedges by roadside. Good tar, growing with 4575 and 4576. S.
- 4575 *S. berthaultii* As for 4574. Growing with 4574 and 4576. S.
- 4576 *S. sucreense* or *S. oplocense* As for 4574. Growing with 4574 and 4575. Leaf rhachis with 1-2mm wide wing; narrow leaflets. Blue-violet flower. Other parent of 4575? H. 1

Bolivia, 1971.

Potato Collections.

J.P. Hjerting, P.J. Cribb and Z. Huamán.

- 4577 S. tarijense Dept. Potosí, prov. Saavedra, above Retiro, 86 km from Sucre on road to Potosí. Alt: 3025m. 6/3/71. On dry slopes among thorn bushes. Growing with 4578 and 4579 and ber (not collected). H.
- 4578 S. sucrense ? S. obovifolium ? As for 4577, growing with 4577 and 4579. H.
- 4579 S. leptophyllum As for 4577. At bottom of barley field, possibly a sun form of 4578. (See also 4310) H. S.
- 4580 S. obovifolium Dept. Potosí, prov. Frias, road to Don Diego, Samasa, 155km from Sucre towards Potosí. Alt: 3625m. 6/3/71. (See also 4319) Looks same as scr collections from Sucre-Potosí road a) and b). H.T. S. $\Sigma n = 48$.
- 4582 S. acaule Dept. Potosí, prov. Frias, at km 160 from Sucre and 15 km from Potosí on road between them. Alt: 3925m. 6/3/71. Among rocks by roadside. S.
- DR 4583 S. obovifolium Dept. Potosí, prov. Frias, Lecherías, below Potosí. Alt: ± 3900m. 7/3/71. At base of rough stone wall, some way below farm building; (see also 4313 - 4316). This is from plants where 4315 was collected). S. $\Sigma n = 48$
- 4584 S. sparsipilum As for 4583. Taken from locality of 4314. S.
- 4585 S. sucrense ? As for 4583. Taken from locality of 4313 and 4316 a - d correspond to 4313; e & f correspond to 4316. S. $\Sigma n = 48$
- 4586 S. tub. ssp. andigena "Sipancachi". Dept. Potosí, prov. Frias, road to Lecherías, 1 km above. Alt: 3950m. 7/3/71. Leaf like stn. White fls, short calyx lobes. T. (see 4311)
- 4587 S. acaule As for 4586. By wall at edge of field. S.
- Paz 4588 S. acaule As for 4586, but 0.5 km below Potosí. Alt: 3950m. Growing in barley field with 4588. Possible hybrids in this area. S.
- 4589 S. megistacrolobum As for 4588, and growing with it. S.
- 4590 S. megistacrolobum As for 4586 but 0.75 km below Potosí. Alt: 3950m. By wall. S. H. 2
- 4592 S. megistacrolobum x S. acaule As for 4586, but 0.5 km below Potosí. Probable hybrid of 4588 and 4589 with which it grew. H. T. 1

Bolivia, 1971.

Potato Collections

J.P. Hjerting, P.J. Cribb and Z. Huaman

- /spl
- 4593 S. sucrense? Dept. Potosí, prov. Frias, Aroifilla, km. 20 from Potosí on road to Oruro. Alt: 3375m 8/3/71. Growing in a mixed maize/potato field. One of Ross's collections was from here. Very small flowers, to 1.5cm, blue-violet. H. S. $2n = 48$.
- DE 4594 S. sucrense/oploense Dept. Potosí, prov. Frias, just before Tarapaya, 23 km from Potosí on road to Oruro. Alt: 3500m. 8/3/71. (See also 4333). In maize field, and at edge of road. Very similar to 4593. S. $2n = 24$.
- 4595 S. spagazzinii Dept. Potosí, prov. Frias, 27 km from Potosí on road to Oruro, above Tarapaya. Alt: 3550m. 8/3/71. (See also 4334) In wet hollow by aqueduct. S. sucrense (adg)
- 4596 S. oploense? As for 4595. Nos 4595 and 4596 may be one species; the former is from a wet hollow, the latter in maize fields and other cultivated ground. Another form from under Acacia bushes at the edge of the field seems identical with 4593 and 4594! H. S.
- 4597 S. sparsipilum? Dept. Potosí, prov. Frias, km 30 on road from Potosí to Oruro. Alt: 3600m. 8/3/71. (see also 4336) In maize fields and mixed maize/potato fields.
a) wide leaflets - looks 4x, by roadside and in maize field.
b) probable shade form of a), growing in bean field.
c) with narrower leaflets than a) or b). $2n = 48$ S. H. A $2n = 48$
- 4598 Sol. (cultivated or weed) sp. As for 4597 and growing near it. Divided into a) str ?, b) adg - pale blue fls, c) adg ?, d) adg ? H. S.
- 4600 S. spagazzinii/oploense Dept. Potosí, prov. Frias, above Yocalla, 56 km from Potosí on road to Oruro. Alt: 3900m. 8/3/71. In a barley field and around edges of a potato field. (See 4339 - 4341) Varies from spg to opl apparently, depending on whether growing in open or in shade, respectively. Ma and ac grow with spg just 100m down the road towards Yocalla. S. $2n = 24$
- DE 4601 S. sucrense/oploense Dept. Potosí, prov. Frias, Tarapaya plaza around fountain, 25 km from Potosí on Oruro road. Alt: 3500m. Same as 4594 apparently. 8/3/71 S.
- 4609 S. infundibuliforme x oploense? Dept. Potosí, prov. Linares, 35 km from Potosí on road to Camargo. Alt: 3800m. At edge of field of cultivated potatoes. Leaf like ifd x opl; purplish flower with whitish spots. H. 9/3/71.

Bolivia, 1971 Potato Collections

J.P. Hjerting, P.J. Cribb and Z. Huamán

Linares

- 4610 S. oplocense/sucrense? Dept. Potosí, prov. ~~Roxa~~, 35 km from Potosí on road to Camargo. Alt 3800m. 9/3/71. On dryish slope but in slightly wetter area than general. Appears to be the same as the opl/scr from Lecherías, etc. M.
- 4611 S. megistacrolobum As 4610. Under bushes on dry cactus and thorn scrub slope. H.
- 4612 S. megistacrolobum x infundibuliforme as 4610. H.
- 4613 S. oplocense/sucrense Dept. Chuquisaca, prov. Nor Cinti, Padcoyo, 500m before hotel, 126 km on road from Potosí to Camargo. Alt: 3500m. 9/3/71. (see also 4522). Edges of potato and bean field. S.
- 4615 S. oplocense ^{sucrense} Dept. Chuquisaca, prov. Nor Cinti, by hotel in Muyuquiri, km 161 on road from Potosí to Camargo. 3000m. 9/3/71. In barley field and on rocky slope under Dunalia; possibly a few cultivated potatoes in field also. Pale blue flower with white rays. Leaves like the scr/opl collected elsewhere. H. S. $2n = 48$
- 4616 S. oplocense Dept. Chuquisaca, prov. Nor Cinti, Tacaquira, km 170 from Potosí on Camargo road. Alt: 2900m. 9/3/71. Pale blue small flowers; decurrency on first lateral leaflets. H. S.
- 4619 S. oplocense ^{andigera} Dept. Chuquisaca, prov. Sud Cinti, Incahuasi, 15 km east of Culpina on road from San Pedro to Incahuasi. Alt: 2925m. 10/3/71. ~~Linea maizer field. No flowers. H. S. T.~~
Flowers purple
- 4636 S. oplocense Dept. Tarija, prov. Chiquitita, 38 km from Las Carreras on road to Tarija. Alt: 3350m. 11/3/71. Under the hedge at edge of field of maize and oca. Plants to 15cm; decurrent first lateral leaflets; some leaves with long narrow leaflets, others with broader ones. Flower blue-violet. H. Méndez $2n = 48$.
- 4638 S. acaule ssp. aemulans? Dept. Tarija, prov. Méndez, below Cumbre de Sama on road to Tarija, 73 km from Las Carreras. Alt: 3660m. 11/3/71. Among rocks by roadside. Very wet cloudy region. Leaf 2-jugate with broad decurrency on first laterals. Large terminal leaflet. Plants to 10 cm. H.
- K 4641 S. megistacrolobum As for 4638. Simple leaves. H.
- K 4651 S. leptophyes Dept. Tarija, prov. Méndez, 17 km from Iskayachi on road to Tarija. Alt: 3400m. 11/3/71. In wet areas by roadside. Cuesta de Sama. Dark blue-violet flowers. Plants to 15cm. n,

Bolivia, 1971.

Potato Collections.

J. P. Hjerting, P. J. Cribb and Z. Huamán

- 4654 S. microdontum ssp. gigantophyllum Dept. Tarija, prov. Méndez, 20 km from Iscayachi on road to Tarija. Alt: 3100m. 11/3/71. In a very damp gully. H. 2
- 4659 S. sp. (tuber-bearing) Dept. Tarija, prov. Méndez, 18 km from Tarija on the road to Camargo. Alt: 2200m. 11/3/71. Under thorn bushes on dry hillside. Stem wings; no fls; possibly chc? H. 2
- 4667 S. tarijense Dept. Tarija, prov. ~~O'Connor~~, 53 km from Tarija on road to Entre Ríos. Alt: 2350m. 13/3/71. Under trees in damp flush and among sandstone rocks by roadside. Good tarijense. H. S. 2
- 4673 S. tarijense Dept. Tarija, prov. Cercado, 41 km from Tarija on road to Entre Ríos. Alt: 2325m. 13/3/71. By farm in dry area. Very pentagonal flower. H. S. 2
- 4675 S. microdontum Dept. Tarija, prov. O'Connor, 55 km from Tarija on road to Entre Ríos. Alt: 2200m. 13/3/71. By wet area alongside river. Selva Tucumano-Boliviana. White flower. H. Subsp. gigantophyllum type. 2
- 4681 S. microdontum Dept. Tarija, prov. O'Connor, 74 km from Tarija on road to Entre Ríos. Alt: 2250m. 13/3/71. In selva Tucumano-Boliviana; with Alnus and Podocarpus, growing commonly from km 74 onwards to Entre Ríos at intervals. H. 1
- 4695 S. megistacrolobum Dept. Tarija, prov. Méndez, 32 km from Tarija on road to Iscayachi, Cuesta de Sama. Alt: 3000m. 14/3/71. By roadside in sandy soil. H. S. 1
- 4697 S. leptophyes As 4695 but 35 km from Tarija. Amongst rocks. Alt: 3100m. Plants to 15cm; leaflets narrow, like 4651. Very like small opl. Fls blue-violet. H. 1
- 4702 S. acaule Dept. Tarija, prov. Avílez, 30 km from Iscayachi on road to Villazón, Lagunas de Tajsajta. Alt: 3700m. 14/3/71. Under Stipa tufts in puna vegetation, 100m from lakeside; very small plants, no fls. H. S.
- 4712 S. infundibuliforme Dept. Potosí, prov. Sud Chichas, on road from Tarija to Villazón, 38 km from Villazon, 3 km past Mojo. Alt: 3400m. 14/3/71. Puna, under acacias and in wet hollows. No fls. S. oplocense found here also, but plants only 2-3" high (by roadside). H. T. 1
- 4713 S. oplocense Dept. Potosí, prov. Sud Chichas, 39-40 km along road from Villazón to Tupiza. Alt: 3400m. 15/3/71. Under acacia scrub. No fls; plants wilting badly but fls on pts at km 40. Lilac fls. H.T. (Correll got tac. var. sand. here) 1

Bolivia, 1971.

Potato Collections

J.P.Hjerting, P.J.Cribb and Z.Huamán

- 4714 *S. oplocense* ^{ardigera} ^{Sud Chichas} Dept. Potosí, prov. 1 km before Opioca on road from Tupiza. Alt: 3150m. 15/3/71. In maize fields and thorn hedges. No fls; typical opl leaves H. S. T. $2n = 48$.
- 4718 *S. oplocense* ^{Sud Chichas} Dept. Potosí, prov. 2 km from Tupiza on road to Cotagaita. Alt: 3350m. 16/3/71. Under acacia scrub on dry hillsides. Plants to 30cm; leaves with rhachis wings and first lateral decurrency. fls violet, pentagonal. H. ³
- 4719 *S. oplocense* ^{(prov. Nor Chichas and) Ramírez} As 4718 but 53 km from Tupiza. Alt: 3225m. 16/3/71. In hedges and under acacias in field by road. Shade forms with large leaves; light forms with smaller leaves and darker flowers, violet. H. S.
- 4720 *S. oplocense* ^(prov. Nor Chichas and) As 4718 but 68 km from Tupiza. Alt: 2850m. 16/3/71. Under thorn hedges. No fls, leaves like *S. sandemanii*. Wings on rhachis to 3-4mm. H. ²
- 4721 *S. oplocense* ^(prov. Nor Chichas and) As 4718 but 57 km from Tupiza. Alt: 3100m. 16/3/71. In field and by edge. Fls blue-violet. H. S.
- 4723 *S. oplocense* ^{Nor Chichas,} Dept. Potosí, prov. 62 km from CotagaCotagaita on road to Vitichi. Alt: 2900m. 16/3/71. In thorn hedge by maize field on both sides of road. With smaller flowers than previous opl collections on this road but otherwise the same. H. S. ¹⁶
- 4725 *S. oplocense* ^{canasense Segs} Dept. Potosí, prov. Linares 29 km from Vitichi on road to Cucho Ingenio. Alt: 3200m. 16/3/71. By roadside and under leguminous trees. No fls; some leaves with several interjecteds. H. T. S. $2n=48$ ³
- 4726 *S. oplocense/leptophyes* ? Dept. Potosí, prov. Saavedra, 87 km from Sucre on road to Potosí, 4km above Retiro. Alt: 3100m. 17/3/71. Under *Schinus* by edge of road on loose rock. (See also 4310 and 4579). S.
- 4727 *S. tarijense* ⁴⁷²⁶ As 4726. (see also 4577) S.
- 4728 *S. berthaultii* As 4726; growing near 4726/7. White fls with bluish star in centre. S.
- 4729 *S. tarijense* ? Dept. Chuquisaca, prov. H. Giles, km 42 from Sucre on road to Potosí. Alt: 2700m. 17/3/71. No fls. S.

Bolivia, 1971

Potato Collections

J.P. Hjerting, P.J. Cribb and Z. Huamán

- 4733 *S. gandariensis* Dept. Cochabamba, prov. Campero, 182 km from Sucre on road to Epizana and Cochabamba, 1 km after passing Chujillas (Rio). Alt: 1850m. 18/3/71. Under thorn trees, to 4m or so, by river splash; plants growing in humus at foot of trees; rosette with 1-2 nodes only; white flowers. Old tubers to 1cm diam, round; plants wilted badly; one fruit. H (no seeds) Mizque
- 4735 *S. torrecillasense* Dept. Cochabamba, prov. Campero, 192 km from Sucre on road to Epizana. Alt: 2650m. 18/3/71. (See also 4296 and 4535). S. Mizque
- 4736 *S. doddsii* As 4735. (See also 4295 and 4534). Very close to tor parent but leaflets narrower. S.
- 4737 *S. microdontum* Dept. Cochabamba, prov. Carrasco, km 107 from Cochabamba on Santa Cruz road. Alt: 3025m. Seems to be one clone. (See also 4292) T. 18/3/71. 2n=24. (line 3)
- 4739 *S. sp. nov. ?* Dept. Cochabamba, prov. Carrasco, km 104-5 from Cochabamba on road to Santa Cruz. Alt: 3000m. 18/3/71. On edge of wet meadow and Alnus wood, also in wood itself. Tubers may be mixed with Ullucus (pink tubers), to 1cm diam, slightly flattened. (see 4508). H.T.S. L.
- 4745 *S. leptophyllum* ? Dept. Chuquisaca, prov. Zudáñez, near Zudáñez, Santa Elena, km 105 from Sucre. Alt: 2420m. 6/3/71. Collected by E. Meneses. Plants to 30cm. Flower blue-violet, about 1.5cm diam. S. scr?
- 4746 *S. gandariensis* ^{berthaultii} Dept. Chuquisaca, prov. Oroya, 30 km from Sucre on Cochabamba road at Serpas. Alt: 2050m. 8/3/71. Collected by E. Meneses. By stream side in dryish valley. Berries very large, white spotted on dark green background, 2 x 2.5cm. Fls white, about 1-5cm diam. H. S. ✓
- 4748 *S. capsicibaccatum* Dept. Cochabamba, prov. Quillacollo, 21 km from Quillacollo on road to Morochata. Alt: 3550m. 21/3/71. On scree below road. White/cream stellate fls. H. ✓
- 4752 *S. brevicaule* Dept. Cochabamba, prov. Quillacollo, 23 km from Quillacollo on road to Morochata, Puente San Miguel. Alt: 3000m. 21/3/71. (See 4276 and 4505) Lighter blue fls may have spi genes, darker fls would be good bvc H. T. ✓
- 4756 *S. sparsipilum* Dept. Cochabamba, prov. Quillacollo, 1.5 km before Liriuni on road from Quillacollo. Alt: 3100m. 21/3/71. ~~hybridum~~ S. Growing in potato field. Very few fruits. Many plants seem to have flowered later than the cultivars (probably all adg) S. ✓

Bolivia, 1971.

Potato Collections.

J.P. Hjerting, P.J. Cribb and Z. Huamán.

- 4757 S. sp. (cultivated) Dept. Cochabamba, prov. Quillacollo, 1.5km before Liriuni on road from Quillacollo. Alt: 3100m. 21/3/71
Collected by sp1 plants growing in cultivated potato field.
One fruit per plant collected, each being given a separate code letter. S.

- 4758 S. toralapanum Dept. Cochabamba, prov. Arani, Hacienda Toralapa, turning from Cochabamba - Santa Cruz road between km 71 and 72. Alt: 3500m. 23/3/71. In barley field and on edge of potato field. (see also 4247). S.

Numbers 4759 to 4814 were all tuber* collections made at the Est. Exp. Hacienda Toralapa. The collection was badly infected by virus and only those plants apparently unaffected were collected. The native names and provenance are given when known. (*Seed occasionally)

23/3/71

- 4759 S. curtilobum ? Unknown provenance. S.

- 4762 S. tub. andigena "Milagro". Moya, Oruro. Pink fls, pink tubers with large white areas. T.

- 4763 S. tub. andigena "Isocana". Cardenas's collection, described in Folia Universitaria from Koari, grown at Toralapa. Red imilla-type tubers. T. 2n = 48

- 4764 S. tub. andigena "Chichi Llokalia" From Huarapata, Mizque, Cochabamba. Purple fls, white acumens; pink elongated tubers. T.

- 4765 S. tub. andigena "Pacco Imilla" From Condoviri, Oruro. White flower, white imilla tubers. T.

- 4766 S. tub. andigena "Pila Pala". Belén, La Paz collection. Pale pink fls; pink imilla tubers, slightly obliquely flattened. T.

- 4767 S. tub. andigena "Janco Pali" From Sacaca, Potosí. Tubers white, round, bilaterally compressed. T.

- 4768 S. tub. andigena "Kumurana". From Toledo, Oruro. Fls pink with white acumens. Pink imilla tubers. T.

- 4769 S. tub. andigena "Tunti Imilla" From Sansan, Oruro. T.

- 4770 S. tub. andigena "Llocailla" From Moza, Oruro. Pinkish-purple fls with white acumens. (Used in Cochabamba expt (P.16)). T. 2n = 48

- 4771 S. tub. andigena "Laram Pali". Purple imilla type tubers. T. From Huari, dept. Oruro.

- 4772 S. tub. andigena "Fuca Nahui". From Culpani, Mizque, Red imilla type tubers. Used in Cochabamba expt. (P.17). T. dept. Cochabamba.

Bolivia, 1971

Potato Collections

J.P. Hjerting, P.J. Cribb and Z. Huamán

Est. Expt. No.

For further details see notes on page 24. All grown at Heda, Toralapa.

- 4773 S. tub. andigena "Alkka Imilla". From Condoviri, Oruro.
Used in Cochabamba expt (P.18). T. $2n = 24$
- 4774 S. tub. andigena "Imilla Blanca". From Cochipata, Toralapa, Cochabamba.
White imilla type tubers; pink flowers, white acumens.
Used in Cochabamba experiment (P.19). T. $2n = 48$
- 4775 S. tub. andigena "Imilla Rosada". From La Paz. Pink imilla
tubers. White flower. T.
- 4776 S. tub. andigena "Alkka imilla". From Piquiriqui, Challapata,
Oruro. Tubers pink with white spectacles. imilla form.
Used in Cochabamba experiment (P.20). T. $2n = 48$
- 4777 S. tub. andigena "Huancu Siliu". From Moza, Oruro. Pink fls,
white acumens; pink oval tubers. T. $2n = 48$
- 4778 S. stenotomum ssp. goniocalyx "Canasta Huachay". From the
Peruvian collection. Pink fls; white imilla type tubers. T. $2n = 24$
- 4779 S. x chaucha "Alkkamari". From Colque Rancho, Misque, Cochabamba.
Tubers with white spectacles, violet, imilla type. Flowers purple.
Used in Cochabamba experiment. T. (P.12).
- 4780 S. x chaucha "Centefia". From Cardenas's collection at Koari, Cochabamba.
Violet elongated tubers. Used in Cochabamba experiment (P.15). T. $2n = 48$
- 4781 S. x chaucha/stenotomum ? "Carhuash Pashon". From Peruvian
collection. Pink elongated tubers, pink flowers. T. $2n = 24$
- 4782 S. x chaucha? From Belén, La Paz collection. Violet imilla-
type tubers, pink flowers. T. $2n = 48$
- 4783 S. x chaucha/goniocalyx ? "Zapallo". From Viloco, La Paz.
White imilla-type tubers, blue flowers. Used in Cochabamba
experiment (P.15) T. $2n = 24$
- 4784 S. x chaucha? "Jancko imilla". From Sansan, Oruro. White
imilla tubers, purple flowers. Used in Cochabamba expt. (P.14). T. $2n = 24$
- 4785 S. curtilobum ? "Jancko Luqui". From Huaina Pasto, Oruro.
Round white tubers. P. S.
- 4786 S. curtilobum "Jancko Luqui". From Jancko Nunu, Oruro. Tubers
dark violet, oval. T.
- 4787 S. curtilobum "Luqui". From Tacagua, Challapata, White imilla-
type tubers. T. deft. Oruro.

Bolivia, 1971

Potato Collections

J.P.Hjerting, P.J.Cribb and Z.Huamán

For further notes see p. 24. All material grown at Hacienda Tora-lapa.

- 4788 S.curtilobum "Morocluqui" From Belén, La Paz collection. White oval tubers. T. 24 = 24
- 4789 S.curtilobum "Laram Luqui" From Belén, La Paz collection. Oval 'black' tubers. T.
- 4790 S.curtilobum "Choquepitu morada" From Belén, La Paz collection. Dark violet tubers, imilla shape. T.
- 4791 S.curtilobum "Choquepitu blanca", "Luqui" From Belén, La Paz collection. White imilla-type tubers. T. S.
- 4792 S.stenotomum "Huahua chara" From Condoriri, Oruro. Oval white tubers. Used in Cochabamba experiment (P.1). T. 24 = 24
- 4793 S.stenotomum ? From Moza, Oruro. Imilla-type tubers, red with white spectacles. Used in Cochabamba expt.(P.2).T. 24 = 24
- 4794 S.stenotomum "Lapca" From Belén, La Paz collection. Tubers dark violet with white areas often round eyes. Used in Cochabamba experiment (P.3). T.
- 4795 S.stenotomum "Acharapi" From Toledo, Oruro. Red imilla-type tubers. Used in Cochabamba experiment (P4). T. AKARA P!
- 4796 S.stenotomum ? "Achacana" From Moza, Oruro. Red oval tubers, white flowers. Used in Cochabamba expt.(P.5).T. 24 = 24
- 4797 S.stenotomum "Alkka pitu huayaca". From San San, Oruro. Tubers deep red, elongated; flowers pink with white acumens. Used in Cochabamba experiment (P.6).T. 24 = 24
- 4798 S.juzepczukii From Belén collection, La Paz. Very broad terminal leaflets. Tubers white, oval. T.
- 4799 S.juzepczukii "Luqui" From Toledo, Oruro. Tubers white, elongated. T.
- 4800 S.juzepczukii From Belén, La Paz collection. Sausage-shaped white tubers. T.
- 4801 S.ajanhuiri From Belén, La Paz collection. Oval white tubers. T.
- 4802 S.ajanhuiri "Yari" From Belén, La Paz collection. Elongated violet-purple tubers. T.

Bolivia, 1971.

Potato Collections

J. P. Hjerting, P.J. Cribb and Z. Huamán

For further notes see p. 24. All material grown at Hacienda Tora-lapa.

- 4803 S.ajanhuiri "Alkka Jari". From Caracollo, Oruro. Tubers of rectangular shape, purple/violet or with purple/violet areas on white background. T.
4804. S.ajanhuiri "Chiar ajanhuiri" From Ocko Vinto, Oruro. Oval tubers. T.
- 4805 S.ajanhuiri "Laram Jari". From Caracollo, Oruro. Tubers purple/violet, rectangular; fls pale blue. T.
- 4806 S.ajanhuiri From Belén, La Paz collection. Long oval purple/violet tubers. "Ajanhuiri". T.
- 4807 S.ajanhuiri "Ajanhuiri" From Dr Cárdenas's collection at Koari, Cochabamba. Tubers fusiform, violet with white ends. T.
4808. S.ajanhuiri "Chayayari" From Belén, La Paz collection. Rectangular tubers with pale purple stains. T.
- 4809 S.stenotomum "Choquephiñu" From Belén, La Paz Collection. Virused? Tubers white, black-spectacled. Used in Cochabamba experiment (P.7). T.
- 4810 S.stenotomum "Huancu sullu" From Belén, La Paz collection. Virused. Tubers white, black-spectacled. Used in Cochabamba experiment (P.8.). T. $2n = 24$
- (4811 virused - discarded)
- KILLU*
- 4812 S.stenotomum "KILLU phiñu" From Belén, La Paz collection. Virused. White imilla tubers. Purple flowers. Deep eyes. Used in Cochabamba experiment (P.9). T.
- 4813 S.stenotomum "Huila phiñu". From Belén, La Paz collection. Virused; tubers elongated and curved into a circle, white. $2n = 24$. Used in Cochabamba experiment (P.10). T. $2n = 24$
- 4814 S.stenotomum "Pala pala". From Belén, La Paz collection. Red spectacled tubers. Used in Cochabamba experiment (P.11). T. $2n = 24$

End of Toralapa material

- 2 4840 S. oplocense? ^{canasense} Dept. La Paz, prov. Murillo, La Paz, Municipal cemetery. Alt: c. 3800m. 26/3/71. Amongst gravestones. Plants to 40cm, some like scr, some like opl. Some glabrous leaved. Blue pentagonal fls. Berries with white spots. H.S.

Bolivia, 1971.Potato Collections.

J.P.Hjerting, P.J.Cribb and Z.Huamán. (and M.Zavaleta)

DE 4842 S.acaule Dept. La Paz, prov Murillo, La Paz, Municipal cemetery. Alt: c. 3800m. 26/3/71. Amongst gravestones. S.

4848 S.acaule Dept. La Paz, prov. Pacajes, Cerro Comanche on road from Viacha to Corocoro. Alt: 4100m. 28/3/71. S.

hoya and K 4853 S.megistacrolobum Dept. La Paz, prov. Pacajes, on road from Caquiaviri to Rio Desaguadero, 4km past Caquiaviri. Alt: 4000m. 28/3/71. On hillside beside road. Leaf shape very variable; growing with S.ajanhuiri. Note: "Caquiaviri" is Aymará for "Ajanhuiri". H.S. *(name Caquiaviri is)* 2

4854 S.acaule As 4853 but 2km past Caquiaviri. Alt: 4050m. In fields and pastures, common. S.

4856 S.curtilobum Grown at Patacamaya Expt. Station, Dept. La Paz. Alt: 3900m. 29/3/71. S. *(Prov. Aroma)*

Nos. 4857 to 4945. Moises Zavaleta collection of cultivated potatoes grown on his farm in Dept. La Paz, prov. Pacajes, near Caquiaviri and harvested by him and members of the expedition on 28/3/71. Alt: 3950m. The Zavaleta collection numbers, original localities of collections and vernacular names are given where known.

4857 S.stenotomum. "Maman Peque" Zavaleta 1352. Dept. La Paz, prov. Ingavi, Lachay. Black and white tubers, round. T.

4858 S.stenotomum "Phiñu" or "Cholo". Zavaleta 1357. Dept. La Paz, prov. Ingavi, Lachay. Tubers round, red. T.

4859 S.stenotomum "Pala". Zavaleta 1361. Dept. La Paz, prov. Ingavi, Lachay. Flat round red tubers. T.

4860 S.stenotomum "Chiquiña" Zavaleta 1375. Dept. La Paz, prov. Ingavi, Huaraya. Round red tubers. T.

4861 S.stenotomum Zavaleta 1355. Dept. ~~Lachay~~, prov. Cercado, Condoriri. Tubers round. T. *Oruro*

4862 S.stenotomum "Jancko Kunurana" Zavaleta 1389. Dept. La Paz, Prov. Pacajes, Aipa Paruyo. Round white tubers. T.

4863 S.stenotomum Zavaleta 1277. Dept. ~~Lachay~~, prov. Cercado, Condoriri. Round black & white tubers. T. *Oruro*

4864. S.stenotomum Zavaleta 1280. As for 4863. Round white tubers. T.

Bolivia, 1971.Potato Collections.

J.P. Hjerting, P.J. Cribb, Z. Huamán and M. Zavaleta.

All numbers on this page are from the Moises Zavaleta collection of cultivated potatoes, grown on his farm in Dept. La Paz, prov. Pacajes, near Caquiavirá. Alt: 3950m. 28/3/71. See also p. 28.

- 4865 S. stenotomum Zavaleta 1285. Dept. ~~La Paz~~, prov. Cercado, Condoriri. Long white tubers. T. ^{Oruro}
- 4866 S. stenotomum Zavaleta 1297. Locality as for 4865. Long black tubers. T.
- 4867 S. stenotomum "Palala amarilla" Zavaleta 1010. From dept. Oruro, prov. Atahualpa, Huanuri. Yellow round tubers. T.
- 4868 S. stenotomum "Paloma" Zavaleta 1184. From dept. La Paz, prov. Aroma, Patacamaya. Tubers mauve and white, round. T.
- 4869 S. stenotomum "Pitu huayca rosada" Zavaleta 928. From dept. La Paz, prov. Cercado, Condoriri. Long red tubers. T.
- 4870 S. stenotomum Zavaleta 929. As for 4869. Round black. T.
- 4871 S. stenotomum "Chulipa choque" Zavaleta 967. From dept. Oruro, prov. Atahualpa, Sillja. Said to be wild. Tubers oval white. T.
- 4872 S. stenotomum "Laurachi" Zavaleta 836. From dept. Oruro, prov. Litoral, Escara. Tubers imilla shaped, black. T.
4873. S. stenotomum "Packo philiu" Zavaleta 995. From dept. Oruro, prov. Atahualpa, Curi de Huajillas. Red, round tubers. T.
- 4874 S. stenotomum No number, place or native name. Red round. T.
- 4875 S. stenotomum "Puca mama" Zavaleta 624. From dept. La Paz, prov. Aroma, Chiar Umani. Round red. ? missing. T.
- 4876 S. stenotomum "Sallama" Zavaleta 685. From dept. Potosí, prov. Frías, Cebadillas. Tubers round, black on white. T.
- 4877 S. stenotomum "Imilla negra" Zavaleta 688. From dept. Potosí, prov. Frías, Cayara. Tubers round blue/white. T.
- 4878 S. stenotomum "Kunurana" Zavaleta 712. From dept. Potosí, prov. Saavedra, Chimpapata. Tubers red round. T.
- 4879 S. stenotomum "Yana koyllu" Zavaleta 717. As for 4878. Round black tubers. T.
- 4880 S. stenotomum "Sallama" Zavaleta 789. From Dept. Oruro, Corque. Round white tubers. T.

Bolivia, 1971.Potato Collections

J.P. Hjerting, P.J. Cribb, Z. Huamán and M. Zavaleta.

All numbers on this page are from the Moises Zavaleta collection of cultivated potatoes, grown on his farm in Dept! La Paz, prov. Pacajes, near Caquiavirí. Alt: 3950m. 28/3/71. See also p. 28.

- 4881 S. stenotomum "Chiar achacana" Zavaleta 580. From dept. La Paz, prov. Pacajes, Llimpi. Round black. "Achacana" means "cactus-like" in Aymará. T.
- 4882 S. stenotomum "Huila imilla" Zavaleta 579. As 4881. Round red. T.
- 4883 S. stenotomum "Huila ajanhuirí" Zavaleta 571. Long red. As 4881. T.
- 4884 S. stenotomum "Huila chajlla" Zavaleta 563. From Dept. La Paz, prov. Pacajes, Janjo Marca. Round red. T.
- 4885 S. stenotomum "Chilena blanca" Zavaleta 195. From dept. La Paz, prov. Aroma, Chiar Umani. Round white. T.
- 4886 S. stenotomum "Chupic chanka" Zavaleta 166. From dept. La Paz, prov. Ingavi, Santiago de Machaca. Long black. T.
- 4887 S. stenotomum "Runa bocilla" Zavaleta 72. From dept. Chuquisaca, prov. Sur Cinti, Culpina. Red/black, round. T. $n=24$.
- 4888 S. stenotomum "Maman Huaylla" Zavaleta 550. From dept. La Paz, prov. Iarecaja, Millipaya. Round white. T.
- 4889 S. stenotomum "Pichuya" Zavaleta 543. From dept. La Paz, prov. Murillo, Santa Ana. Mauve/white round. T.
- 4890 S. stenotomum "Kunurana" Zavaleta 9. From dept. La Paz, prov. Pacajes, Caquiavirí. Round, white and red. T.
- 4891 S. stenotomum "Pala Pala" Zavaleta 504. From dept. La Paz, prov. Murillo, Ticuyu. White flat round tuber. T.
- 4892 S. stenotomum "Huila piticalla" Zavaleta 498. From dept. La Paz, prov. Murillo, Santa Ana. Round red tuber. T.
- 4893 S. stenotomum No name. Zavaleta (1274). From dept. Oruro, prov. Cercado, Condoriri. Round red tuber. T.
- 4894 S. stenotomum "Sako" Zavaleta 420. From dept. La Paz, prov. Omasuyos, Choromata. Round, black and white. T.
- 4895 S. stenotomum No name. Zavaleta 197-1. No locality. Long black tuber with white spectacles. T.
- 4896 S. stenotomum ("Phissu") Zavaleta 438. From dept. La Paz, prov. Aroma, Ayoayo. Pink white long tuber. T.

Bolivia, 1971.

Potato Collections.

J. P. Hjerting, P. J. Cribb, Z. Huamén and M. Zavaleta.

All numbers on this page are from the Moises Zavaleta collection of cultivated potatoes, grown on his farm in dept. La Paz, prov. Pacajes, near Caquioviri. Alt: 3950m. 28/3/71. See also p. 28.

- 4897 S. stenotomum No name, no locality. Zavaleta 4-62. Round red. T.
- 4898 S. stenotomum "Imilia negra"(!!) Zavaleta CH 43. From dept. La Paz, Belén. Tubers long white. T.
- 4899 S. stenotomum No name or locality. Zavaleta 192. Tubers round, white and red. T.
- 4900 S. stenotomum No name, or locality. Zavaleta 367. Black round. T.
- 4901 S. stenotomum No name or locality. Zavaleta 4-45. Round red. T.
- 4902 S. ajanhuiri No name or locality. Zavaleta 1-70 (521). Tubers long pink. T.
- 4903 S. ajanhuiri "Charu yari" Zavaleta 838. From dept. Oruro, prov. Litoral, Escara. Long pink tubers. T. (Berry empty).
- 4904 S. ajanhuiri "Yari" Zavaleta 878. From dept. Oruro, prov. Kosapa. Tuber long purple. T. (Berry empty).
- 4905 S. ajanhuiri "Ajanhuiri" Zavaleta 374. From dept. La Paz, prov. Aroma, Chiar Umani. Long mauve tubers. T. S.
- 4906 S. ajanhuiri No name. Zavaleta 1259. From dept. Oruro, prov. Cercado, Condoriri. Long mauve tubers. T. S.
- 4907 S. ajanhuiri No name or locality. Zavaleta 446-1. Long mauve. T. S.
- 4908 S. ajanhuiri No name. Zavaleta 1231. From dept. Oruro, prov. Cercado, Condoriri. Long mauve tubers. T. (Berry empty).
- 4909 S. ajanhuiri No name. Zavaleta 1261. As 4908. Long mauve. T.
- 4910 S. ajanhuiri "Ajahuiri negra" Zavaleta 947. As 4908. Tubers long mauve. T. S.
- 4911 S. ajanhuiri "Ajahuiri" Zavaleta 429. From dept. La Paz, prov. Omasuyos, Coromata. Long mauve tubers. T.
- 4912 S. ajanhuiri "Kara ajahuiri" Zavaleta 446. From La Paz dept., prov. Aroma, Ayoayo. Long pink tubers. T.
- 4913 S. ajanhuiri No name. Zavaleta 1245. From dept. La Paz, prov. Cercado, Condoriri. Tubers long white. T.
- 4914 S. ajanhuiri "Ajahuiri" Zavaleta 1392. From dept. La Paz, prov. Pacajes, Aypa Paruyo. Long mauve tubers. T.

Bolivia, 1971.

Potato Collections

J.P. Hjerting, P.J. Cribb, Z. Huamán and M. Zavaleta.

All numbers on this page are from the Moises Zavaleta collection of cultivated potatoes, grown on his farm in dept. La Paz, prov. Pacajes, near Caquiaviri. Alt: 3950m. 28/2/71. See also p. 28.

- 4915 S.ajanhuiri "Orko Ajahuiri" Zavaleta 1366. From dept. La Paz, prov. Ingavi, Lacoyo. Long mauve tubers. T.
- 4916 S.ajanhuiri "Ajahuiri" Zavaleta 561. From dept. La Paz, prov. Ingavi, Titicanitacaca. Long black tubers. T.
- 4917 S.ajanhuiri "Ajahuiri" Zavaleta 519. From dept. La Paz, prov. Pacajes, Lirko. Long mauve tubers. T.
- 4918 S.ajanhuiri No name. Zavaleta 1241. From dept. Oruro, prov. Cercado, Condoriri. Long mauve tubers. T.
- 4919 S.ajanhuiri "Chiar Ajahuiri" Zavaleta 501. From dept. La Paz, prov. Murillo, Santa Ana. Long pink tubers. T.
- 4920 S.ajanhuiri (or 4x commercial var?) No name or number. Caquiaviri dept. Long mauve tubers. T. No locality.
- 4921 S.ajanhuiri (or 4x commercial var?) No name number or locality. Long mauve tuber. T. as(4920)
- 4922 S.ajanhuiri No name. Zavaleta 1246. From dept. La Paz, prov. Cercado, Condoriri. Long mauve tuber. T. Oruro
- 4923 S.ajanhuiri "Ajahuiri" Zavaleta 169. From dept. La Paz, prov. Ingavi, Santiago de Machaca. Long pink tubers. T.
- 4924 S.ajanhuiri "Ajahuiri" Zavaleta 175. From dept. La Paz, prov. Saavedra, Kaata. Long mauve tubers. T.
- 4925 S.ajanhuiri No name. Zavaleta T-346. No locality. Round red tubers. T.
- 4926 S.ajanhuiri No name or locality. Zavaleta 577-A(709). Round red tubers. T.
- 4927 S.ajanhuiri No name. Zavaleta 1247. From dept. La Paz, prov. Cercado, Condoriri. Tubers long mauve. T. Oruro
- 4928 S.ajanhuiri No name. As 4927. Zavaleta 1251. Long white. T.
- 4929 S.ajanhuiri "Kara Ajahuiri" Zavaleta 142. From dept. La Paz, prov. Pacajes, Ticoniri. Long mauve tubers. T.
- 4930 S.ajanhuiri "Ajahuiri" Zavaleta 16. From dept. La Paz, prov. Pacajes, Caquiaviri. Long pink tubers. T.

Bolivia, 1971.

Potato Collections.

J.P.Hjerting, P.J.Cribb, Z.Huamán and M. Zavaleta.

All numbers on this page are from the Moises Zavaleta collection of cultivated potatoes, grown on his farm in dept. La Paz, prov. Pacajes, near Caquiavirí. Alt: 3950m. 28/3/71. See also p. 28.

- 4931 S. juzepczukii "Kholo" Zavaleta 17. From dept. La Paz, prov. Pacajes, Caquiavirí. Round white tubers. T.
- 4932 S. juzepczukii No name. Zavaleta 430. No locality. Long white tubers. T.
- 4933 S. juzepczukii No name or locality. Zavaleta 138-1. Round white tubers. T.
- 4934 S. juzepczukii No name. Zavaleta 397. From dept. La Paz, prov. Lipoyez. Tubers flattened, blue and white. T.
- 4935 S. juzepczukii "Kaysalla" Zavaleta 414. From dept. La Paz, prov. Omasuyos, Coromata. Tubers long mauve. T.
- 4936 S. juzepczukii No name or locality. Zavaleta 449. Long white tubers. T.
- 4937 S. juzepczukii "Keta" or "Ketu" Zavaleta 1346. From dept. La Paz, prov. Aroma, Pomani. Tubers flat white. T.
- 4938 S. juzepczukii "Morok luqui" Locality for 4937. Zavaleta 1347. Long white tubers. T.
- 4939 S. juzepczukii "Saitu luqui" Zavaleta 1348. Locality as for 4937. Long white tubers. T. $2^n = 36$.
- 4940 S. juzepczukii "Mullunku" Zavaleta 1349. Locality as for 4937. Round white tubers; badly eaten by grubs. T.
- 4941 S. juzepczukii "Pincu" Zavaleta 1350. Locality as for 4937. Long white tubers. T.
- 4942 Zavaleta 1383. Arrived dead.
- 4943 S. juzepczukii "Kauna luqui" Zavaleta 1384. From dept. La Paz, prov. Ingavi, Kallia. Tubers round white. T.
- 4944 Zavaleta 1387. Arrived dead.
- 4945 S. juzepczukii No name. Zavaleta s.n. From dept. La Paz, prov. Pacajes, Caquiavirí. Tubers long white. T.

Bolivia, 1971.

Potato Collections.

J.P.Hjerting, P.J.Uribé and Z.Huamán

All numbers on this page are from the Humberto Gendarillas collection of cultivated potatoes, grown at the Research Station of Patacamaya, prov. Aroma, dept. La Paz. Alt: 3900m. 30/3/71. Localities of original collection and native name given when known.

- 4946 S. juzepczukii "Luqui" Gand. 2A (4946A "Chiri Luqui")
From Vilaque, dept. La Paz. Round white tubers. T.
- 4947 S. juzepczukii No name. Gand. 2B. From dept. La Paz, Vilaque.
Round white tubers. T.
- 4948 S. juzepczukii Gand. 9. From dept. Oruro, Challa. Tubers long white. T. 2n = 26.
- 4949 S. juzepczukii "Huila luqui" Gand. 10. From dept. La Paz, Vilaque. Tubers violet/white flattened. T.
- 4950 S. juzepczukii "Kaysalia luqui" Gand. 11. From dept. La Paz, prov. Aroma, Patacamaya market. Tubers long violet. T.
- 4951 S. juzepczukii "Luqui" Gand. 15A. As for 4950. Round pink tubers. T.
- 4952 S. juzepczukii "Luqui" Gand 15B. As for 4950. Long white tubers. T.
- 4953 S. juzepczukii "Nasare Luqui". Gand. 17. From dept. La Paz, Torno. Long red tubers. T.
- 4954 S. juzepczukii "Morocho" Gand. 18. From dept. La Paz, Vilaque. Round white tubers. T.
- 4955 S. juzepczukii "Kaysalia" Gand. 25. From dept. La Paz, prov. Aroma, Patacamaya market. Tubers mauve/white long. T.
- 4956 S. juzepczukii "Kaysalia" Gand. 26. As for 4955. Long violet/white tubers. T.
- 4957 S. juzepczukii "Kaysalia blanca" Gand. 27. As for 4955.
Long white tubers. T.
- 4958 S. juzepczukii "Pumiri" Gand. 28. As for 4955. Round white tubers. T.
- 4959 S. juzepczukii "Kaisi" Gand. 29. As for 4955. Long pink tubers. T.
- 4960 S. juzepczukii "Luqui" Gand. 31. As for 4955. Long pink and white tubers. T.
- 4961 S. juzepczukii "Luqui" Gand. 53. As for 4955. Long white flattened tubers. T.
- 4962 S. juzepczukii "Luqui" Gand. 54. As for 4955. Long white tubers. T.

Bolivia, 1971.

Potato Collections.

J.P. Hjerting, O.J. Cribb and Z. Huamán.

All numbers on this page are from the Humberto Gandarillas collection of cultivated potatoes, grown in dept. La Paz, prov. Aroma, Patacamaya Research Station. Alt: 3900m. 30/3/71.
Native names and original collection localities given when known.

- 4963 S. juzepczukii. No name. Gand. 54A. From dept. La Paz, prov. Aroma, Patacamaya Market. Round flat white tubers. T.
- 4964 S. juzepczukii "Kola" Gand. 54B. As for 4963. Round white tubers. T.
- 4965 S. ajanhuiri "Ajahuiri blanca". Gand. 22B. From dept. La Paz, Calacoto Market. Round white tubers. T. $2n = 24$.
- 4966 S. ajanhuiri "Ajahuiri" Gand. 20. Dept. La Paz, prov. Aroma, Patacamaya Market. Long white tubers. T.
- 4967 S. ajanhuiri "Ajahuiri blanca" Gand. 22A. From dept. La Paz, Calacoto market. Long white tubers. Virused. T. S.
- 4968 S. ajanhuiri No name. Gand. 23. As for 4966. Oval white tubers. T.
- 4969 S. ajanhuiri "Yari" Gand. 52. As for 4966. Long white, with white flowers. T.
- 4970 S. ajanhuiri "Huilla" Gand. 80. As for 4966. Long black tubers. T. $2n = 24$.
4971. S. ajanhuiri "Yari" Gand. 89. As for 4966. Long white tubers; white fls. T. S.
- 4972 S. ajanhuiri "Yari" Gand. 90. As for 4966. Long white tubers; white flowers. T.
- 4973 S. ajanhuiri No name. Gand. 8. From dept. La Paz, Vilaque. White and mauve long tubers. T. S.
- 4974 S. ajanhuiri "Ajahuiri blanca" Gand. 4. As for 4973. Tubers long white. T.
- 4975 S. ajanhuiri "Ajahuiri negra". As for 4973. Long mauve tubers. T. Some variation to STW. Gand. 5. S.
- 4976 S. ajanhuiri "Ajahuiri" Gand. 6. From dept. La Paz, prov. Aroma, Patacamaya Market. Long black tubers. T. S. STW is
- 4977 S. ajanhuiri "Ajahuiri negra". Gand. 7. As for 4976. Long black tubers. T. S.
- 4978 S. x chaucha No name. Gand. 86. As 4976. Long red tubers with white spectacles. T.

Bolivia, 1971.Potato Collections.

J.P. Hjerting, P.J. Cribb and Z. Huamán.

All numbers on this page are from the Zavaleta collection (see p. 28) and from the Gandarillas collection (see pp. 34 & 35).

- 4979 S.chaucha No name. Zavaleta 147. 28/3/71. From dept. La Paz, prov. Aroma, Patacamaya Market. Long white tubers. T.
STN 18
- 4980 S.chaucha "Ruqqui" Zavaleta 178. From dept. La Paz, prov. Saavedra, Kaata. 28/3/71. Long white tubers. T.
STN 18
- 4981 S.chaucha "Piña" Zavaleta 636. From dept. La Paz, prov. Aroma, Pomani. 28/3/71. Round white tubers. "Janco Phiñu" T.
- 4982 S.curtilobum No name. Zavaleta s.n. No locality. Tubers mauve round flattened. T. 28/3/71
- 4983 S.curtilobum Zavaleta 365. Arrived dead.
- 4984 S.curtilobum "Choque pitu morada" Zavaleta 775. From dept. Oruro, prov. Toledo, Cipatiti. 28/3/71. T.
- 4985 S.curtilobum "Luque morada" Zavaleta 946. From dept. Oruro, prov. Cercado, Condoriri. Tuber round flattened, mauve. T.S.
- 4986 S.curtilobum "Morok luqui" Zavaleta 971. From dept. Oruro, prov. Atahualpa, ~~Silja~~ ^{Sijlla}. Tuber round white. T.
- 4987 S.curtilobum "Jancko choquela" Zavaleta 1381. From dept. La Paz, prov. Ingavi, Sulca Titi. Tubers long white. T.
- 4988 S.curtilobum. Gandarillas 1. "Laram luqui". No locality. 29/3/71. Round white tubers. T. S.
- 4989 S.curtilobum "Choque pitu". Gandarillas 35. No locality. Round dark mauve tubers. T. S.
- 4990 S.curtilobum No name of locality. Gandarillas 36. Round white tuber. T. S.
- 4991 S.stenotomum ssp. goniocalyx ? "Zapallo" Zavaleta 47 (T-47) No locality. 28/3/71. Round yellow tuber. T. $2n = 24$
- 4992 S.sten. ssp. goniocalyx ? "Zapallo" Zavaleta 50. Round yellow tubers. T.
- 4993 S.sten. ssp. goniocalyx "Zapallo" Zavaleta 384. Round yellow tubers. T.
STN 18
- 4994 S.sten. ssp. goniocalyx ? $2n = 26$. Gandarillas 60. Round white tubers. T.S.
 24
- 4995 S.sten. ssp. goniocalyx ? "Zapallo" $2n = 24$. Gandarillas 93. Patacamaya market. Round yellow tubers. T.
- 4996 S.sten. ssp. goniocalyx "Zapallo" Gandarillas 94. As for 4995. tubers round, yellow. T. $2n = 24$

Bolivia, 1971.

Potato Collections.

J.P.Hjerting, P.J.Cribb and Z.Huamán.

Numbers 4997 to 5001 are from the Gandarillas Collection (see p. 34)

- 4997 S.stenotomum No name. Gandarillas 95. From the Chile - Bolivian border. Round white tubers. T.
- 4998 S.stenotomum "Pituhuyaca" Gandarillas 97. From dept. La Paz, prov. Aroma, Patacamaya Market. Round red tubers. T.
- 4999 S.stenotomum or S.phureja "Penco" Gandarillas 99. As for 4998. Red tubers with white spectacles. T.
- 5000 S.phureja Name and origin unknown. Gandarillas 100. Long red tubers. T.
- 5001 S.juzepczukii "Chiri luqui" Gandarillas 2. From dept. La Paz, Vilaque. Pink/white flattened tubers. T.
-
- 5004 S.achacachense Dept. La Paz, prov. Omasuyos, 21 km from Achacachi on road to Sorata. Alt: 4150m. 31/3/71. On rock face. Violet fls; plants to 25cm; flowers to at least 5cm. H.
- 5009 S.virgultorum Dept. La Paz, prov. Larecaja, 17km from Sorata on road to Tacacoma. Alt: 3675m. 31/3/71. At base of 3m high bushes. No fls; possibly different form of 5010. H.
- 5010 S.candolleanum As for 5009. Leaflets narrower than 5009; interjecteds present. No flowers. H.
- 5012 S.circaeifolium Dept. La Paz, prov. Larecaja, 11 km from Sorata on road to Tacacoma. Alt: c.3500m. 31/3/71. Under bushes by roadside. Very glabrous leaves. H.
- 5017 S.circaeifolium/capsicibaccatum intermediate. Dept. La Paz, prov. Larecaja, on road from La Paz to Sorata, 100m before hotel Prefectural, Sorata. Alt: 2750m. 1/4/71. On scree. H.
- 5025 S.sparsipilum Dept. La Paz, prov. Murillo, La Paz, Seguencoma. Alt: 3325. 2/4/71. Plants dying or dead. S.
5026. S.sparsipilum/leptophyes Dept. La Paz, prov. Murillo, Aranjue~~z~~, 1 km below Calocoto, on the Valle Abajo road. Alt: 3300m. 2/4/71. On dry slopes above road, variously like lph, opl/spl or intermediate. (a) from dead plants, (S). (b) from dissected plant. H. (Ovules numerous). A 2.n=24
- 5027 S.leptophyes? Dept. La Paz, prov. Murillo, Mallacilla, c.2 km below Calocoto on road to El Alto. Possibly Buchtien type locality for lph. S. T. 2/4/71 Alt: 3400m.

Bolivia, 1971.

Potato Collections

J.P.Hjerting, P.J.Cribb and Z.Huamán

- 5028 S.sparsipilum Dept. La Paz, prov. Murillo, Ovejuyo, field ~~Timus~~
behind Instituto Nacional de Biología Animal. Alt: 3650m.
2/4/71. At bottom of field and rubbish dump under bushes. ~~Timus~~
Plants dying or dead. S.
- 5029 S.sparsipilum As for 5028. By wall behind labs. Looks like
4x form, with broader leaflets than 5028. H.T. ~~Timus~~
- 5033 S.phureja Dept. La Paz, prov. Murillo, mercado Rodriguez
de La Paz. From Sorata area, probably Timus valley,
prov. Chuquisaca, dept. La Paz. Dull red with white spectacles.
Possibly collected already at Millipaya. T.
- 5034 S.phureja As 5033. From Timus valley, prov. Chuquisaca,
dept. La Paz. White spectacles on red-splashed background. T.
NUNECAS
2n = 24.
- 5035 S.phureja As 5033. From Sorata valley. Two kinds, A and
B. Red tubers. T.
- 5036 S.phureja As 5033. From Sorata valley. Very dark mauve,
and white spectacles. oblong. T.
- 5037 S.phureja As 5033. From Sorata valley. Yellow long tubers. T.
Nov Yungas 2n = 24.
- 5040 S.violaceimarmoratum Dept. La Paz, prov. Ingavi, road
from Unduavi to Coroico at 6 km from Unduavi. Alt: 3275m.
3/4/71. On disturbed slope below road ^{and} in ceja formation,
above road. Flowers stellate or pentagonal, violet or
violet with white acumens. Fruits round or elongated. H. S. 4
- 5042 S.violaceimarmoratum As for 5040 but 10 km from Unduavi.
3225m. Fls much larger than 5040, speckled violet. H. S. 3
- 5043 S.violaceimarmoratum As for 5040 but 19 km from Unduavi.
Alt: 2725m. With very small pale pink flowers, quite unlike
those of 5040 and 5042. H. S? 4
- 5052 S.acaule Dept. La Paz, prov. Ingavi, ruins of Tiahuanaco.
Alt: 3900m. 5/4/71. S.
- 5056 S.sparsipilum Dept. La Paz, prov. Aroma, Kallari, road
from Sica Sica to Luribay. Alt: ~~3800~~ 4000m? Date?
Collected by Zavaleta, № 1525. 2n = 24. S

End of Bolivian Collections.

(Peruvian collections follow: 5057 - 5247)

Peru, 1971.

Potato Collections

J.P. Hjerting, P.J. Cribb and Z. Huamán.

- DE 5057 S. canasense/oploense Dept. Puno, prov. Chucuito, 31 km from Desaguadero on road to Puno. Alt: 3900 - 4000m. 5/4/71. On mountain rock face and scree just below. Plants near hill top look like canasense, those below resemble S. oploense/sparsipilum. Fls blue-violet, leaf varies in width of leaflets and decurrency. Possibly all same thing. H.S. ✓
- 5058 S. megistacrolobum Same as 5057. One possible hybrid with 5057 seen. S. locality
- 5063 S. canasense Dept. Puno, prov. Puno, Parcialidad Huaraya, fundo Huerta, N.E. of Puno, Herrerapata. Alt: 3950m. 6/4/71. Fls blue-violet, to 4.5cm diam; leaflets narrow, pubescent with interjecteds. Berries with striped pigmentation (a), or with stripes and spots, somewhat elongated (b) H.S. ✓
- 5064 S. canasense ? Dept. Puno, prov. Puno, Huerta, 6 km from Puno by lake side. Alt: 3900m. 6/4/71. In very fertile valley running down to Lake Titicaca. Three parts:
on path (a) Deep blue-violet fls. By wall. (b) Intermediate, under Pinus. (c) Pale blue fls; 50m above (a). Leaves like can, pubescent, narrow leaflets, but occasional plants resembling Liriunianum in leaflet shape and S. candolleanum in size. (a) (b) (c) Plants growing to 1.5m. Fls to 5cm, rotate. Berries with pigmented stripes, some slightly elongated. H. S. ✓
- 5065 S. megistacrolobum x canasense. As for 5064. Decurrencies of first lateral leaflets like a.jn. H. T. 2
- 5066 S. phureja As for 5064. Cultivated by F. Flores, brought by him from Bolivia. Purple tubers with white spectacle. T. 2n=24.
- DE 5071 S. acaule Dept. Puno, prov. Puno, on road from Juliaca to Huancane, 1 km past Taraco. Alt: 3950m. 6/4/71. On edge of potato field in which S. juzepczukii is grown. S. Huancane
- 5072 S. canasense Dept. Puno, prov. Puno, 5km from Puno on road to Juliaca. Alt: 3950m. 6/4/71. Growing in and under walls and among screes, very common. Looks like 5063 and only 3 km from same. Berries very variable, from white to pigmented to spotted. H. S. ✓
- K 5074 S. canasense Dept. Puno, prov. Puno, 10 km on old road from Puno to Juliaca. Alt: 4000m. 7/4/71. In walls and among rocks. Similar to 5063 and 5072. H. S. ✓
- 5075 S. acaule ? (and hybrid ?) Dept. Puno, prov. Puno, Sillustani, below chullpas on scree, and in loose soil. Alt: 3900m. 7/4/71. Tubers: (a) from plants to 50cm. (b) from smaller plants, possibly spi x acl. Seeds taken from (b). H.S.T. 4 ✓ Note: spi seen on slope also. One dry plant seen.

Peru, 1971.

Potato Collections.

J.P. Hjerting, P.J. Cribb and Z. Huamán.

- 5076 S. canasense Dept. Puno, prov. Puno, Iipa, 1 km off asphalt road from Puno to Juliaca. Alt: 3900m. 7/4/71. Typical S. canasense. Type locality: (quebrada behind the farm of Mr John Revie) of S. puneense. H. S. ✓
- 5081 S. acaule Dept. Puno, prov. Melgar, between Santa Rosa and Aguas Calientes, 17 km before reaching Aguas Calientes, near Araranca. Alt: 4175m. 8/4/71. On flat quite dry area above river, by roadside. S.
- 5082 ^{SP} S. multidissectum As for 5081. Fruits like those of S. canasense, with stripes of pigmentation, but leaflets wider, more dissected; pubescence less and hairs longer. H. S. ✓
- 5083 S. megastacrolobum Dept. Cuzco, prov. Canchis, Sicuani Calvario. Alt: 3600m. 8/4/71. At edges of calvario at sides of stream. Type locality of S. pumilum. No flowers, leaves 2-jugate. H. T. ✓
- 5086 S. raphanifolium Dept. Cuzco, prov. ^{Canchis}, Ruinas de Viracocha at Raqchi, near San Pedro on Puno to Cuzco road. Alt: 3550m. 8/4/71. On walls near ruins. No flowers. H. S. ✓
- V susc 5088
DE 5087 S. sp(soukupii?) As 5086. Amongst rocks on hill above ruins. Small leaves like S. canasense but not as pubescent; leaflets 5-jugate, narrow, dark green. Flowers blue-violet. H. S. Seeds with pigment stripes. [Or berries, ?] ✓
- 5088 ^{SP CAN BUK} S. multidissectum(pumilum) As 5086. Amongst rocks on hill above ruins. No flowers. Leaves as dissected as 5087 but terminal leaflet longer than laterals, and leaflets wider, with rounded apices. H. S. ✓
- 5094 ^{SP} S. multidissectum Dept. Puno, prov. Melgar, Aguas Calientes station. Alt: 4100m. 8/4/71. On rock face. Like 5082 but no fls or seeds; some plants very small, 1-jugate, not unlike S. pumilum. H. ✓
- 5095 S. sparsipilum (x raphanifolium ?) Dept. Cuzco, prov. Anta, 2 km from Anta on road to Urubamba. Alt: 2550m. 10/4/71. By buildings on bank by road. Plants to 1 m; some basal leaves with wide decurrency; blue-violet flowers. H. S? ✓
- 5097 S. raphanifolium Dept. Cuzco, prov. Anta, between Anta and Urubamba, Chequerce. Alt: 3500m. 10/4/71. In wall by maize field. H. S. ✓
- 5103 ^{santillanae} S. pillahuatense Dept. Cuzco, prov. Paucartambo, Pillahuata. Collected by Prof. C. Vargas. Alt: 2200m. Given 10/4/71. S

Peru, 1971.

Potato Collections

J.P.Hjerting, P.J.Cribb and Z.Huamán

- ✓ Susc DE
- 5105 S. sparsipilum (calcense) Dept. Cuzco, prov. Calca, 4 km from Calca on road to Urubamba. Alt: 3000m. 10/4/71. In maize field. Deformed galled flowers with green anthers and no style visible. One flower with white acumens. Leaf as Bolivian spl/opl. H. *B*
- 5107 S. canasense var. xerophyllum Dept. Cuzco, prov. Calca, 9 km past Calca on road to Pisac. Alt: 3000m. 10/4/71. On rock face. Narrow leaflets, no flowers, spotted berries. H.S. *3*
- 5111 S. raphanifolium Dept. Cuzco, prov. Calca, ruins of Pisac. Alt: c. 3300m. 11/4/71. On terrace under bushes below ruins. No flowers. H. S. *2*
- 5112 S. canasense As for 5111. By pathside on scree. No fls; narrow leaflets, dissected leaves. (? xeroph. (?) H. S. *3*
- 5113 S. lignicaule As 5111. Alt: 3200-3400m. On terraces below ruins, under bushes by stream side on way up. No fls. H. S. *3*
- 5126 S. marinasense Dept. Cuzco, prov. Calca, 8 km past Pisac on road to Cuzco. Alt: 3350m. On steep bank in a village. Leaf 3-jugate. No living plants. S. 11/4/71
- 5127 S. calcense Dept. Cuzco, prov. Cuzco on road from Cuzco to Puno, Saylla, 15 km from Cuzco. Alt: 3150m. 12/4/71. In maize field. White-spotted fruits. (? 2x and 4x) H.S. *3*
- 5134 S. canasense ~~var. xerophyllum~~ Dept. Cuzco, prov. Quispicanchi, Rumicolca, before ruins, 25 km from Cuzco on road to Puno. Alt: 3200m. On rocky slope near ruins. No flowers or fruits. Type locality of S. lechnovitzii. H. 12/4/71
- 5138 S. raphanifolium As for 5134. Under bushes on rocky slope. Very variable leaf form, some like rap, others like mga. H. S. *1*
- 5141 S. raphanifolium Dept. Cuzco, prov. Cuzco, ruins of Sacsahuaman. Alt: 3550m. 13/4/71. Type locality. No fls. H.S. *4*
- 5146 S. marinasense Dept. Cuzco, prov. Calca, 23 km from Cuzco on road to Pisac. Alt: 3300m. 13/4/71. In wet quebrada. Plants to 1.3m. Leaf 3-jugate. No flowers. H. *5*
- 5147 S. raphanifolium As for 5146. No flowers. H. *2*
- 5152 S. calcense ^{sparsipilum} Dept. Cuzco, prov. Calca, Urco, 3km on road from Pisac to Urubamba. Alt: 2850m. 14/4/71. In maize field. Type locality. No flowers. Seed may show hybridzn. with rap. 2n = 24. H.S. *2*
- 5153 S. raphanifolium As for 5152. Edge of maize field. H. *1*
- 5154 S. rap. x calcense As for 5152. Edges of field. H. *2*

Peru, 1971.

Potato Collections.

J.P. Hjerting, P.J. Cribb and Z. Huamán.

- 5172 S. "ochoae" Dept. Cuzco, prov. Cuzco, Tambomachay. Alt: 3900m. 14/4/71 Under rocks and in bushes. Looks like can with slightly broader leaves. Great variation in leaf characters and in decurrency. Flower violet. H. 4
- 5203 S. raphanifolium Dept. Cuzco, prov. Anta #, 68 km from Cuzco on road to Abancay, 8 km before Limatambo. Alt: 3100m. 17/4/71. On bare soil caused by earth slip. One plant; blue-violet fls. H. 1
- 5211 S. cfr. pumilum Dept. Apurímac, prov. Abancay, at top of pass before descending to Abancay, Abra Soccllaccasa. Alt: 4050m. 17/4/71. In artificial gulley at angle to road. Leaf very similar to S. pumilum type. Large blue-violet fls. H. S. 2
- 5220 S. cfr. bukasovii Dept. Apurímac, prov. Andahuaylas, km 79 from Abancay on road to Andahuaylas. Alt: 3900m. 18/4/71. On bank by roadside. Hairs longer than can from Puno. Corolla blue-violet, rotate. H. S. 2
- 5221 S. cfr. pumilum As 5220. Amongst rocks below road. Leaflets broader than in 5220 and leaf less dissected. Fls blue-violet. H. X
- 5222 S. tub. ssp. andigena (feral)? or 5220 x cultd. As for 5220. In bushes by potato field. Plants to 50cm; leaf like adg Wild type flower. H. 2
- 5225 S. bukasovii As 5220 but 82.5 km from Abancay. Alt: 3900m. 18/4/71. Growing on top of wall by road. Large blue-violet flower, long spotted fruit, up to 35cm diam. H. S. 3
- Very
bushy
DE 5226 S. bukasovii As 5220 but 108.5 km from Abancay. Alt: 3900m. 18/4/71. A locality given by Ochoa for S. pumilum but leaves more dissected, fruits to 2.0cm diam. H. S. 4
- 5229 S. pampasense Dept. Apurímac, prov. Andahuaylas, above Río Pampas, 12 km below Chincheros on Ayacucho road. Alt: 2600m. 18/4/71. By roadside under dead thorn bushes. Long petioles, pentagonal flower. Like spl but no decurrency of lateral leaflets and lilac or purple fls. H. S. 4
- 5230 S. pampasense Dept. Ayacucho, prov. Cangallo, 7 km from Río Pampas bridge. Alt: 2400m. 18/4/71. Under cactus plants. No flowers. Type locality. H. S. 1
- 5233 S. "ephippianum" Dept. Ayacucho, prov. Cangallo, 73 km from Chincheros on Ayacucho road, above Ocros. Alt: 3800m. 18/4/71. Ochoa locality for abbottianum but looks like buk. H. S. ✓
- 5247 S. bukasovii Dept. Junin, prov. Tarma, 11 km from Oroya on Tarma road. Alt: 3775m. 21/4/71. By railway. (Type locality of nhk.) H. 1

Bolivia, 1971.Potato Collections.

J.G. Hawkes and M. Zavaleta

- 5259 Solanum cfr. oplocense Dept. La Paz, prov. Murillo, Cementerio de La Paz. 13/2/71. Alt: 3650-3700m. Amongst gravestones, etc. H.
- 5261 S.leptophyes/sparsipilum Dept. La Paz, prov. Murillo, 1km below Calacoto on road to Río Abajo, Aranjuez. 13/2/71. Alt: c. 3300m. In prepuna formation. Same locality as 5026. H.
- 5262 S.sparsipilum ? Dept. La Paz, prov. Murillo, below Río Aoajo. 13/3/71. Alt: c. 3000m. H.

Peru, 1971.

J. G. Hawkes and Z. Huamán.

- 5263 S.oukasovii Dept. Junín, prov. Concepción, distr. Santa Rosa, near Santa Rosa, Jalayo. 16/2/71. Alt: 3450m. On walls and in fields. H. S.
- 5264 S.oukasovii As 5263. In fields. No flowers or tubers. H.
- 5265 S.sparsipilum Dept. Junín, prov. Jauja, Estación Experimental Agropecuaria de la Universidad del Centro, Huancayo. 17/2/71. Alt: 3450m. H.

Bolivia, 1971. Collections made by Ing.Agr. H. Gandarillas

- 5266 S."Leptophyes" Dept. La Paz, prov. Murillo, Ovejuyo near Orajes. 11/3/71. Alt: c. 3500m. H.
- 5267 S.megistacrolobum Dept. La Paz, prov. Pacajes, Calacoto. March, 1971. Alt: 3800m. H.
- 5268 S.acaule As 5267. March, 1971. Alt: c. 3800m. H.
- 5269 S.opiocense/sparsipilum Dept. La Paz, prov. Inquisivi, Inquisivi. March, 1971. Alt: c. 2500m. H.
- 5270 S. cfr. venturii Dept. La Paz, prov. Inquisivi, Quime. 2/3/71. Alt: c. 3500m. H.
- 5271 S. cfr. venturii As 5270. Very humid zone. H.
- 5272 S.megistacrolobum Dept. La Paz, prov. Inquisivi, cumbres on road to Quime. March, 1971. Alt: c. 4000m. H.
- 5273 S.vidaurrei Dept. Potosí, prov. Frias ?, region of Huarihuari de Potosí, 35km towards Don Diego. April, 1970. Alt: c. 3600m.