

Supplementary Table 3.1. List of 172 species following CIP taxonomy, its equivalences in Solanaceae Source Taxonomy (Spooner et al., 2014) and the prioritization category obtained through the gap analysis. SRS: Sampling Representativeness Score, GRS: Geographical Representativeness Score, ERS: Environmental Representativeness Score, FPCAT: Final priority category.

Species name (CIP taxonomy)	Species name (equivalent in Solanaceae source taxonomy (Spooner et al., 2014))	No. of records	No. of records with coordinates	SRS	GRS	ERS	FPS	FPCAT
<i>S. acaule</i>	<i>S. acaule</i>	4820	1349	3.65560 2	10	10	7.88520 1	NFCR
<i>S. achacachense</i>	<i>S. candolleanum</i>	2	2	10	10	10	0	HPS
<i>S. acroglossum</i>	<i>S. acroglossum</i>	96	26	0.41666 7	0.61233 1	2.72727 3	0	HPS
<i>S. acroscopicum</i>	<i>S. acroscopicum</i>	28	18	1.07142 9	1.50081 5	5	0	HPS
<i>S. agrimonifolium</i>	<i>S. agrimonifolium</i>	385	130	1.03896 1	6.47507 5	4	3.83801 2	MPS
<i>S. alandiae</i>	<i>S. brevicaule</i>	22	14	8.63636 4	10	10	9.54545 5	NFCR
<i>S. albicans</i>	<i>S. albicans</i>	420	111	3.14285 7	5.19534 3	9.23076 9	5.85632 3	LPS
<i>S. albornozii</i>	<i>S. albornozii</i>	38	13	3.42105 3	5.05852	6	4.82652 4	MPS
<i>S. amayanum</i>	<i>S. candolleanum</i>	9	7	3.33333 3	10	6	0	HPS
<i>S. ambosinum</i>	<i>S. candolleanum</i>	48	31	3.125	3.24448 8	6	4.12316 3	MPS
<i>S. anamatophilum</i>		4	4	0	0	0	0	HPS
<i>S. ancophilum</i>	<i>S. rhomboideilanceolatum</i>	18	11	3.33333 3	4.10788	7.14285 7	0	HPS
<i>S. ancoripae</i>	<i>S. candolleanum</i>	5	4	2	10	10	0	HPS
<i>S. andreanum</i>	<i>S. andreanum</i>	37	20	5.40540 5	10	10	8.46846 8	NFCR
<i>S. aridophilum</i>	<i>S. chiquidenum</i>	4	3	0	0	0	0	HPS
<i>S. augustii</i>		10	9	3	10	5	0	HPS
<i>S. avilesii</i>	<i>S. brevicaule</i>	7	3	5.71428 6	10	10	0	HPS
<i>S. ayacuchense</i>	<i>S. ayacuchense</i>	10	7	0	0	0	0	HPS
<i>S. aymaraesense</i>	<i>S. candolleanum</i>	4	3	0	NA	NA	0	HPS
<i>S. berthaultii</i>	<i>S. berthaultii</i>	39	22	8.20512 8	3.15547 5	5.55555 6	5.63871 9	LPS
<i>S. bill-hookeri</i>	<i>S. candolleanum</i>	7	6	0	0	0	0	HPS
<i>S. boliviense</i>	<i>S. boliviense</i>	17	12	7.64705 9	1.56798 3	5.71428 6	4.97644 2	MPS
<i>S. bombycinum</i>	<i>S. bombycinum</i>	9	7	1.11111 1	1.62035 4	4.28571 4	0	HPS
<i>S. brevicaule</i>	<i>S. brevicaule</i>	24	12	7.5	0.99964 7	5	4.49988 2	MPS
<i>S. buesii</i>	<i>S. buesii</i>	69	34	0.86956 5	0.24275 9	2.5	0	HPS

<i>S. bukasovii</i>	<i>S. candolleanum</i>	973	441	3.56629	10	5.45454 5	6.34027 8	LPS
<i>S. bulbocastanum</i>	<i>S. bulbocastanum</i>	1145	421	1.52838 4	6.05959 5	10	5.86266	LPS
<i>S. burkartii</i>	<i>S. burkartii</i>	2	2	0	NA	NA	0	HPS
<i>S. burtonii</i>	<i>S. andreanum</i>	3	2	0	NA	NA	0	HPS
<i>S. cajamarquense</i>	<i>S. cajamarquense</i>	239	45	0.66945 6	1.06459 9	5.45454 5	2.3962	HPS
<i>S. calacalinum</i>	<i>S. colombianum</i>	3	2	6.66666 7	10	10	0	HPS
<i>S. calvescens</i>	<i>S. chacoense</i>	2	2	0	NA	NA	0	HPS
<i>S. candolleanum</i>	<i>S. candolleanum</i>	34	21	5.88235 3	1.82812	4.11764 7	3.94270 7	MPS
<i>S. cantense</i>	<i>S. cantense</i>	158	71	0.18987 3	0.93010 9	3.33333 3	0	HPS
<i>S. cardiophyllum</i>		6	2	5	10	10	0	HPS
<i>S. chacoense</i>	<i>S. chacoense</i>	94	6	2.65957 4	0.17260 6	2.5	1.77739 4	HPS
<i>S. chancayense</i>		15	9	2	1.6597 6	3.33333 3	0	HPS
<i>S. chilliasense</i>	<i>S. chilliasense</i>	20	10	2.5	10	10	0	HPS
<i>S. chillonamum</i>	<i>S. candolleanum</i>	6	5	5	2.95708 4	6	0	HPS
<i>S. chiquidenum</i>	<i>S. chiquidenum</i>	207	73	0.62801 9	3.62648 8	5.45454 5	3.23635 1	MPS
<i>S. chomatophilum</i>	<i>S. chomatophilum</i>	406	153	1.84729 1	6.17678 1	6.92307 7	4.98238 3	MPS
<i>S. circaeifolium</i>		127	1	0	NA	NA	0	HPS
<i>S. clarum</i>	<i>S. clarum</i>	250	93	0.24	3.68767 5	2.63157 9	0	HPS
<i>S. coelestispetalum</i>	<i>S. candolleanum</i>	97	52	3.71134	1.77587 6	3.63636 4	3.04119 3	MPS
<i>S. colombianum</i>	<i>S. colombianum</i>	140	40	3.78571 4	2.99109 3	4.86486 5	3.88055 7	MPS
<i>S. commersonii</i>	<i>S. commersonii</i>	804	296	1.39303 5	2.03738 3	5.38461 5	2.93834 4	HPS
<i>S. contumazaense</i>	<i>S. contumazaense</i>	23	14	0.86956 5	5.25646 5	5.71428 6	0	HPS
<i>S. demissum</i>	<i>S. demissum</i>	2282	544	2.68624	7.54639 6	9.2	6.47754 5	LPS
<i>S. dolichocremastrum</i>		57	32	3.15789 5	5.86681 4	5	4.67490 3	MPS
<i>S. donachui</i>	<i>S. garcia-barrigae</i>							HPS
<i>S. ehrenbergii</i>		4	2	7.5	10	10	0	HPS
<i>S. flahaultii</i>	<i>S. flahaultii</i>	16	5	9.375	10	10	9.79166 7	NFCR
<i>S. flavoviridens</i>	<i>S. berthaultii</i>	2	2	0	NA	NA	0	HPS
<i>S. gandarillasii</i>	<i>S. gandarillasii</i>	69	34	3.04347 8	3.72428 4	6.25	4.33925 4	MPS
<i>S. garcia-barrigae</i>	<i>S. garcia-barrigae</i>	2	1	5	NA	NA	0	HPS
<i>S. gracilifrons</i>	<i>S. gracilifrons</i>	20	9	0.5	1.46950 2	3.33333 3	0	HPS
<i>S. guerreroense</i>	<i>S. guerreroense</i>	24	3	8.33333 3	10	10	9.44444 4	NFCR
<i>S. guzmanguense</i>		6	2	1.66666 7	10	10	0	HPS
<i>S. hastiforme</i>	<i>S. hastiforme</i>	51	33	0.39215 7	0.37881 5	3.63636 4	0	HPS

<i>S. hintonii</i>	<i>S. hintonii</i>	39	18	0	0	0	0	HPS
<i>S. hjertingii</i>	<i>S. hjertingii</i>	209	67	2.58373 2	1.92526 2	3.75	2.75299 8	HPS
<i>S. hoopesii</i>	<i>S. brevicaule</i>	2	2	10	NA	10	0	HPS
<i>S. hougasii</i>	<i>S. hougasii</i>	225	82	1.73333 3	2.11848 9	3.5	2.45060 8	HPS
<i>S. huancabambense</i>	<i>S. huancabambense</i>	140	36	2.07142 9	2.06728 7	5	3.04623 8	MPS
<i>S. huancavelicae</i>	<i>S. candolleianum</i>	5	3	0	0	0	0	HPS
<i>S. huarochiriense</i>	<i>S. chomatophilum</i>	58	26	2.06896 6	3.06042 8	4.28571 4	3.13836 9	MPS
<i>S. humectophilum</i>		378	42	0.07936 5	0.23064 7	3.07692 3	0	HPS
<i>S. hygrothermicum</i>		1	1	0	NA	NA	0	HPS
<i>S. hypacrarthrum</i>		47	30	1.06383	2.16580 9	2.5	0	HPS
<i>S. immite</i>		29	21	2.06896 6	7.34167 2	5.71428 6	0	HPS
<i>S. incahuasinum</i>		3	2	3.33333 3	10	10	0	HPS
<i>S. incamayoense</i>	<i>S. brevicaule</i>	5	3	10	10	10	0	HPS
<i>S. incasicum</i>	<i>S. incasicum</i>	11	7	1.81818 2	10	5	0	HPS
<i>S. infundibuliforme</i>	<i>S. infundibuliforme</i>	1070	380	2.18691 6	4.70634 1	7	4.63108 5	MPS
<i>S. ingifolium</i>		4	4	2.5	10	10	0	HPS
<i>S. iopetalum</i>	<i>S. iopetalum</i>	719	330	1.29346 3	5.25671 2	6.92307 7	4.49108 4	MPS
<i>S. irosinum</i>	<i>S. burkartii</i>	77	13	0.64935 1	10	7.14285 7	0	HPS
<i>S. jaenense</i>	<i>S. colombianum</i>	3	3	0	NA	NA	0	HPS
<i>S. jalcae</i>	<i>S. chomatophilum</i>	50	22	1.2	3.16107 1	5	0	HPS
<i>S. jamesii</i>		38	18	10	2.27539 2	3.52941 2	5.26826 8	LPS
<i>S. kurtzianum</i>	<i>S. kurtzianum</i>	1040	282	2.65384 6	4.01721	7.77777 8	4.81627 8	MPS
<i>S. laxissimum</i>	<i>S. laxissimum</i>	42	31	1.90476 2	1.40380 8	3.84615 4	0	HPS
<i>S. leptophyes</i>	<i>S. brevicaule</i>	93	66	5.05376 3	3.08216 2	8.125	5.42030 8	LPS
<i>S. lesteri</i>	<i>S. lesteri</i>	35	15	3.42857 1	4.22103 7	4	3.88320 3	MPS
<i>S. lignicaule</i>		23	14	3.91304 3	10	10	0	HPS
<i>S. limbaniense</i>	<i>S. limbaniense</i>	68	33	1.76470 6	1.18123 6	4.44444 4	2.46346 2	HPS
<i>S. lobbianum</i>	<i>S. lobbianum</i>	5	1	8	NA	NA	0	HPS
<i>S. longiconicum</i>	<i>S. longiconicum</i>	571	207	0.43782 8	10	10	6.81260 9	LPS
<i>S. longiusculus</i>	<i>S. candolleianum</i>	4	3	0	0	0	0	HPS
<i>S. lopez-camarenae</i>	<i>S. acroscopicum</i>	9	6	1.11111 1	8.04909 8	5.71428 6	0	HPS
<i>S. maglia</i>	<i>S. maglia</i>	205	52	0.73170 7	0.30914 3	1.66666 7	0.90250 6	HPS
<i>S. marinasense</i>	<i>S. candolleianum</i>	207	77	2.17391 3	3.33488 3	5	3.50293 2	MPS
<i>S. medians</i>	<i>S. medians</i>	174	104	2.87356 3	3.45957 3	5.71428 6	4.01580 7	MPS

<i>S. megistacrolobum</i>	<i>S. boliviense</i>	90	56	4.88888 9	3.75888 5	6.15384 6	4.93387 3	MPS
<i>S. microdontum</i>	<i>S. microdontum</i>	1600	425	2.6375	6.25303 3	8.33333 3	5.74128 9	LPS
<i>S. minutifoliolum</i>		10	6	2	10	6.66666 7	0	HPS
<i>S. mochiquense</i>		28	17	2.5	8.09517	7.14285 7	0	HPS
<i>S. morelliforme</i>	<i>S. morelliforme</i>	409	147	1.10024 4	4.74062 6	6.33333 3	4.05806 8	MPS
<i>S. moscopanum</i>	<i>S. colombianum</i>	14	3	7.14285 7	10	10	0	HPS
<i>S. multiinterruptum</i>	<i>S. multiinterruptum</i>	591	244	1.60744 5	7.33346 8	7.77777 8	5.57289 7	LPS
<i>S. nemorosum</i>	<i>S. colombianum</i>	2	2	0	NA	NA	0	HPS
<i>S. neocardenasii</i>	<i>S. neocardenasii</i>	42	20	4.04761 9	0.55926 7	3.33333 3	2.64674	HPS
<i>S. neorossii</i>	<i>S. neorossii</i>	118	45	3.55932 2	3.03636 4	7.5	4.69856 2	MPS
<i>S. neovalenzuelae</i>	<i>S. flahaultii</i>	2	1	10	NA	NA	0	HPS
<i>S. neovargasii</i>	<i>S. laxissimum</i>	1	1	0	NA	NA	0	HPS
<i>S. neovavilovii</i>	<i>S. neovavilovii</i>	26	13	0	0	0	0	HPS
<i>S. nubicola</i>	<i>S. nubicola</i>	38	22	0.52631 6	0.69555 1	5	0	HPS
<i>S. okadae</i>	<i>S. okadae</i>	214	68	3.50467 3	2.09089 2	6.66666 7	4.08741 1	MPS
<i>S. olmosense</i>	<i>S. olmosense</i>	26	15	0	0	0	0	HPS
<i>S. oplocense</i>	<i>S. brevicaule</i>	135	68	7.55555 6	5.53952 7	9	7.36502 7	LPS
<i>S. orocense</i>	<i>S. colombianum</i>	1	1	10	NA	NA	0	HPS
<i>S. orophilum</i>	<i>S. candolleianum</i>	68	49	2.64705 9	8.24623 8	6.25	5.71443 2	LPS
<i>S. ortegae</i>	<i>S. candolleianum</i>	1	1	0	NA	NA	0	HPS
<i>S. otites</i>	<i>S. colombianum</i>	5	3	8	10	5	0	HPS
<i>S. oxycarpum</i>	<i>S. oxycarpum</i>	261	89	2.22222 2	2.45022 1	7.66666 7	4.11303 6	MPS
<i>S. pampasense</i>	<i>S. candolleianum</i>	11	8	7.27272 7	3.64153 8	5	0	HPS
<i>S. pamplonense</i>	<i>S. colombianum</i>	1	1	0	NA	NA	0	HPS
<i>S. pascoense</i>	<i>S. chomatophilum</i>	2	2	10	10	10	0	HPS
<i>S. paucijugum</i>	<i>S. andreanum</i>	26	16	6.92307 7	4.82912 2	8.57142 9	6.77454 2	LPS
<i>S. paucissectum</i>	<i>S. paucissectum</i>	202	29	0.99009 9	10	10	6.9967	LPS
<i>S. peloquinianum</i>		10	8	2	4.22024 5	5	0	HPS
<i>S. pillahuatense</i>	<i>S. pillahuatense</i>	16	12	0.625	10	10	0	HPS
<i>S. pinnatisectum</i>		4	3	7.5	10	10	0	HPS
<i>S. piurae</i>	<i>S. piurae</i>	243	43	0.69958 8	0.46751 1	2.72727 3	1.29812 4	HPS
<i>S. polyadenium</i>	<i>S. polyadenium</i>	385	102	2.57142 9	3.52141 8	7.64705 9	4.57996 9	MPS
<i>S. puchupuchense</i>	<i>S. candolleianum</i>	4	3	0	0	0	0	HPS
<i>S. raphanifolium</i>	<i>S. raphanifolium</i>	817	260	2.69277 8	6.51747 7	7.5	5.57008 5	LPS
<i>S. raquialatum</i>		18	11	1.66666 7	10	5	0	HPS

<i>S. regularifolium</i>	<i>S. andreanum</i>	3	3	6.66666 7	10	10	0	HPS
<i>S. rhomboideilanceolatum</i>	<i>S. rhomboideilanceolatum</i>	13	7	0.76923 1	10	10	0	HPS
<i>S. salasianum</i>	<i>S. salasianum</i>	13	7	0	0	0	0	HPS
<i>S. sanctae-rosae</i>	<i>S. boliviense</i>	2	1	5	NA	NA	0	HPS
<i>S. sandemanii</i>	<i>S. medians</i>	15	7	0.66666 7	10	6.66666 7	0	HPS
<i>S. santolallae</i>	<i>S. laxissimum</i>	11	10	2.72727 3	0.29142 2	2.30769 2	0	HPS
<i>S. sarasarae</i>	<i>S. candolleianum</i>	10	6	5	10	7.5	0	HPS
<i>S. saxatilis</i>	<i>S. candolleianum</i>	5	4	6	0.61461 9	2.85714 3	0	HPS
<i>S. scabrifolium</i>		6	5	3.33333 3	8.14367 1	4	0	HPS
<i>S. schenckii</i>	<i>S. schenckii</i>	154	42	3.18181 8	2.44648 7	6.53846 2	4.05558 9	MPS
<i>S. simplicissimum</i>		8	8	1.25	10	10	0	HPS
<i>S. soestii</i>		4	1	0	NA	NA	0	HPS
<i>S. sogarandinum</i>	<i>S. sogarandinum</i>	184	91	1.46739 1	3.22232 3	6	3.56323 8	MPS
<i>S. solisii</i>	<i>S. andreanum</i>	2	2	10	10	10	0	HPS
<i>S. sparsipilum</i>	<i>S. brevicaule</i>	125	78	4.72	2.93169 3	5	4.21723 1	MPS
<i>S. spegazzinii</i>	<i>S. brevicaule</i>	11	3	8.18181 8	NA	10	0	HPS
<i>S. stenophyllidium</i>		24	11	9.58333 3	10	10	9.86111 1	NFCR
<i>S. stipuloideum</i>								HPS
<i>S. stoloniferum</i>	<i>S. stoloniferum</i>	5389	1665	2.93561	10	10	7.64520 3	NFCR
<i>S. subpanduratum</i>	<i>S. colombianum</i>	1	1	0	NA	NA	0	HPS
<i>S. sucubunense</i>	<i>S. colombianum</i>	1	1	10	NA	NA	0	HPS
<i>S. tacnaense</i>	<i>S. medians</i>	24	12	2.91666 7	7.00468 9	10	0	HPS
<i>S. tapojense</i>	<i>S. candolleianum</i>	6	4	3.33333 3	7.21918 3	4	0	HPS
<i>S. tarapatanum</i>	<i>S. candolleianum</i>	9	6	4.44444 4	10	10	0	HPS
<i>S. tarijense</i>	<i>S. berthaultii</i>	32	19	8.4375	7.12218 4	10	8.51989 5	NFCR
<i>S. tarnii</i>	<i>S. tarnii</i>	113	37	3.98230 1	2.58026 2	4.28571 4	3.61609 2	MPS
<i>S. taulisense</i>	<i>S. chomatophilum</i>	2	2	0	NA	NA	0	HPS
<i>S. trifidum</i>		4	2	10	10	10	0	HPS
<i>S. trinitense</i>		8	7	2.5	4.77045 5	5	0	HPS
<i>S. tundalomense</i>	<i>S. colombianum</i>	20	8	10	4.88060 7	5	6.62686 9	LPS
<i>S. tuquerrense</i>	<i>S. andreanum</i>	25	20	5.2	10	10	8.4	NFCR
<i>S. ugentii</i>	<i>S. brevicaule</i>	33	13	6.06060 6	1.12850 8	4.28571 4	3.82494 3	MPS
<i>S. urubambae</i>	<i>S. violaceimarmoratum</i>	70	35	2.14285 7	0.94531 2	3	2.02939	HPS
<i>S. velardei</i>	<i>S. candolleianum</i>	21	15	3.33333 3	10	10	0	HPS
<i>S. venturii</i>	<i>S. venturii</i>	204	67	1.91176 5	0.47170 3	4	2.12782 3	HPS

<i>S. vermei</i>	<i>S. vermei</i>	690	161	3.78260 9	2.45927	8.18181 8	4.80789 9	MPS
<i>S. verrucosum</i>	<i>S. verrucosum</i>	1190	394	1.86554 6	6.56224 3	5.65217 4	4.69332 1	MPS
<i>S. vidaurrei</i>	<i>S. brevicaule</i>	14	10	10	1.12374 1	5	5.37458	LPS
<i>S. vilgultorum</i>	<i>S. brevicaule</i>	1	1	10	10	10	0	HPS
<i>S. violaceimarmoratum</i>	<i>S. violaceimarmoratum</i>	16	8	7.5	0.95694	3.07692 3	3.84462 1	MPS
<i>S. wittmackii</i>		60	37	3.33333 3	1.66846 4	2.5	2.50059 9	HPS
<i>S. woodsonii</i>	<i>S. colombianum</i>	50	3	0.6	NA	10	0	HPS
<i>S. yamobambense</i>		2	2	0	NA	NA	0	HPS
<i>S. yungasense</i>	<i>S. chacoense</i>	12	11	3.33333 3	0.23569 7	2.35294 1	0	HPS