

No	name	family	country	colsite	altit	ecology	descript	year	pr
1	Acantholimon acerosum	Plumbaginaceae	TUR	Abant	1630	dry grassland	large cushion, long spikes, fls rose	2022	D
2	Acantholimon aulieatense	Plumbaginaceae	KYR	Chatkal AT	2200	dry steppe	Rounded cushions 15-30 cm wide, pink fls in racemes on stems 5-8 cm long	2018	C
3	Acantholimon caesareum	Plumbaginaceae	TUR	Ercyies	2600	volcanic rocks	compact cushion, fls in short spike, pink	2022	D
4	Acantholimon echinus	Plumbaginaceae	MAK	Galicica	2100	dry alpine grassland	cushions 15-50 cm wide fl spikes sssile	2021	D
5	Acantholimon echinus v. albus	Plumbaginaceae	MAK	Galicica	2100	dry alpine grassland	white fls	2021	D
6	Acantholimon kotschy anum v. laxi	Plumbaginaceae	TUR	Ala	2000	limestone scree	large cushion, long spikes, fls white pink	2022	D
7	Acantholimon lycaonicum	Plumbaginaceae	TUR	Ala	2400	limestone scree	compact cushions, fls in short spikes, rose, reddish calyx	2022	D
8	Acantholimon ulicinum var. ulicinu	Plumbaginaceae	TUR	Ala	2400	limestone scree	compact cushions, fls in short spikes, rose, white calyx	2022	D
9	Achillea aggeratifolia	Asteraceae	MAK	Galicica	2200	dry alpine grassland	15 cm	2021	D
10	Achillea aggeratifolia	Asteraceae	BGR	Pirin	2400	alpine crevices	10-15 cm	2021	D
11	Achillea holosericea	Asteraceae	BGR	Galicica	1900	dry alpine grassland	15-20 cm, yellow	2021	B
12	Achillea schurii	Asteraceae	ROM	Bucegi	2400	sandy scree	5-15 cm, white, endem	2021	D
13	Acis nicaensis	Amaryllidaceae	cult				bulb pl, 8-12 cm high, linear lvs, white pinkish fls, 1 cm long	2022	D
14	Adonis turkestanica	Ranunculaceae	TAJ	Anzob, Hissar	2900	subalpine rocky grassl	perennial pl, 15-40 cm high, finely incised lvs, large terminal yellow fls	2017	C
15	Aethionema lepidoides	Brassicaceae	ex TUR				10 cm, pink	2022	C
16	Aethionema oppositifolium	Brassicaceae	TUR	Bolkar	2890	limestone scree	compact 3-5 cm, white pinkish	2022	D
17	Aethionema speciosum	Brassicaceae	TUR	Ala	1800	limestone scree	caespitose silver, 20 cm, pink	2022	C
18	Allium altaicum	Alliaceae	ex MNG	Chorgo			bulb pl 30-40 cm high, ancestor of onion	2021	A
19	Allium atosanguineum	Alliaceae	KAZ	Trans-Ily Ala Tau	3300	alpine grassland, snow	onion ancestor, 10-30 cm, black-purple fls	2019	C
20	Allium galanthum	Alliaceae	ex KAZ	Ketmen	1200	dry scree	sect. Cepa, caespitose pl, 20-40 cm high, white fls, onion ancestor	2022	C
21	Allium insubricum	Alliaceae	ex ITA	Orobie Alps	1800	limestone scree	decorative bulb pl, 15-20 cm, grey lvs, large purple noddling fls, 15 mm long stems	2020	D
22	Allium oschaninii	Alliaceae	ex TAJ	Yazgulem, Pamir	2100	rocky slope	bulb pl, 50 cm high, ancestor to onion, white fls, 5 cm wide umbells	2022	C
23	Allium pskemense	Alliaceae	ex UZB	Pskem			sect. Cepa, onion ancestor	2022	C
24	Allium victorialis ssp. platyphyllum	Alliaceae	ex JAP	Hotaka Dake, Honsu	2000	woodland	bulb pl, 30-40 cm high, broadly ovate lvs in ground rosette, white fls	2022	B
25	Allium wallichii	Alliaceae	ex CHN	ex Yulong Shan	2800		20 cm, pink, triangular stem	2021	D
26	Alstroemeria exerens	Alstroemeriaceae	CHL	Lag. Teno	200	volcanic ash, lava	30-50 cm, orange fls	2019	C
27	Alstroemeria pallida	Alstroemeriaceae	CHL	Lagunillas	230	volcanic ash, lava	15-25 cm, pink fls	2019	D
28	Alyssum propinquum	Brassicaceae	TUR	Ala	2600	limestone scree	silver, 2-3 cm	2022	D
29	Androsace cf. ovczinnikovii	Primulaceae	KYR	Moldo Tau	2800	limestone scree	Flat lax cushions 5-15 cm wide, flat rosettes, greenish hairy lvs, 3-5 fls in umbells	2018	E
30	Androsace darvasica	Primulaceae	TAJ	Khomburabad, Darvas	3300	alpine grassland and s	prostrate lax cushion, 3-7 cm high, 15 mm wide rosettes, linear lvs, white fls	2017	D
31	Androsace darvasica	Primulaceae	TAJ	Peter I.	2600			2017	D
32	Androsace multiscapa	Primulaceae	TUR	Ala	2900	limestone scree	biennial, white fls	2022	D
33	Androsace villosa	Primulaceae	TUR	Ilgaz	2100	limestone scree	larger compact cushions, good flowering	2022	E
34	Androsace villosa (congesta)	Primulaceae	TUR	Ala	2800	limestone scree	very condensed cushions	2022	E
35	Androsace villosa (congesta)	Primulaceae	TUR	Bolkar	2500	limestone scree	very condensed cushions	2022	E
36	Androsace villosa (congesta)	Primulaceae	TUR	Bolkar	2900	limestone scree	very condensed cushions	2022	E
37	Androsace villosa (congesta)	Primulaceae	TUR	Ercyies	2750	volcanic rocks	very condensed cushions	2022	E
38	Antennaria chilensis	Asteraceae	CHL	La Parva	345	volcanic ash, lava	10 cm	2019	B
39	Anthemis carpatica	Asteraceae	ROM	Bucegi	2300	sandy scree	10-15 cm, white	2021	D
40	Anthemis cretica	Asteraceae	MAK	Galicica	1700	limestone crevices	10-20 cm, white	2021	C
41	Anthemis cretica	Asteraceae	TUR	Bolkar	2400	limestone scree	silver, 10-20 cm	2022	D
42	Anthemis marschalliana	Asteraceae	ex Caucasus				15 cm yellow	2022	A
43	Anthemis melanoma	Asteraceae	TUR	Ilgaz	2100	limestone scree	green, 15-20 cm	2022	C
44	Anthyllis aurea	Fabaceae	MAK	Galicica	1900	limestone crevices	10--15 cm, yellow	2021	D
45	Aquilegia flabellata v. alba	Ranunculaceae	ex Sakhalin					2022	C
46	Arabis caucasica	Brassicaceae	TUR	Ala	3300	limestone scree	green, 10-15 cm	2022	D
47	Arenaria ledebouriana	Caryophyllaceae	TUR	Ilgaz	2030	limestone scree	flat spiny mats, white fls	2022	D
48	Argylia adscendens	Bignomiaceae	CHL	Lagunillas	230	volcanic ash, lava	caespitose-prostrate10-15 cm, 5 cm long orange fls	2019	E
49	Arnica lyallii	Asteraceae	USA	BigHorn, WY		alpine grassland	15 cm	2018	C
50	Asperula gussonii	Rubiaceae	TUR	Ilgaz	2320	limestone scree	pink fls	2022	D
51	Asphodeline taurica	Liliaceae	ex TUR	Bolkar Dag	2100	limestone scree	xeric monocarpic pl, 30-40 cm high, large rosettes of grey linear lvs, long spike of hundreds white fls	2022	A
52	Aster alpinus	Asteraceae	TUR	Ilgaz	2080	limestone scree	12-15 cm	2022	C
53	Aster alpinus	Asteraceae	BGR	Pirin	2200	limestone crevices	5-15 cm, white	2021	D
54	Astragalus acaulis	Asteraceae	CHN	DaXueShan, Yunnan	4500	alpine grassland	caespitose, 5-10 cm, yellow fls	2019	D
55	Astragalus cruckhanksii	Asteraceae	CHL	Lagunillas	238	volcanic ash, lava	15 cm, blue fls	2019	D
57	Asyneuma rigidum	Campanulaceae	TUR	Bolkar	2200	limestone scree	biennial, 5-30 cm	2022	C
58	Aubrieta canescens	Brassicaceae	ex TUR	ex Sultan Dag			prostrate cushions, 5-10 cm high, pink fls	2022	A
60	Azorella madreporica	Apiaceae	CHL	V Nevado	310	volcanic ash, lava	very dense cushions-domes, 20-100 cm	2019	D
61	Azorella trifurcata	Apiaceae	CHL	Lag. Laja	145	volcanic ash, lava	flat mats 20-200 cm, yellow fls and frts	2019	C
62	Baccharis magellanica	Asteraceae	CHL	Chillan	200	volcanic ash, lava	prostrate flat subshrub, 20-200 cm, white fls	2019	D
63	Baccharis poeppigiana	Asteraceae	CHL	Lag. Laja	145	volcanic ash, lava	prostrate subshrub	2019	D
64	Beesia calthifolia	Saxifragaceae	cult				caespitose pl, 15-25 cm high, cordate glossy leather-like lvs, white fls in racemes	2022	C
65	Berberis empetrifolia	Berberidaceae	CHL	Shangrila	157	volcanic ash, lava	spiny subshrub, 15-40 cm, yellow fls	2019	B

66	Betonica grandiflora	Lamiaceae	ex Caucasus			20 cm, rose large fls		2022	C
67	Bruckenthalia spiculifolia	Ericaceae	BGR	Rila	1950	alpine grassland	10-15 cm, pink	2021	D
68	Caiophora coronata	Loasaceae	CHL	Lag. Teno	250	volcanic ash, lava	caespitose pl, 10 cm high, lanceolate pinnatisect spinulose lvs, 5 cm large campanulate white fls	2019	C
69	Calandrinia affinis	Calandrinaceae	ARG	P. Pehuenche	256	volcanic ash, along str	caespoitose 5 cm, white, rose, reddish	2019	D
70	Calandrinia affinis	Calandrinaceae	CHL	V Nevado	310	volcanic ash, along str		2019	D
71	Calceolaria arachnoidea	Calceolariaceae	CHL	Teno-Vergara	242	volcanic ash, lava	white tomentose, 20 cm, purple fls	2019	D
72	Calceolaria arachnoidea	Calceolariaceae	CHL	V Nevado	310	volcanic ash, lava		2019	D
73	Calceolaria biflora	Calceolariaceae					10 cm, yellow	2022	C
74	Calceolaria cavanillesii	Calceolariaceae	CHL	Lag. Maule	207	cold crevices, along st	20-30 cm, bouquet-like plant with many yellow fls	2019	C
75	Calceolaria cavanillesii	Calceolariaceae	ARG	P. Pehuenche	210	cold crevices, along st		2019	C
76	Calceolaria corymbosa	Calceolariaceae	CHL	Chillan	176	volcanic rock crevices	10 cm saxatile pl. large yellow fls	2019	D
77	Calceolaria filicaulis	Calceolariaceae	CHL	V Nevado	270	along streams	caespitose pl, 10-15 cm high, dark green flat lvs, yellow fls	2019	D
78	Calceolaria mollis	Calceolariaceae	ex cult				20 cm, yellow	2022	C
79	Calceolaria valdiviana	Calceolariaceae	CHL	Lag. Teno	247	volcanic rock crevices	caespitose pl, 10-15 cm high, numerous flat yellow fls	2019	D
80	Callianthemum alatavicum	Ranunculaceae	KYR	Talas Ala Tau	3100	limestone scree	caespitose pl 5-10 cm high, succulent stems and lvs, finely parted lvs, large flat pinkish fls,	2018	E
81	Callianthemum alatavicum	Ranunculaceae	KYR	Moldo Tau	3300	alpine scree		2018	E
82	Callianthemum alatavicum	Ranunculaceae	KAZ	Trans-Ily Ala Tau	3400	alpine scree		2019	E
83	Caltha sagittata	Calandrinaceae	CHL	Lag. Teno	247	alpine bogs	5-10 cm, white-greenish fls, for peat blocks	2019	D
84	Campanula alpina v. bucegiensis	Campanulaceae	ROM	Bucegi	2500	alpine grassland	5 cm, pale blue, dirty white	2021	D
85	Campanula barbata	Campanulaceae	AUT	Dachstein	2000		15 cm, blue	2021	C
86	Campanula betulifolia	Campanulaceae	ex TUR				15 cm, white	2022	C
87	Campanula choruhensis	Campanulaceae	ex TUR	Tortum			caespitose pl, 5-12 cm high, grey hairy ovate dentate lvs, white-rose bells, 3 cm long	2022	D
88	Campanula orbelica	Campanulaceae	BGR	Pirin	2100	alpine grassland	aff. C. alpina, 5 cm, blue	2021	D
89	Campanula tommasiniana	Campanulaceae	HRV	Ucka	1300	limestone crevices	10-20 cm, long bells 2.5 cm	2021	C
90	Campanula topaliana	Campanulaceae	GRC	Mistra		limestone walls	prostrate plant attached to rocks, large green bells	2019	C
91	Campanula trogerae	Campanulaceae	ex TUR			limestone crevices, ov	hanging caespitose pl, 10-15 cm high, grey hairy ovate lanceolate lvs, large white open flat bells	2022	D
92	Campanula trogerae x choruhensi	Campanulaceae	ex cult.				intermediate plant	2022	D
93	Campanula waldsteiniana	Campanulaceae	ex CRO	Velebit			prostrate cushion, leafy stems, triangular green lvs, 1 cm long, flat blue bells, 12 mm wide	2022	D
95	Centaurea chrysantha	Asteraceae	TUR	Ala	2000	limestone scree	tomentose cushion, yellow fls, spiny invol	2022	E
96	Chamaecytisus polytrichus	Fabaceae	MAK	Galicica	2300	limestone crevices	15-20 cm, yellow	2021	D
97	Chiliotrichum diffusum	Asteraceae	CHL	Chillan	190	volcanic ash, lava	small shrub 3-50 cm, covered by white daisies	2019	D
98	Cicer anatolicum	Fabaceae	TUR	Ercyies	2100	volcanic rocks	20 cm, glutinose, lvs, blue fls	2022	D
99	Cistanthe frigida	Montiaceae	CHL	V Nevado	3200	volcanic ash, lava	prostrate cushion, 5 cm, succulent lvs	2019	E
100	Convolvulus assyricus	Convolvulaceae	TUR	Ala	1920	limestone scree	flat mats 3-5 cm, pink fls	2022	F
101	Convolvulus compactus	Convolvulaceae	TUR	Ala	1920	limestone scree	flat silver mat, white or pinksh fls	2022	F
102	Convolvulus holosericeus	Convolvulaceae	TUR	Kure	1300	limestone steppe	woody, 5-10 cm, white fls	2022	E
103	Convolvulus tragacanthoides	Convolvulaceae	KYR	Kungei AT	2000	mountain rocky steppe	dwarf spiny subshrub 5-15 cm high, large pinkish fls	2018	E
104	Cremanthodium campanulatum	Asteraceae	CHN	DaXueShan, Yunnan	4400	alpine grassland	caespitose pl, 10-15 cm high, dark brown fls, 2-3 cm long	2019	D
105	Crepis wildenowii	Asteraceae	TUR	Ala	2950	limestone scree	silver lyrate lvs, yellow fl, 10 cm	2022	E
106	Cruciata taurica	Rubiaceae	TUR	Bolkar	2175	limestone scree	10-15 cm large frts	2022	C
107	Cyclamen cilicium	Primulaceae	ex TUR	Yarpuz			autumn fl	2022	C
108	Cyclamen cilicium	Primulaceae	ex cult					2022	C
109	Cyclamen coum	Primulaceae	ex TUR	Zigana			tuberosa pl, 5-12 cm high, reniform entire lvs, pink fls, spring flowering	2022	C
110	Cyclamen coum	Primulaceae	ex TUR	Ovit				2022	C
111	Cyclamen coum Ashwood Snow F	Primulaceae	cult				wh/green lvs, white fls	2022	C
112	Cyclamen hederifolium	Primulaceae	HRV	Velebit			10 cm, rose	2022	C
113	Cyclamen hederifolium Samothrak	Primulaceae	GRC	Samothraki Isl			pale green lvs, very large white lvs	2022	C
114	Cyclamen hederifolium v album	Primulaceae	cult				white	2021	C
115	Cyclamen intaminatum	Primulaceae	ex TUR				autun fl, white	2021	D
116	Cyclamen parviflorum	Primulaceae	ex TUR	Zigama			lilac	2022	E
117	Cyclamen parviflorum v. subalpinu	Primulaceae	ex TUR				lilac	2022	E
118	Cyclamen peloponesiacum	Primulaceae	ex GRC	Taigetos			white to pink towards petal tips	2022	C
119	Cyclamen pseudoibericum	Primulaceae	ex TUR	Damanli Dag			15 cm, rose fls	2022	D
120	Cyclamen purpurascens	Primulaceae	ex SLO	Julian Alps			tuberosa pl, 8-15 cm high, large reniform lvs, rose fls, summer flowering	2021	C
121	Cyclamen purpurascens	Primulaceae	ex ITA	mt Alben				2022	C
122	Cyclamen repandum	Primulaceae	ex HRV	Velebit			10 cm rose	2022	C
123	Daphne limprichtii	Thymeleaceae	ex CHN	Sechuan			small shrub, 50 cm high, oblong-ovate lvs, white fls, red berries	2022	D
124	Daphne oleoides	Thymeleaceae	MAK	Galicica	2100	limestone crevices	10-20 cm, creamy	2021	D
125	Daphne oleoides Palermo	Thymeleaceae					30 cm, white, robust	2021	C
126	Daphne oleoides	Thymeleaceae	exBGR	Pirin				2022	C
127	Daphne oleoides v. kurdica	Thymeleaceae	ex TUR	Sipikor			20 cm, glandulose, creamy	2022	D
128	Daphne oleoides v.oleoides	Thymeleaceae	TUR	Ercyies	2500	volcanic rocks	cushions 15 cm	2022	D
129	Daphne oleoides v.oleoides	Thymeleaceae	TUR	Ilgaz	2100	limestone scree	cushions 20 cm	2022	D
130	Daphne oleoides x malyana	Thymeleaceae	ex BIH	Piva valley			small shrub, characters between D. oleoides and D. malyana	2022	D

131	Daphne retusa	Thymeleaceae	exCHN	Sechuan		50 cm white-purple		2022	C
132	Dianthus armeria	Caryophyllaceae	MAK	Galicica	2300	limestone crevices	20-40 cm, deep carmine	2021	C
133	Dianthus brevicaulis	Caryophyllaceae	TUR	Bolkar	2500	limestone scree	cushion 5-10 cm	2022	E
134	Dianthus gelidus	Caryophyllaceae	ROM	Bucegi	2400	limestone crevices	3-5 cm, red	2021	D
135	Dianthus goerkii	Caryophyllaceae	TUR	Ala	2960	limestone scree	lax cushion 10 cm	2022	E
136	Dianthus microlepis	Caryophyllaceae	BGR	Pirin	2200	limestone crevices	3 cm, rose	2021	D
137	Dianthus sylvestris	Caryophyllaceae	MNG	Komovi	1900	limestone scree	5-8 cm, rose	2021	C
138	Dianthus sylvestris	Caryophyllaceae	MAK	Galicica	2200	limestone scree	5-8 cm, rose	2021	C
139	Diplarche multiflora	Ericaceae	CHN	GalungLa, Tibet	3700	cold mossy rocky slope	caespitose pl, 10-15 cm high, densely leafy stems, needle-like lvs, 15-20 mm long, rose fls in terminal racemes	2016	C
140	Dodecatheum pulchellum	Primulaceae	USA	BigHorn, WY		snow field	5 cm, rose fls	2018	C
141	Draba acaulis	Brassicaceae	TUR	Ala	3300	limestone scree	compact densely hairy cusgions 5 cm	2022	F
142	Draba acaulis	Brassicaceae	TUR	Bolkar	2800	limestone scree		2022	F
143	Draba bruniifolia	Brassicaceae	TUR	Ercyies	2600	volcanic rocks	compact cushions 5 cm	2022	D
144	Draba bruniifolia	Brassicaceae	ex TUR	Ala Dag			flat dense cushions,	2022	C
145	Draba bruniifolia ssp.heterocoma	Brassicaceae	TUR	Bolkar	2550	limestone scree	low mats, 5 cm	2022	D
146	Dracocephalum poulsenii	Lamiaceae	KYR	Moldo Tau	2800	limestone rocks	miniature pl for tufa, pink fls	2018	E
147	Dracocephalum stamineum	Lamiaceae	KAZ	Trans-Ily Ala Tau	3400	alpine scree	5-10 cm, purple	2019	C
148	Dracunculus vulgaris	Araceae	GRC	Crete	1000	limestone rocks	large purple fls	2022	D
149	Dryadanthe tetrandra	Rosaceae	KAZ	Trans Illy	3300	silicate scree	cushions, yellowish fls	2019	D
150	Dryas drummondii	Rosaceae	ex USA				whitish lvs, yellow fls	2022	D
151	Dysosma veitchii	Berberidaceae	ex CHN			woodland	30 cm lvs, white fls	2022	D
152	Edraianthus horvatii	Campanulaceae	MAK	Galicica	2300	limestone crevices	5-8 cm, 3-5-flowered, blue	2021	D
153	Edraianthus horvatii hairy	Campanulaceae	MAK	Galicica	1850	limestone crevices	hairy form	2021	D
154	Edraianthus jugoslavicus	Campanulaceae	SRB	Kopaonik	1800	silicate rocks	10 cm, very pale blue	2021	D
155	Edraianthus niveus	Campanulaceae	exBIH	Vranica			10 cm creamy	2022	D
156	Edraianthus pilosulus	Campanulaceae	MNG	Komovi	2200	limestone crevices	3-5 cm, blue	2021	E
157	Edraianthus pumilio	Campanulaceae	HRV	Biokovo	1630	limestone crevices	3 cm cushion, whitish lvs, blue fls	2020	D
158	Edraianthus serpyllifolius	Campanulaceae	HRV	Biokovo	1750	limestone scree, grass	5 cm purple	2022	D
159	Edraianthus sutjeskae	Campanulaceae	ex MNG				5 cm purple	2022	E
160	Edraianthus vesovicii	Campanulaceae	MNG	Komovi	2100	limestone crevices	5-10 cm, 1-3-flowered, deep blue	2021	D
161	Edraianthus zogovicii	Campanulaceae	ex MNG				10 cm, blue	2022	C
162	Empetrum rubrum	Ericaceae	CHL	Lag. Teno	250	volcanic ash, lava	red fruits	2019	D
163	Ephedra fedtschenkoana	Ephedraceae	KYR	ex Talas AT	1700	mountain steppe	caespitose pl in dry conditions 5 cm high, in more humid 10-15 cm high, prominent red berries	2021	C
164	Eremurus cristatus	Liliaceae	KYR	Fergana Ridge	3000	alpine scree	Rhizomatic pl 50-100 cm high, brown purple fls in long racemes	2022	D
165	Eremurus lactiflorus	Liliaceae	KYR	Chatkal AT	2000	mountain scree	Rhizomatic pl 30-60 cm high, white fls in dense racemes, large fruits	2018	D
166	Eremurus robustus	Liliaceae						2022	C
167	Eremurus tianshanicus	Liliaceae	KYR	Chatkal AT	2000	mountain steppe	rhizomatic pl 100-120 cm high, long narrow racemes, pinkish fls	2018	C
168	Erigeron aurantiacus	Asteraceae	KAZ	Trans-Ily Ala Tau	3300	alpine grassland	5-20 cm, prominent orage fls	2019	C
169	Erigeron caucasicus	Asteraceae	TUR	Ilgaz	2330	limestone scree	caespitose 15 cm	2022	C
170	Erigeron chrysopsidis	Asteraceae	cult				5-8 cm, yellow	2021	D
171	Eriogonum allenii	Polygonaceae	USA	ex CO, Denver			20 cm	2018	C
172	Eriogonum umbellatum subalpinur	Polygonaceae	USA	BigHorn, WY		alpine grassland	prostrate cushions	2018	D
173	Eriophyllum lanatum	Asteraceae	exUSA	BigHorn, WY		fine alpine scree	silver pl 10-20 cm, yellow fls	2022	D
174	Eritrichium tianshanicum	Boraginaceae	KAZ	Trans-Ily Ala Tau	3400	alpine grassland	3 cm cushion, 8 cm stems, creamy fls	2019	E
175	Erysimum cf. drenowskyii	Brassicaceae	MAK	Galicica	2000	limestone crevices	15-20 cm yellow	2021	C
176	Erysimum kotschyanum	Brassicaceae	TUR	Ala	2800	limestone scree	caespitose 5-10 cm	2022	D
177	Erysimum pumilum	Brassicaceae	GRC	ex Taigetos		limestone crevices	5 cm, cushion, yellow	2021	D
178	Euphrasia chrysantha	Orobanchaceae	CHL	Lag. Teno	247	volcanic ash, lava	very large yellow fls	2019	D
179	Famatina maulensis	Amaryllidaceae	CHL	Lag. Teno	250	volcanic ash, lava	20 cm, red fls in rich umbells, endemic	2019	D
180	Fritillaria crassifolia	Liliaceae	ex TUR	Kop		scree	wise green-purple fls, 10 cm	2022	D
181	Fritillaria latifolia	Liliaceae	Ex TUR	Zigana			purple fls	2022	E
182	Fritillaria latifolia	Liliaceae	ex TUR	Kose			purple fls	2022	E
183	Fritillaria zagrica	Liliaceae	ex TUR	Cat			long green-purple fls, 15 cm	2022	D
184	Galanthus nivalis Poculi	Amaryllidaceae	ex CZE	Elbe R.			mix of Poculiform coll in CZE	2022	E
185	Galanthus plicatus v. plicatus	Amaryllidaceae	ex TUR	Abant	1500	open forest	bulb pl, 15 cm high, broad lvs, large white fls	2022	C
186	Galanthus plicatus v. plicatus	Amaryllidaceae	ex TUR	Yedigeler				2021	C
187	Gaultheria dolichopoda	Ericaceae	CHN	GalungLa, Tibet	3800	cold open slope	prostrate pl, 2 cm high, leather-like lanceolate lvs, 8 mm long, bright blue berries, 10-12 cm wide	2016	D
188	Gaultheria pumila	Ericaceae	CHL	Lag. Teno	250	volcanic ash, lava	3-5 cm prostrate, white fls and fruits	2019	D
189	Genista depressa	Fabaceae	ex CRO	Velebit			prostrate shrub, 5-10 cm high, green branches, lanceolate lvs, 1-2 cm long, large yellow fls	2022	D
190	Genista depressa	Fabaceae	ex ITA	Apenins			5-10 cm, prostrate	2022	D
191	Genista depressa ssp. csikii	Fabaceae	SRB	Kopaonik	1800	alpine grassland	5-10 cm prostrate, yellow	2021	D
192	Genista horrida	Fabaceae	ex ESP				large cushion, 50-100 cm wide, grey/green spiny branches, yellow fls	2022	C
193	Genista incanescens	Fabaceae	ex TUR				10-15 cm cushion	2022	D
194	Genista lydia	Fabaceae	exTUR	Ulu D		limestone crevices	5 cm prostrate, yellow	2022	D

195	<i>Gentiana affinis</i>	Gentianaceae	USA	BigHorn, WY		alpine grassland	10-20 cm , blue fls in umbells	2018	C
196	<i>Gentiana algida</i>	Gentianaceae	USA	BigHorn, WY		snow fields	white fls	2018	C
197	<i>Gentiana asclepiadea</i>	Gentianaceae	SRB	Kopaonik	1800	alpine grassland	20-40 cm, more compact	2021	D
198	<i>Gentiana atuntsiensis</i>	Gentianaceae	CHN	DaXueShan, Yunnan	4300	alpine grassland	caespitose pl, 20-30 cm high, lanceolate lvs, closed blue fls in whorls	2019	D
199	<i>Gentiana atuntsiensis</i>	Gentianaceae	CHN	BaimaShan, Yunnan	4400	limestone scree, grass		2019	D
200	<i>Gentiana bavarica</i> v.subacaulis	Gentianaceae	AUT	H.Tauern	2700	alpine silicate scree	5 cm, blue	2020	E
201	<i>Gentiana boissierii</i>	Gentianaceae	TUR	Bolkar	2730	limestone scree	caespitose 5-10 cm	2022	D
202	<i>Gentiana clusii</i> v rochellii	Gentianaceae	SVK	Fatra		limestone crevices	10 cm blue	2021	D
203	<i>Gentiana dinarica</i>	Gentianaceae	MNG	Komovi	1800	alpine grassland	5-10 cm	2021	D
204	<i>Gentiana kaufmanniana</i>	Gentianaceae	KAZ	Trans-Ily Ala Tau	3300	alpine grassland	5-10 cm, large blue fls, 1-2 on stems	2019	D
205	<i>Gentiana kochiana</i>	Gentianaceae	SRB	Kopaonik	1800	alpine grassland	5-15 cm, larger form	2021	D
206	<i>Gentiana lutea</i>	Gentianaceae	HRV	Ucka	1300	limestone scree	1 m, yellow	2021	C
207	<i>Gentiana melandriifolia</i>	Gentianaceae	exCHN	Cang Shan		forest rocks	prostrate, 10-15 cm	2021	D
208	<i>Gentiana occidentalis</i>	Gentianaceae	ex ESP	Picos		limestone crevices	smaller than G. acaulis	2022	C
209	<i>Gentiana olivieri</i>	Gentianaceae	TAJ	Peter 1, Pamir	2500	limestones scree	15 cm, blue, xeric	2017	C
210	<i>Gentiana orbicularis</i>	Gentianaceae	ROM	Bucegi	2400	limestone scree	5 cm, pale blue, large wings	2021	E
211	<i>Gentiana septemfida</i>	Gentianaceae	TUR	Ilgaz	2350	alpine grassland on lin	caespitose 10-15 cm	2022	C
212	<i>Gentiana septemfida</i>	Gentianaceae	TUR	Ilgaz	2050	alpine grassland on lin		2022	C
213	<i>Gentiana verna</i> var. aestiva	Gentianaceae	SRB	Kopaonik	1800	alpine grassland	10-15 cm, larger form	2021	D
214	<i>Gentiana verna</i> var.pontica	Gentianaceae	TUR	Ilgaz	2320	alpine grassland on lin	10 cm,	2022	D
215	<i>Geum triflorum</i>	Rosaceae	USA	BigHorn, WY		mountain grassland	15-20 cm	2018	C
216	<i>Gillia rubra</i>	Rubiaceae	USA	ex TX		prairie	ex Texas	2018	B
217	<i>Globularia spinosa</i>	Plantaginaceae	ex ESP				15 cm, blue	2022	C
218	<i>Goniolimon tataricum</i>	Plumbaginaceae	MAK	Klepa	1900	dry alpine grassland	15-20 cm, rose	2021	D
219	<i>Gunnera magellanica</i>	Gunneraceae	CHL	Chillan	176	volcanic ash, lava	5-15 cm, red frts	2019	D
220	<i>Gypsophila tenuifolia</i>	Caryophyllaceae	ex RUS	W. Caucasus	2100	limestone crevices	compact green cushions, 15 cm wide, linear juicy lvs, white or pinkish fls on ascendent stems	2022	C
221	<i>Haplopappus glutinosus</i>	Asteraceae	CHL	Lag. Teno	247	volcanic ash, lava	prostrate cushions	2019	D
222	<i>Haplopappus glutinosus</i>	Asteraceae	CHL	Lagunillas	237	volcanic ash, lava		2022	D
223	<i>Haplopappus paucidentatus</i>	Asteraceae	CHL	Lagunillas	240	volcanic ash, lava	10 cm yellow	2019	D
224	<i>Hedysarum erythroleucum</i>	Fabaceae	TUR	Bolkar	2730	limestone scree	caespitose, 10 cm, red fls	2022	E
225	<i>Helichrysum chionophyllum</i>	Asteraceae	TUR	Bolkar	2600	limestone scree	prostrate mat 3-5 cm, solitary yell capitules	2022	D
226	<i>Helichrysum plicatum</i>	Asteraceae	TUR	Abant	1630	limestone scree	caespitose, 10-15 cm, yell fls in umbells	2022	C
227	<i>Heterotheca jamesii</i>	Asteraceae	ex USA				prostrate mat, yellow fls	2022	D
228	<i>Hypericum cerastoides</i>	Hypericaceae	exBGR	Rhodops			10 cm yellow	2021	B
229	<i>Hypericum</i> cf. linarioides	Hypericaceae	TUR	Ala	2300	limestone scree	prostrate 12 cm	2022	C
230	<i>Hypericum linarioides</i>	Hypericaceae	TUR	Bolkar	2200	limestone scree	prostrate 10 cm, yell. fl	2022	C
231	<i>Hypochoeris tenuifolia</i>	Asteraceae	CHL	La Parva	289	volcanic ash, lava	10-20 cm, large yellow fls	2019	C
232	<i>Iberis taurica</i>	Brassicaceae	TUR	Bolkar	2630	limestone scree	caespitose, 10 cm white fls	2022	D
233	<i>Incarvillea younghusbandii</i>	Bignomiaceae	ex CHN				5 cm, rose	2022	F
234	<i>Inula acaulis</i>	Asteraceae	TUR	Bolkar	2830	limestone scree	sessile caespitose, 3 cm, yell fls	2022	D
235	<i>Iris albertii</i>	Iridaceae	KYR	ex Talas AT	1600	dry mountain steppe	Rhizomatic pl 20-40 cm high, 2 cm wide lvs, large pale blue fls, yellow anther brushes	2021	C
236	<i>Iris chrysographes</i>	Iridaceae	CHN	DaXueShan, Yunnan	4000	alpine grassland	40 cm, dark blue	2019	C
237	<i>Iris greberiana</i>	Iridaceae	ex KYR	Arslanbob			20 cm pale blue	2021	D
238	<i>Iris halophila</i>	Iridaceae	exKAZ				rhizomatic pl 30 cm high, pale blue fls	2021	B
239	<i>Iris imbricata</i>	Iridaceae	ex AZE				40 cm, pale yellow	2022	C
241	<i>Iris magnifica</i>	Iridaceae	ex KYR				Juno, 40 cm	2022	E
242	<i>Iris melita</i>	Iridaceae	ex TUR				10 cm	2022	E
243	<i>Iris missouriensis</i>	Iridaceae	USA	BigHorn, WY		mountain steppe	20-40 cm	2018	C
244	<i>Iris pallida</i>	Iridaceae	MAK	Galicica	1600	dry steppe	40-50 cm, pale blue	2022	C
245	<i>Iris purpureobracteata</i>	Iridaceae	ex TUR	Honaz Dag			rhizomatic pl, 20 cm high, purple bracts, yellow fls	2022	C
246	<i>Iris reichenbachii</i>	Iridaceae	ex BGR	Ali Botus			20 cm yellow	2022	C
247	<i>Iris schachtii</i>	Iridaceae	ex TUR				dirty yellow fls	2022	C
248	<i>Iris sintenisii</i>	Iridaceae	ex TUR	Abant			small rhizomatic pl, 20 cm high, narrow linear lvs, dark blue fls	2022	C
249	<i>Iris sogdiana</i>	Iridaceae	ex KAZ	Ketmen	2600	alpine grassland	rhizomatic pl, 30-50 cm high, linear erect lvs, 1 cm wide, pale blue fls	2022	A
250	<i>Jurinea micevskyi</i>	Asteraceae	MAK	Galicica	2300	limestone scree	10 cm, rose, endem	2021	E
251	<i>Jurinella moschus</i>	Asteraceae	TUR	Bolkar	2800	limestone scree	sessile caespitose, 5-10 cm, pink	2022	D
252	<i>Jurinella moschus</i>	Asteraceae	TUR	Ala	2900	limestone scree		2022	D
253	<i>Lagochillus platyacanthus</i>	Lamiaceae	KYR	Kungei AT	1950	rocky dry steppe	Xeric prostrate subshrub10-20 cm wide, small trifoliate lvs, spiny pedicels, pink fls in short racemes	2018	E
256	<i>Lamium garganicum</i>	Lamiaceae	ex TUR				caespitose pl 10 cm, rose fls	2022	C
257	<i>Leontopodium alpinum</i>	Asteraceae	ITA	Dolomites	2200	limestone crevices	10-15 cm	2020	D
258	<i>Leontopodium alpinum</i>	Asteraceae	SLO	Julian A	2100	limestone crevices		2021	D
259	<i>Leontopodium ochroleucum</i> nanur	Asteraceae	KAZ	Trans-Ily Ala Tau	3300	alpine grassland	high alpine form of L ochroleucum described as L. nanum, 5 cm	2019	D
260	<i>Lilium albanicum</i>	Liliaceae	MNG	Komovi	2000	limestone scree	20-30 cm, yellow	2021	E
261	<i>Lilium candidum</i>	Liliaceae	ex MAK	Prilep		limestone, shrubs	1 m white	2022	D

262	<i>Lilium martagon</i> v. <i>album</i>	Liliaceae	ex cult.				white form <i>L. martagon</i>	2022	D
263	<i>Lilium martagon</i> v. <i>cattaniae</i>	Liliaceae	exMNG				dark black-purple	2022	D
264	<i>Linum arboreum</i>	Linaceae	GRC	Crete	1600	limestone crevices	cushions 15 cm, yellow	2022	E
265	<i>Linum capitatum</i>	Linaceae	MNG	Komovi	1800	limestone scree	15-20 cm, yellow	2021	D
266	<i>Linum capitatum</i>	Linaceae	BGR	Pirin	2200	limestone scree	15-20 cm, yellow	2021	D
267	<i>Linum flavum</i>	Linaceae	MAK	Galicica	1850	limestone scree	15-20 cm, yellow	2021	D
268	<i>Linum hirsutum</i> ssp. <i>spathulatum</i>	Linaceae	MAK	Galicica	2000	limestone crevices	10-15 cm, blue	2021	D
269	<i>Loasa filicifolia</i>	Loasaceae	CHL	Lag. Teno	247	volcanic ash, lava	10-15 cm, white	2019	D
270	<i>Machaeranthera colradensis</i> /Aster	Asteraceae	ex USA				caespitose pl, 10-15 cm high, rose fls	2022	B
271	<i>Maihuenia poeppigii</i>	Cactaceae	CHL	Shangrila	152	volcanic ash, lava	Cactus, 10 cm, pale yellow fls	2019	D
272	<i>Marrubium cephalanthum</i>	Lamiaceae	TUR	Ala	2250	limestone scree	caespitose odoriferous herb10-30 cm	2022	D
273	<i>Meconopsis horridula</i>	Papaveraceae	CHN	BaimaShan, Yunnan	4500	limestone scree, grass	5-15 cm, blue or rose fls	2019	D
274	<i>Meconopsis integrifolia</i>	Papaveraceae	CHN	DaXueShan, Yunnan	4400	alpine grassland	30-40 cm, yellow fls	2019	D
275	<i>Meconopsis speciosa</i>	Papaveraceae	CHN	GalungLa, Tibet	3900	rocky alpine slope	caespitose pl, 15-30 cm high, lanceolate ciliate lobate lvs, 7-12 cm long, seberal pale blue fls in terminal racemes	2016	D
276	<i>Melosperma andicola</i>	Plantaginaceae	CHL	Lagunillas	246	volcanic ash, lava	15 cm	2019	D
277	<i>Mimulus luteus</i>	Phrymaceae	CHL	Chillan	180	along streams	10-30 cm, yelloe to red fls	2019	C
278	<i>Minuartia parnassica</i>	Caryophyllaceae	ex GRC				large compact cushions, 20-50 cm wide, white sessile fls	2022	B
279	<i>Minuartia stellata</i>	Caryophyllaceae	ex GRC				large cushions, 30-70 cm wide, white sessile fls	2022	A
280	<i>Mischauxia camanuloides</i>	Campanulaceae	TUR	Ala	1300	limestone scree	monocarpic plant up to 1 m, large wh fls	2022	C
281	<i>Moltkaea petraea</i>	Boraginaceae	HRV	Biok.		dry limestone crevices	15-20 cm subshrubs, sky blue fls	2020	D
282	<i>Montiopsis gayana</i>	Montiaceae	CHL	Lag. Teno	246	volcanic ash, lava	5-10 cm, prominent dark rose fls	2019	D
283	<i>Montiopsis sericea</i>	Montiaceae	CHL	Shangrila	1520	volcanic ash, lava	5-15 cm, hairy, prominent dark rose fls	2019	D
284	<i>Montiopsis umbellata</i>	Montiaceae	CHL	Lag. Teno	246	volcanic ash, lava	5-15 cm, prominent dark rose fls	2019	D
285	<i>Mulinum echinus</i>	Apiaceae	CHL	Lag. Laja	153	volcanic ash, lava	large cushions, 20-60 cm wide	2019	C
286	<i>Mutisia oligodon</i>	Asteraceae	CHL	Lag. Laja	140	volcanic ash, lava	low subshrub 20-50 cm, prominent pink fls	2019	E
287	<i>Mutisia spinosa</i>	Asteraceae	ex ARG				herbaceous vine, 1-2 m high, ovate lvs with supporting appendages, violet ray fls, yellow tubular fls in capituli, 5 cm	2020	D
288	<i>Nassauvia glomerata</i>	Asteraceae	CHL	Lag. Teno	250	volcanic ash, lava	prostrate cushions 10-30 cm wide, white fls	2019	D
289	<i>Nastanthus ventosus</i>	Calycerace	CHL	Lag. Teno	247	volcanic ash, lava	cauliflower-like sessile umbells, 10-15 cm	2019	D
290	<i>Olsynium junceum</i> ssp. <i>junceum</i>	Iridaceae	CHL	Lag. Teno	250	volcanic ash, lava	creamy fls	2019	D
291	<i>Omphalodes luciliae</i>	Boraginaceae	TUR	Ala	2500	limestone cold rocks	10-15 cm blue	2022	E
292	<i>Omphalogramma delavayi</i>	Primulaceae	CHN	CangShan, Yunnan	4200	alpine grassland	caespitose pl, 10-15 cm high, ovate lvs, 3-5 cm long, large violet fls 3-4 cm long, petals dentate	2019	E
293	<i>Onosma nanum</i>	Boraginaceae	ex TUR				caespitose pl, 15-20 cm high, white fls	2021	A
294	<i>Oreopolus glacialis</i>	Rubiaceae	CHL	Lag. Laja	145	volcanic ash, lava	compact cushion, 10-40 cm wide, yellow sessile star-like fls	2019	F
295	<i>Orites myrtoidea</i>	Proteaceae	CHL	Shangrila	154	volcanic ash, lava	dwarf shrub	2019	E
296	<i>Oxygraphis glacialis</i>	Ranunculaceae	KAZ	Trans-Ily Ala Tau	3300	alpine scree	prostrate pl 5 cm, yellow fls	2019	D
297	<i>Oxytropis chionobia</i>	Fabaceae	KAZ	Trans-Ily Ala Tau	3500	alpine grassland	prostrate silver cushions, bluish purple sessile fls	2019	D
298	<i>Oxytropis dinarica</i>	Fabaceae	MNG	Komovi	2200	alpine grassland	10 cm pink	2021	D
299	<i>Oxytropis dinarica</i> /urumovii	Fabaceae	MAK	Galicica	2400	alpine grassland	10 cm, pink	2021	D
300	<i>Paeonia mlokosewitschii</i>	Paeoniaceae	cult				50 cm, pale yellow	2022	D
301	<i>Paeonia ruprechtiana</i>	Paeoniaceae	ex cult				40 cm, dark rose	2022	E
302	<i>Paeonia turcica</i>	Paeoniaceae	ex TUR				50 cm purple rose	2022	D
303	<i>Papaver apokrinomenon</i>	Papaveraceae	TUR	Ilgaz	2300	limestone scree	hairy plant 20-50 cm, red	2022	B
304	<i>Papaver corona-sancti-stephani</i>	Papaveraceae	ROM	Bucegi	2400	limestone scree	10-15 cm, yellow	2021	D
305	<i>Paraquilegia grandiflora</i>	Ranunculaceae	KAZ	Trans-Ily Ala Tau	3450	alpine crevices	5-15 cm, bluish white fls	2019	E
306	<i>Paronychia pulvinata</i>	Caryophyllaceae	USA	Lovelans,CO		alpine crevices	cushions	2018	D
307	<i>Pelargonium endlicherianum</i>	Geraniaceae	TUR	Ala	1250	limestone scree	succulent rootstock, 10-20 cm, rose fl	2022	D
308	<i>Penstemon caryie</i>	Scrophulariaceae	USA	BigHorn, WY		mountain steppe	10 -20 cm, blue-purple fls	2018	D
309	<i>Penstemon cyananthus</i>	Scrophulariaceae	USA	Tetonex WY		alpine grassland	15 cm, blue-purple fls	2018	D
310	<i>Penstemon davidsonii</i> v. <i>menziesii</i>	Scrophulariaceae	ex USA				10-15 cm, rose	2022	D
311	<i>Penstemon glaber</i>	Scrophulariaceae	USA	BigHorn, WY		mountain steppe	15-20 cm, blue-purple fls	2018	D
312	<i>Penstemon hallii</i>	Scrophulariaceae	USA	Horseshoe Mts, WY		alpine limestone scree	15 cm, blue fls	2021	D
313	<i>Penstemon procerus</i>	Scrophulariaceae	USA	BigHorn, WY		alpine grassland	10-20 cm, blue-purple fls	2021	D
314	<i>Penstemon rostriflorus</i>	Scrophulariaceae	USA	ex CO			ex sw USA Pinyon Juni, red fls	2018	C
315	<i>Phacelia sericea</i>	Lamiaceae	USA	Steamboat, CO		steppe	20-40 cm, lilac fls in dense racemes	2018	C
316	<i>Phlomis capitata</i>	Lamiaceae	TUR	Ala	2280	limestone scree	odoriferous hairy herb 20-40 cm, yellow	2022	C
317	<i>Phyteuma globulariifolium</i>	Campanulaceae	AUT	H.Tauern	2700	alpine grassland	3-5 cm, blue	2020	E
318	<i>Polemonium viscosum</i>	Polemoniaceae	USA	Loveland, CO		alpine grassland	15-20 cm, prominent blue fls	2018	D
319	<i>Potentilla apennina</i>	Rosaceae	BGR	Pirin	2200	limestone crevices	10 cm, pink	2021	D
320	<i>Potentilla clusiana</i>	Rosaceae	MNG	Komovi	2200	limestone crevices	10 cm creamy	2021	D
321	<i>Potentilla nitida</i>	Rosaceae	ITA	Dolomites	2200	limestone crevices	5-10 cm rose	2020	D
322	<i>Potentilla speciosa</i>	Rosaceae	TUR	Ala	2200	limestone scree	white toment cushions10 cm, yellow	2022	D
323	<i>Potentilla speciosa</i>	Rosaceae	MAK	Galicica	2000	limestone crevices	15 cm, white tomentose, pale yellow fls	2022	D
324	<i>Pozoa coriacea</i>	Apiaceae	CHL	La Parva	289	volcanic ash, lava	prostrate pl 5 cm, green yellow fls	2019	D
325	<i>Pozoa coriacea</i>	Apiaceae	CHL	Lag. Maule	215	volcanic ash, lava		2019	D

326	Pozoa coriacea	Apiaceae	CHL	Lanin	145	volcanic ash, lava		2019	D
327	Pozoa volcanica	Apiaceae	CHL	Lag. Teno	246	volcanic ash, lava	caespitose pl 10-15 cm, green yellow fls	2019	D
328	Primula algida	Primulaceae	KAZ	Trans-Ily Ala Tau	3300	alpine grassland	caespitose pl 10 cm, pink fls	2019	D
329	Primula auricula	Primulaceae	SVK	Fatra	1600	limestone crevices	10 cm yellow	2021	C
330	Primula auriculata	Primulaceae	TUR	Ilgaz	2180	wet grassland	farinose lvs, rose fls 10-20 cm	2022	D
331	Primula dryadifolia	Primulaceae	CHN	BaimaShan, Yunnan	4500	cold scree in the high	5-12 cm, rose fls	2019	D
332	Primula florindae	Primulaceae	CHN	Lulang, Tibet	3300	boggy meadows	giant caespitose Primula, 40-80 cm high, large oblong lvs, large yellow fls in 1-3 umbells	2016	C
333	Primula halleri	Primulaceae	BGR	Pirin	2400	alpine grassland	10-15 cm, rose	2021	D
334	Primula minkwitziae	Primulaceae	TAJ	Artuch, Zeravshan	3400	sheltered under bould	caespitose pl, 10-15 cm high, soft green hairy rounded dentate lvs, large rose fls, yellow throat in umbells	2017	D
335	Primula nivalis	Primulaceae	KAZ	Trans-Ily Ala Tau	2550	lake banks, mineral w	large pl 30-50 cm, not farinose lvs, rose fls	2019	D
336	Primula sikkimensis	Primulaceae	CHN	BaimaShan, Yunnan	4300	limestone scree, grass	caespitose pl, 20-40 cm high, pale green oblong lvs, 10-13 cm long, yellow fls in umbells	2019	D
337	Primula sinopurpurea	Primulaceae	CHN	DaXueShan, Yunnan	4300	alpine grassland	caespitose pl, 40 cm high, rose fls in umbells	2019	D
338	Primula sinopurpurea	Primulaceae	CHN	Zhongdian, NapaHai, Yunnan	3600	mountain grassland		2019	D
339	Primula spectabilis	Primulaceae	ITA	Tremalzo	1800	limestones scree	10 cm rose	2020	D
340	Primula turkestanica	Primulaceae	KAZ	Trans-Ily Ala Tau	3400	alpine wet scree	aff. P. nivalis, 20-30 cm, farinose lvs, rose fls	2019	D
341	Primula zambalensis	Primulaceae	CHN	BaimaShan, Yunnan	4300	wet scree, boggy gras	small compact pl 5-12 cm, rose fls	2019	D
342	Prometheum /Sedum sempervivoi	Crassulaceae	TUR	Ilgaz	1730	limestone scree	biennial, like sempervivum, bright red fls and fruits	2022	D
343	Prunus prostrata	Rosaceae	GRC	Crete, Lefka Ori	1600	Limestone cerevices	compact cushions, 5-10 cm	2022	D
344	Pterocephalus pinnardii	Dipsacaceae	TUR	Ala	2150	limestone scree	flat mat, lilac fls	2022	D
345	Pterocephalus pinnardii	Dipsacaceae	TUR	Bolkar	2200	limestone scree		2022	D
346	Pulsatilla armena Bl	Ranunculaceae	ex TUR				dark blue	2022	C
347	Pulsatilla armena Ye	Ranunculaceae	ex TUR				whitish	2022	C
348	Pulsatilla bohemica	Ranunculaceae	CZE	Czech Karst	250	limestone crevices	15 cm, black purple fl. (derived from P. nigricans)	2021	C
349	Pulsatilla campanella	Ranunculaceae	KAZ	Trans-Ily Ala Tau	2700	alpine grassland	caespitose pl, 15-20 cm high, finely incissed lvs, linear lobbes, dirthy bluish-grey fls	2019	C
350	Pulsatilla grandis	Ranunculaceae	ex CZE	Brno			15 cm, lilac	2022	C
351	Pulsatilla subslavica	Ranunculaceae	ex SVK	Muran			20 cm, lilac	2022	C
352	Pulsatilla vernalis	Ranunculaceae	MNG	Komovi			15 cm, lilac	2020	D
353	Pulsatilla violacea	Ranunculaceae	ex Cucasus				P. albana violacea	2022	C
354	Pyrethrum karelinii	Asteraceae	KAZ	Trans-Ily Ala Tau	3400	alpine grassland	large daisy, 15-20 cm, very large fls	2019	D
355	Pyrethrum pyrethroides	Asteraceae	KAZ	Trans-Ily Ala Tau	3400	alpine scree	prostrate silver mat, white fls	2019	D
356	Pyrethrum tatsiense	Primulaceae	CHN	BaimaShan, Yunnan	4300	alpine acidic grassland	5-20 cm, green lvs, yellow fls	2019	D
357	Quinchamalium chilense	Santalaceae	CHL	Lag. Teno	247	volcanic ash, lava	prostate stems with warm yellow umbells	2019	D
358	Rhamnus microcarpa	Rhamnaceae	ex RUS	Caucasus, Mt. Fisht			dwarf shrub, appressed to rocks, 10 cm high, broadly ovate lvs, 4-6 cm long, black berries, 4 mm wide	2022	C
359	Rhodiola rhodantha/Clementsia	Crassulaceae	USA	Mt. Evans, CO		alpine grassland	15 cm, rose fls	2018	C
360	Rhododendron cephalanthum	Ericaceae	CHN	BaimaShan, Yunnan	4400	limestone scree, grass	small shrub 15-25 cm, white fls	2019	D
361	Rhododendron cephalanthum	Ericaceae	CHN	DaXueShan, Yunnan	4680	alpine grassland		2019	D
362	Rhododendron chamaethomsonii	Ericaceae	CHN	GalungLa, Tibet	3800	cold rocky slopes	prostrate shrub, 10-20 cm high, like R.forrestii, ovate lvs, 4-8 cm long, prominent red fls	2016	D
363	Rhododendron kotschyi	Ericaceae	ROM	Bucegi	2300	alpine grassland	15-20 cm, rose	2021	D
364	Rhodophiala araucana	Amaryllidaceae	CHL	Lag. Laja	155	volcanic ash, lava	15 cm,	2019	E
365	Rhodophiala montana	Amaryllidaceae	CHL	Lag. Maule	230	volcanic ash, lava	20 cm, yellow fls	2019	D
366	Rhodothamnus chamaecistus	Ericaceae	ITA	Dolomites	2180	limestone crevices	15 cm, pink	2020	D
367	Roscoea tibetica	Zingiberaceae	CHN	ex Zhongdian,Yunnan	3500	mountain grassland	small rhizomatic pl, 5-10 cm high, prostrate lvs, sessile purple red fls	2022	C
368	Salvia canescens	Lamiaceae	ex RUS	Balkaria, Caucasus			silver pl 20 cm	2022	C
369	Salvia cryptantha	Lamiaceae	TUR	Bolkar	2200	limestone scree	tomentose odoriferous herb 15-20 cm, white fls, bowl-like calyx	2022	D
370	Saponaria pulvinaris	Caryophyllaceae	TUR	Bolkar	2850	limestone scree	prostrate green mat, rose fls	2022	D
371	Saponaria pumila	Caryophyllaceae	AUT	H.Tauern	2650	silicate scree	5 cm, rose	2020	D
372	Sarracenia purpurea	Sarraceniaceae	cult				15 cm purple	2020	D
373	Saxifraga biflora	Saxifragaceae	AUT	H.Tauern	2860	silicate scree	3 cm, purple	2020	D
374	Saxifraga caesia	Saxifragaceae	ITA	Tremalzo	1800	limestone crevices	5 cm white	2020	D
375	Saxifraga cartilaginea	Saxifragaceae	TUR	Ilgaz	2300	limestone scree	silver plant 15 cm, white	2022	D
376	Saxifraga cebenensis	Saxifragaceae	exFRA				5 cm white	2022	C
377	Saxifraga crustata v. minor	Saxifragaceae	exSVN	Kamnik Alps			small form	2022	C
378	Saxifraga exarata	Saxifragaceae	TUR	Ilgaz	2300	limestone scree	mossy caespitose, 10 cm	2022	D
379	Saxifraga ferdinandi-coburgii	Saxifragaceae	BGR	Pirin	2200	limestone crevices	10 cm, yellow	2022	D
380	Saxifraga kotschyi	Saxifragaceae	TUR	Ilgaz	2150	limestone scree	compact cushion Kabshia, yellow fls	2022	E
381	Saxifraga kotschyi	Saxifragaceae	TUR	Bolkar	2780	limestone scree		2022	E
382	Saxifraga kotschyi	Saxifragaceae	TUR	Ala	2350	limestone scree		2022	E
383	Saxifraga porophylla	Saxifragaceae	ex ITA	ex Grand Sasso			compact Kabshia, purple fls	2022	D
384	Saxifraga scardica	Saxifragaceae	MAK	Galicica	2300	limestone crevices	10-13 cm, creamy	2021	D
385	Saxifraga squarrosa	Saxifragaceae	ITA	Dolomites	2200	limestone crevices		2020	E
386	Saxifraga stribnyi	Saxifragaceae	ex BGR	Rodopi			sect. Porophyllum, silver rosette, 2-3 cm wide, purple fls in terminal racemes on stems, 10 cm long	2022	D
387	Schizanthus grahamii	Solanaceae	CHL	Lag. Teno	246	volcanic ash, lava	15-30 cm, numerous large lilac fls	2019	D
388	Schizanthus hookeri	Solanaceae	ARG	P. Pehuenche	210	volcanic ash, lava	15-30 cm, numerous large red fls	2019	D
389	Scorzonera sericea	Asteraceae	TUR	Ilgaz	2300	limestone scree	white tomentose hard cushions, yelloew fls	2022	E



390	Scutellaria przewalskyi	Lamiaceae	KYR	Moldo Tau	2800	alpine scree	prostrate pl 10-30 cm wide, ovate deeply incised lvs, pale yellow fls wit purple blotch	202y	C
391	Scutellaria suffruticosa `Texas Ro	Lamiaceae	cult	USA			caespitose pl, 10-15 cm high, ovate lvs, 10-15 mm long, prominent red fls in autumn	2019	C
392	Sempervivum armenum	Crassulaceae	TUR	Ilgaz	2300	limestone scree	15 cm, yellowish fls	2022	D
393	Sempervivum ciliosum var. galicici	Crasulaceae	MAK	Galicica	2000	limestone crevices	5-10 cm rose	2021	D
394	Sempervivum ciliosum/Klepa	Crasulaceae	MAK	Klepa	900	limestone crevices	5-10 cm, rose	2021	D
395	Senecio aurantiacus	Asteraceae	ROM	Bucegi	2300	alpine grassland	10-15 cm, white hairy, orange	2021	D
396	Senecio chilensis	Asteraceae	CHL	Lag. Laja	138	volcanic ash, lava	10-15 cm, yellow	2022	D
397	Senecio incanus	Asteraceae	AUT	H.Tauern	2650	alpine grassland	5-10 cm, tomentose lvs, yellow	2020	D
398	Serratula cf. cerinthifolia	Asteraceae	TUR	Bolkar	1300	limestone scree	like Centaurea, 20 cm, pink	2022	D
399	Siewersia reptans	Geraniaceae	ROM	Bucegi	2500	alpine silicate scree	10-15 cm, yellow	2021	D
400	Silene aff. caryophylloides	Caryophyllaceae	TUR	Ala	2300	limestone scree	flat cushions, white fls, 10-15 cm	2022	D
401	Silene argaea	Caryophyllaceae	TUR	Ercyies	2740	volcanic rocks	flat cushions, rose fls, 10-15 cm	2022	D
402	Silene caryophylloides v. subulata	Caryophyllaceae	TUR	Ilgaz	2330	limestone scree	lax cushions, white fls15-20 cm	2022	D
403	Silene falcata	Caryophyllaceae	ex TUR	Ulu Dag	2000	limestone scree	prostrate mats, 5-15 cm wide, falcate linear green lvs, 2 cm long, solitary white fls on 6 - 12 cm stems, black capsule	2019	C
404	Silene schafta	Caryophyllaceae	ex cult				caespitose pl 10-15 cm high, rose fls, flowering in summer to frosts	2022	B
405	Sisyrinchium arenarium	Iridaceae	CHL	Lagunillas	237	volcanic ash, lava	pale yellow fls	2019	D
406	Stachys inflata	Lamiaceae	ex IRN	Elborz, Baladeh	1600	mountain steppe	caespitose pl, 20 cm high, white hairy ovate lvs 10-20 mm, pink fls in terminal racemes	2022	A
407	Stellera chamaejasme v. chrysanthi	Thymeleaceae	CHN	Zhongdian, Yunnan	3300	mountain grassland	20-30 cm stems, yellow umbells	2019	E
408	Tarasa humilis	Malvaceae	CHL	Lag. Laja	150	volcanic ash, lava	caespitose, 5 cm, prominent bright rose fls	2019	E
409	Telesonix heucheroides	Saxifragaceae	USA	BigHorn, WY		limestone crevices	saxatile plant 15 cm, purple fls, red fruits	2018	D
410	Teucrium polium	Lamiaceae	TUR	Kure	1280	limestone steppe	white tomentose prostrate, white fls	2022	C
411	Thlaspi bellidifolium	Brassicaceae	BGR	Pirin	2300	limestone scree	5 -8 cm, pale lilac	2021	D
412	Thlaspi bellidifolium	Brassicaceae	MAK	Galicica	2200	limestone scree	5 cm lilac-rose	202y	D
413	Trollius altaicus	Ranunculaceae	KAZ	Trans-Ily Ala Tau	2600	alpine grassland	30 cm, yellow fls	2019	D
414	Trollius lilacinus/Hegemone	Ranunculaceae	KAZ	Trans-Ily Ala Tau	3300	alpine wet grassland	white bluish, purplish fls, for wet peat blocks	2019	E
415	Tulipa anadroma	Liliaceae	KYR	Chatkal AT	1900	rocky grassland nr lake	Bulb pl 15-30 cm high, large yellow fls reddish outside	2018	D
416	Tulipa dasystemon	Liliaceae	KAZ	Trans-Ily Ala Tau	3300	alpine grassland	bowl like yellow fls	2019	D
417	Tulipa ferganica	Liliaceae	ex KYR	Fergan			15 cm, reddish yellow fls	2022	D
418	Tulipa heterophylla	Liliaceae	KAZ	Trans-Ily Ala Tau	3400	alpine grassland	lily-like yellow fls	2019	D
419	Tulipa urumiensis	Liliaceae					10 cm yellow	2022	B
420	Tulipa zenaidae	Liliaceae	KYR	E Kyrgyz AT	2500	rocky grassland	Bulb pl 10-20 cm high, yellow fls, red outside	2018	D
421	Veronica bombycina var. bolkarda	Scrophulariaceae	TUR	Bolkar	2500	limestone scree	white tomentose, 3 cm, blue fls	2022	E
422	Veronica kotschyana	Scrophulariaceae	TUR	Ala	3350	limestone scree	dark green caespitose, 10 cm, blue fls in rich racemes	2022	E
423	Veronica satureoides	Scrophulariaceae	BGR	Pirin	2400	limestone scree	5 cm, dark blue	2021	D
424	Veronica tauricola	Scrophulariaceae	TUR	Ala	2740	limestone scree	prostrate grey-green, blue fl	2022	D
425	Viola congesta	Violaceae	CHL	Lag. Teno	246	volcanic ash, lava	rosulate hairy, purple fls	2019	F
426	Viola cotyledon	Violaceae	CHL	Chillan	188	volcanic ash, lava	rosulate sticky, white fls	2019	F
427	Viola cotyledon	Violaceae	CHL	Pehuenche	2150	volcanic ash, lava	rosulate sticky, pale blue fls	2019	F
428	Viola cotyledon	Violaceae	CHL	Lag. Teno	246	volcanic ash, lava	rosulate sticky, pale blue fls	2019	F
429	Viola cotyledon	Violaceae	CHL	Lanin	124	volcanic ash, lava	rosulate sticky, pale blue fls	2019	F
430	Viola philippii	Violaceae	CHL	V Nevado	310	volcanic ash, lava	rosulate, brown lvs, white fls	2019	E
431	Viola reichii	Violaceae	CHL	Chillan	185	volcanic ash, lava	small leafy, yellow fls	2019	E
433	Wulfenia bleicii	Scrophulariaceae	exMNG				15 cm blue	2022	D