Electronic Appendix 1. – List of the 16 traits used to differentiate the various clonal growth forms used in this study. Each trait was coded as a binary variable (zero vs. one). For each vegetation type (having a different number of species and plots) the relative abundance of each trait as weighted by total species cover in a vegetation type is reported. The relative abundance of each trait was compared to that expected by chance (based on randomizing species cover within each vegetation type). Results of observed vs. expected relative abundance are reported for each trait and vegetation type (e.g. ↑ = more even than expected by chance, which implies a % closer to 50%; ↓ = less even). Vegetation types identified by the TWINSPAN analyses were: vegetation on screes, alpine meadows, shrubby vegetation, steppes, subnival vegetation, animal resting places, salt marshes and vegetation near to water bodies. GCO=clonal growth organ.

	Screes (20 plots x 66 sp.)		**Meadow** (54 plots x 143 sp.)		**Shrubs** (48 plos x 117 sp)		**Steppe** (83 plos x 157 sp)		**Subnival** (52 plos x 144 sp)		**Resting places** (9 plos x 42 sp)		**Salt** (92 plos x 149 sp)		**Water bodies** (11 plos x 71 sp)	
TRAITS	%	Obs vs. Exp	%	Obs vs. Exp	%	Obs vs. Exp	%	Obs vs. Exp	%	Obs vs. Exp	%	Obs vs. Exp	%	Obs vs. Exp	%	Obs vs. Exp
perennial main root, no adventitious roots, none clonal growth	45.2	↑	45.1	ns	43.5	↓	39.4	↓	37.3	↓	27.3	ns	35.6	↓	27.5	↓
perennial primary shoot	19.4	↓	17.6	ns	15.4	ns	13.1	↓	16.2	ns	15.5	ns	13.39	ns	8.9	ns
shoots herbaceous	100	ns	88.5	↑	98.5	ns	96.1	ns	92.6	ns	97.2	ns	98.5	ns	97.3	ns
extensive lateral spread	30.7	↑	34.4	↑	33.1	ns	39.8	↑	41.3	↑	48.1	↑	38.7	↑	28	ns
small lateral spread	49.9	ns	47.9	ns	51.4	ns	46.9	ns	42.2	↓	36.4	ns	47.9	ns	63	ns
cushion	2.1	ns	0.8	ns	2.2	ns	2.6	ns	1.1	ns	0	ns	2.24	ns	0	ns
adventitious buds on roots	5.4	ns	3.6	ns	2.7	ns	3.1	ns	7.9	ns	0.2	ns	1.07	ns	0.5	ns
integrator	50.7	↓	49.1	ns	45.6	↓	42.3	↓	46.2	↓	27.7	↓	37.33	↓	28.1	↓
slow splitter	46.3	↑	50.4	ns	51.5	↑	49.7	↑	51.5	ns	55.1	ns	54.8	↑	67.7	↓
CGO photosynthetising	2.9	ns	0.46	ns	2.9	ns	7.9	↑	2.2	↑	17.1	↑	7.84	ns	4.1	↑
CGO has storage function	46.3	↑	50.4	ns	51.6	↑	49.7	↑	51.4	↑	55.4	ns	54.8	↑	67.3	↓
clonal offspring resemble seedling	0.2	ns	0	ns	0.29	ns	1.8	ns	0	ns	3.6	ns	1.3	ns	0	ns
CGO provides anchorage	55.1	↓	64.6	↓	64.1	↓	60.5	↑	67.9	↓	58.2	ns	62.2	↓	74.1	↓
high potential multiplication rate	30.2	ns	16.8	↑	31.9	↑	29.3	↑	26.4	↑	34.9	ns	32.9	↑	36.4	↑
more CGOs combined in one species	2.9	ns	0.5	ns	2.8	ns	7.9	↑	2.2	ns	17.1	↑	7.5	ns	4.11	↑
deep bud bank	27.9	↑	35.9	↑	31.4	↑	35.3	ns	39.4	↑	34.5	ns	32.9	↑	28.1	ns

Electronic Appendix 2. – Centred and standardized PCA of the different environmental factors considered in this study. Abbreviations are: soil.moist=Soil moisture; stabil=soil stability.