Chorotype	Life-forms	Relevés Number	1	2	3	4	53	65	66	67	101	104	105	193	102	5	49	50	51	52	54	55	56	69	107	108	109	106	152	154	155	155	156	91	94	92	93	95	96	98	97	99	100	138	139	140	141	57	58	63	64	59	112	113	119	120	122	71	72	73	75	76	80	78	79	77	74	129	127	130	131	123	124	125	126	60	61	62	68	70	69
		Geneva	Bel.	Bel.	Bel.

On-line Suppl. Tab. 2. Results from forward selection in Cannonical correspondence analysis (CCA) of all 19 bioclimatic variables extracted from WorldClim database, version 2.0 (Fick and Hijmans 2017). The bioclimatic variables with the highest percentage of the total variance of species data explained (in shaded cells) are plotted onto the Detrended correspondence analysis (DCA) ordination plot (Fig. 2 in text). *TV* is the percentage of the total variance and *p* is the significance level.

Name	Bioclimatic variable	TV%	pseudo-F	P	P(adj)
Bio 18	Precipitation of warmest quarter	6.6	10.5	0.001	0.019
Bio 17	Precipitation of driest quarter	6.6	10.5	0.001	0.019
Bio 15	Precipitation seasonality	6.3	10.1	0.001	0.019
Bio 11	Mean temperature of coldest quarter	6.3	10	0.001	0.019
Bio 14	Precipitation of driest month	6.3	10	0.001	0.019
Bio 01	Annual mean temperature	6.1	9.7	0.001	0.019
Bio 05	Max temperature of warmest month	6	9.6	0.001	0.019
Bio 10	Mean temperature of warmest quarter	6	9.5	0.001	0.019
Bio 06	Min temperature of coldest month	5.9	9.4	0.001	0.019
Bio 08	Mean temprature of wettest quarter	5.8	9.1	0.001	0.019
Bio 19	Precipitation of coldest quarter	5.6	8.9	0.001	0.019
Bio 04	Temperature seasonality	5.2	8.1	0.001	0.019
Bio 09	Mean temperature of driest quarter	4.9	7.7	0.001	0.019
Bio 07	Temperature annual range	4.7	7.4	0.001	0.019
Bio 12	Annual precipitation	4.3	6.7	0.001	0.019
Bio 13	Precipitation of wettest month	4.3	6.6	0.001	0.019
Bio 03	Isothermality	4.1	6.4	0.001	0.019
Bio 16	Precipitation of wettest quarter	3.7	5.7	0.001	0.019
Bio 02	Mean diurnal range	3.3	5.1	0.001	0.019

On-line Suppl. Tab. 3. Parameter values of some climatic variables, site characteristics and total vegetation cover for representative locations within the communities of *Genista lydia*. Group 1 – *Diantho pinifolii-Genistetum lydiae*, Group 2 – *Romuleo graecae-Genistetum lydiae*, Group 3 – *Galio flavescentis-Genistetum lydiae*, Group 4 – *Genista lydia-Satureja pilosa* community. The values for annual mean temperature, annual precipitation and the months with precipitation maximum were extracted from WorldClim database, version 2.0 (Fick and Hijmans 2017) as raster graphic images (geotif files) with highest spatial resolution (~1 km^2). Altitude range is measured by handheld GPS Garmin eTrex Vista HCx. The data on slope, substrates and total vegetation cover are presented according personal observations.

	Locations	Annual Mean Temp. (°C)	Annual Precip. (mm)	Precip. Max. (month)	Altitudes range, (mean), m	Slope, (°)	Substrates	Total veg. cover (%)
Group 1	Potamoi, GR	8.4	603	November	600–1500 (964)	14.5	rocks, deposites, sandy soils	81.4
	Gotze Delchev, BG	10.7	550	November				
	Dobrinishte, BG	9.3	555	May, November				
	Chepelare, BG	7.8	685	June				
	Jundola, BG	6.9	666	June				
Group 2	Paranesti, GR	12.3	550	November	150–600 (337)	4.1	deposites, sandy soils	83.9
	Ano Karyofyto, GR	12.4	560	November				
	Fotinovo, BG	12.3	588	November				
	Sedlovina, BG	12.3	595	November			white zeolites	
Group 3	Sliven, BG	9.7	655	May, November	300–1000 (780)	10.6	rocks	64.6
	Jumruk skala, BG	12	600	November				
Group 4	Potochnitsa, BG	12.6	580	November	150–300 (186)	1	gravel bars	65
	Velikdenche, BG	12.3	580	Desember				