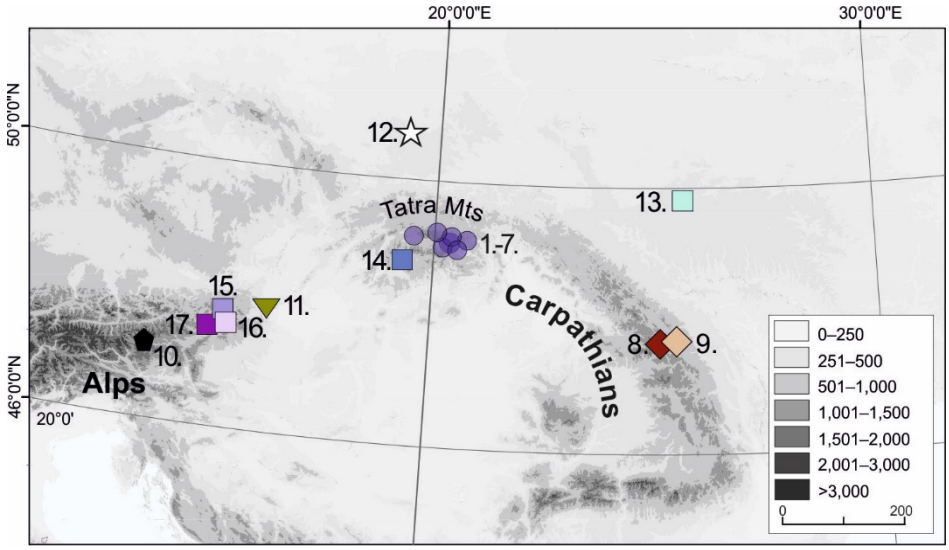
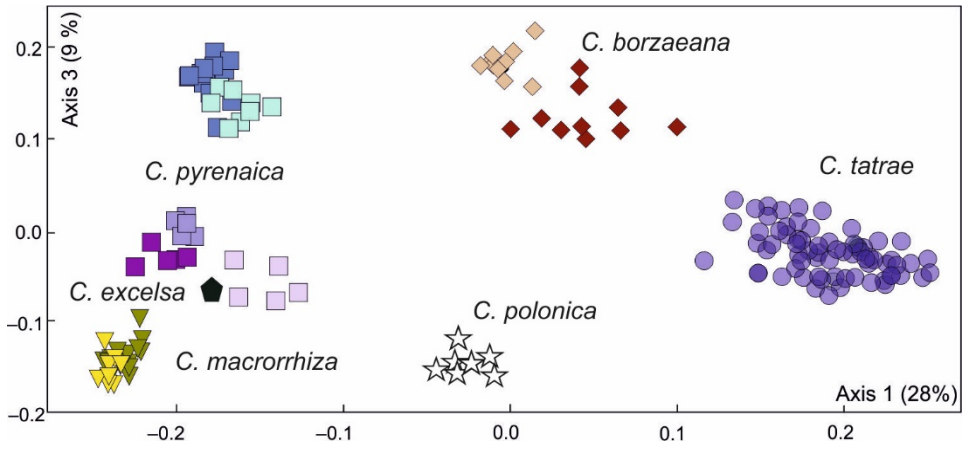
Cieślak E., Cieślak J. & Ronikier M. (2021) Phylogeographical structure of a narrow endemic plant in an isolated high-mountain range: the case of *Cochlearia tatrae* in the Tatra Mts (Western Carpathians). – Preslia 93: 125–148.

Electronic Appendix 1. Localities of populations used in the analysis of *Cochlearia* tatrae and other Central European *Cochlearia* species: *C. borzaeana*, *C. excelsa*, *C. macrorrhiza*, *C. polonica*, *C. pyrenaica* and information of ploidy level of species (Kiefer et al. 2013). N – number of individuals analysed; Abbreviations: A – Austria; PL – Poland; RO – Romania, SK – Slovakia; UA – Ukraine. Collectors: AR – Anna Ronikier; EC – Elżbieta Cieślak; GC – Gheorghe Coldea, JC – Jakub Cieślak; MK – Marcus Koch; MP – Mihai Puşcaş; MR – Michał Ronikier

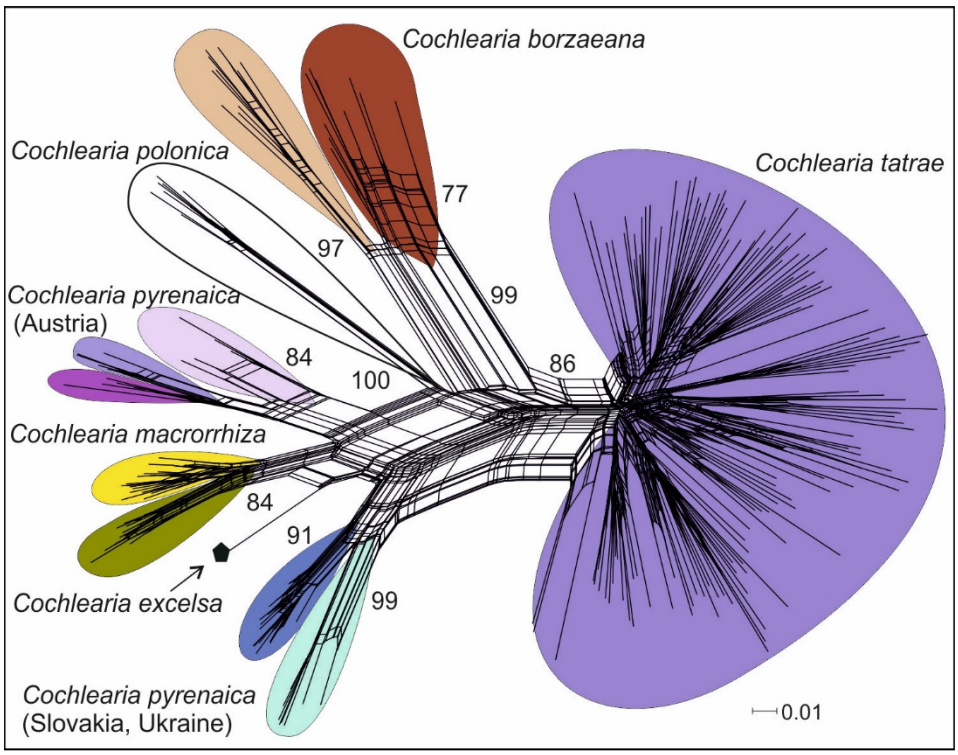
No.	Taxon/ Ploidy level	Sampling locality	Coord. N/E	N
Cochlearia tatrae (2n=42)				
1.		SK, Western Tatra Mts, Plačlive (Nohavica) peak (AR, MR)	49°11'49" 19°44'42"	10
2.		SK, High Tatra Mts, Hrubý vrch peak (MR)	49°10'14" 20°01'37"	8
3.		PL, High Tatra Mts, Mięguszowieckie Szczyty massif:	49°11'1.88"	19
		a. Mięguszowiecka Przełęcz pod Chłopkiem pass (EC, JC)	20°04'1.49"	
		b. Mięguszowiecki Kocioł (Bańdzioch), (EC, JC)	49°11'12.1" 20°03'58.8"	25
4.		SK, High Tatra Mts, Čierne sedlo pass (MR)	49°09'46" 20°09'09"	15
5.		SK, High Tatra Mts, Velická Dolina valley (Kvetnica) (AR, MR)	49°10'37" 20°08'42"	19
6.		SK, High Tatra Mts, Lomnický štit peak (AR, MR)	49°11'41" 20°12'47"	14
7.		SK, High Tatra Mts, Prielom (Rohatka) pass (MR)	49°12'29" 20°11'54"	23
Cochlearia borzaeana (2n=48)				
8.		RO, Obcina Meştecănisului, Rachitişul Mare hill near Benia village (MK)	47°39'00" 25°15'00"	10
9.		RO, Maramureş, Valea Sălhoi valley (GC, MP)	47°39'00" 24°59'00"	10
Cochlearia excelsa (2n=12)				
10.		A, Eastern Alps, Styria, Seckauer Tauern (MK)	47°20'00" 14°44'00"	1
Cochlearia macrorrhiza (2n=12)				
11.		A, Lower Austria, Moosbrunn (MK)	48°00'00" 16°26'00"	17
		A, Lower Austria, Moosbrunn (cultivated seedling) (MK)	48°00'00" 16°26'00"	8
Cochlearia polonica (2n=36)				
12.		PL, Spring area of the Centuria river near Olkusz (EC, JC)	50°25'05" 19°29'29"	7
Cochlearia pyrenaica (2n=12)				
13.		UA, Podìl's'ka Wisočina, spring area of the Bug river near Wierhobuž, (EC, JC)	49°51'04" 25°06'13"	8
14.		SK, Western Carpathians, Vel'ka Fatra, Bukovinka (AR, MR)	49°00'08" 19°17'10"	16
15.		A, Lower Austria, Ulreichsberg (MK)	47°40'00" 15°24'00"	5
16.		A, Lower Austria, Niederalpl (MK)	47°50'00" 15°25'00"	5
17.		A, Lower Austria, Türnitz (MK)	47°53'00" 15°28'00"	5



Electronic Appendix 2. – Map of sampled populations of species: *Cochlearia tatrae* (1–7), *C. borzaeana* (8–9), *C. excelsa* (10), *C. macrorrhiza* (11), *C. polonica* (12), *C. pyrenaica* (13–17) (numbers refer to populations in Table 1S).



Electronic Appendix 3. – Principal Coordinate Analysis (PCoA) scatter diagram based on Jaccard's coefficient calculated from 238 AFLP fragments obtained for the studied *Cochlearia* species: *C. borzaeana*, *C. excelsa*, *C. macrorrhiza*, *C. polonica*, C. *pyrenaica* and *C. tatrae.*



Electronic Appendix 4. – Neighbor-Net network of individuals based on Nei and Li's (1979) genetic distances calculated from 238 AFLP fragments obtained for the studied *Cochlearia* species: *C. borzaeana*, *C. excelsa*, *C. macrorrhiza*, *C. pyrenaica* and *C. tatrae.* Bootstrap values are given along the splits.

Electronic Appendix 5. AMOVA analysis based on 238 AFLP fragments from studied species of *Cochlearia borzaeana. C. excelsa*, *C. macrorrhiza*, *C. polonica*, *C. pyrenaica* and *C. tatrae.* In a hierarchical analysis, each group is represented by single species. Fixation Indices F_{SC}: 0.41, F_{ST}:0.67, F_{CT}: 0.44. Significance tests (1023 permutations), $p<0.001$.

Source of variation	df	Sum of squares	Variance components	Percentage of variation
Among six groups (species)	5	2585.772	15.80041 Va	44.10
Among populations within groups	12	1430.152	8.19995 Vb	22.89
Within populations	207	2447.729	11.82478 Vc	33.01
TOTAL	224	6463.653	35.82513	

Electronic Appendix 6. Pairwise *Nm* values for *Cochlearia tatrae* populations (numbers refer to populations in Table 1S).

	1	2	3a	3b	4	5	6	7
1	–							
2	0.554							
3a	0.684	1.796						
3b	0.848	2.229	5.943					
4	0.658	2.929	3.157	3.157				
5	0.697	6.82	2.428	3.083	4.866			
6	0.672	2.99	2.797	2.797	3.695	4.177		
7	0.513	1.496	2.877	2.129	3.116	2.087	2.586	–