

Electronic supplementary file 1. Appendix.- Populations sampled for AFLPs analysis. Populations marked with an asterisk* were also selected for plastid markers sequencing.

- P. albenensis* Banfi & Ferlinghetti.- Italy, Val Brembana, Val d'Ancogno (BG). On shady rocks at 1090-110 m. Lat: 45° 57' 36" N, Long: 09° 34' 17" E (coll. S. Crema, G. Cristofolini) *.
- P. allionii* Loisel.- Italy, Entracque (CN), Gorge de la Reina. On shady cliffs at 1200 m. Lat: 44° 14' 41" N, Long: 07° 25' 41" E (coll. S. Crema, A. Managlia, U. Mossetti) *.
- P. apennina* Widmer.- Italy, Mt. Buffanaro (RE). On Northwest-facing rocky crevices at 1720 m. Lat. 44° 19' 45" N, Long: 10° 10' 13" E (coll. S. Crema, L. Conte, C. Cotti) *.
- P. auricula* L.- Austria, Tyrol (Smirnthal) (coll. Harald Goldner). *
Austria, Vorarlberg, summit of Geißpitze in Gauertal, Montafon, at 2330 m. (coll. G. Schorr).
- P. balbisii* Lehm.- Slovenia, Kamniške/Savinjske Alpe, Mt. Raduha. East-facing slopes (along the way to Planina Arta) at c.1800 m. Lat: 46° 24' 14" N, Long: 14° 43' 55" E (coll. P. Schönschwetter). Italy, Carega Massif, M. Fumante (TN). Mostly on north-facing grasslands and rocks at 1700 m. Lat: 45° 43' 16" N, Long: 11° 09' 13" E (coll. S. Crema, G. Cristofolini, S. Milani). Italy, Corno alle Scale, Balzi dell'Ora (MO). On pastures and East-facing rocky crevices at 1760 m. Lat: 44° 07' 30" N, Long: 10° 49' 55" E (coll. S. Crema, A. Managlia, U. Mossetti). *
- P. carniolica* Jacq.- Slovenia, Notranjska, Gorge Pekel pri Borovnici, c. 360 m. Lat: 45° 53' 21" N, Long: 14° 22' 10" E (coll. P. Schönschwetter). *
- P. cottia* Widmer.- Italia, Val Germanasca, Prali Ghigo (TO). On pastures, grassy slopes and rocks at 1300 m. Lat. 44° 55' 07" N, Long: 07° 03' 40" E. This location corresponded to the locus classicus (coll. S. Crema, A. Managlia, U. Mossetti). * Italy, Punta Cialancia, On rocky slopes along the street from Perrero to Punta Cialancia, above Lago Lausun at c. 2100 m (TO). Lat: 44° 52' 48" N, Long: 7° 07' 48" E (coll. G. Schorr). *
- P. daonensis* (Leyb.) Leyb.- Italy, Passo del Vivione (BG). On a North facing slope at c. 1920 m. Lat: 46° 02' 49" N, Long: 10° 12' 03" E (coll. G. Schorr & N. Holstein). * Italy, Passo dello Stelvio (BZ). Along the rocky waterside of a little stream. Lat: 46° 32' 04" N, Long: 10° 26' 20" E (coll. G. Schorr & N. Holstein).
- P. grignensis* Moser.- Italy, Grigna settentrionale (LC) on calcareous rock at c. 1930 m between Rif. Bogani and Rif. Brioschi. Lat: 45° 57' 95" N, Long: 9° 23' 04" E (coll. G. Schorr and N. Holstein).
- P. hirsuta* All.- France, refuge d'Olan. At 2320 to 2400 m on west slope, at 150 to 200 m distance. Lat: 44° 50' 30" N, Long: 6° 12' 14" E (coll. G. Schorr & N. Holstein). * Italy, South Tyrol, Suldental (BZ). In the Ortler massif at NE slope on c. 2400 m direction to End der Welt Ferner. Lat: 46° 31' 10" N, Long: 10° 34' 31" E (coll. G. Schorr & N. Holstein). Austria, Rätikon, Gauertal. At Golmer Höhenweg beneath Kreuzspitze at 2217 m on SSE slope. Lat: 47° 03' 02" N, Long: 9° 49' 04" E (coll. G. Schorr).
- P. latifolia* Lapeyr.- France, Cottian Alps, Col Sommeiller. Above Rifugio Scarfiotti at street from Bardonecchia to Col Sommeiller, on schist at c. 2200 m. Lat: 45° 07' 54", Long: 6° 48' 00" (coll. G. Schorr). France, Vallée de Fontanalba vers le Refuge Fontanalba. Northern side of the valley. Lat: 44 ° 05' 24", Long: 7° 28' 55" (coll. G.

- Schorr). Switzerland, Albula Alps, Albula Pass. On silicious bedrock at c. 2330 m. c. Lat: 46° 35' 2" N, Long: 9° 50' 20" E (coll. G. Schorr). *
- P. marginata* Curtis.- France, Les Cadieres, calcareous N-facing vertical rock face. Lat : 43° 50' 47" N, Long: 6° 27' 01" E (coll. G. Schorr). Italy, Ponte di Nava.* Calcareous rocky waterside of a little stream to the Tanaro river in the village at c. 800 m. Lat: 44° 07' 05" N, Long: 7° 52' 04" E (coll. G. Schorr). Italy, Entracque (CN), Gorge de la Reina. On shady cliffs at c. 1200 m. Lat: 44° 14' 47" Long: 07° 25' 23" (coll. S. Crema, A. Managlia, U. Mossetti).
- P. palinuri* Petagna.- Italy, Porto di Palinuro (SA). On north-facing sandstone cliffs, along the coast, on sandy rocks at 4-6 m. Lat: 40° 01' 48" N, Long: 15° 26' 48" E (coll. S. Crema, G. Cristofolini). Italy, Marina di Camerota (SA), Cala di Pozzallo. On north and East-facing limestone cliffs, close to the sea, at 2-3 m. Lat: 39° 59' 50" N, Long: 15° 24' 27" E (coll. S. Crema, G. Cristofolini). *
- P. pedemontana* Thomas ex Gaudin.- Italy, Balme, Ref. Ciriè (TO). On East-facing pastures and rocks at 1890m. Lat: 45° 18' 29" N, Long: 07° 09' 48" E (coll. S. Crema, A. Managlia, U. Mossetti). *
- P. recubariensis* Prosser & Scortecagna.- Italy, Carega Massif, Mt. Fumante, Forcella Lovaraste (TN). On North-facing cliff crevices (Triassic dolomite) at 1750 m. Lat: 45° 43' 16" N, Long: 11° 09' 12" E. (coll. S. Crema, G. Cristofolini, S. Milani). *
- P. valcuvianensis* (S. Jess & L. Lehm) Cristof. & Crema (= *P. hirsuta* subsp. *valcuvia-nensis* S. Jess & L. Lehm). - Italy, Valcuvia (VA). Close to Monte Nudo on calcareous rock. Lat: 45° 55' 30" N, Long: 8° 40' 26" E (coll. G. Schorr and N. Holstein). *
- P. villosa* Wulfen in Jacq.- Slovenia, Kamniške/Savinjske Alpe, Smrekovško pogorje, summit of Mt. Komen, at 1680 m. Lat: 46° 25' 5" N, Long: 14° 50' 46" E (coll. G. Schorr).
* Austria, Carinthia, Biospherepark Nockberge, Falkert, track n°12. In crevices.at 2100-2200 m. Lat. 46° 51' 35" N, Long. 13° 48' 26" E (coll. S. Steffen).

Outgroups - Subsect. *Cyanopsis* (Schott) Pax.

- P. glaucescens* Moretti.- Italy, Val Brembana, Val d'Ancogno (BG). On limestone at 900 m. Lat.: 45° 57' 36" N, Long.: 09° 34' 17" E (coll. S. Crema, G. Cristofolini). *
- P. spectabilis* Tratt.- Italy, Carega Massif, Mt. Fumante (TN). On rocks and grassy slopes at 1650 m. Lat.: 45° 43' 19" N, Long: 11° 09' 14" E. (coll. S. Crema, G. Cristofolini, S. Milani)
- P. wulfeniana* Schott.- Slovenia, Kamniške/Savinjske Alpe, Mt. Raduha. On the summit crest, 2060 m. Lat: 46° 24' 36" N, Long: 14° 44' 15" E (coll. P. Schönswetter).