T1.2 Application of the unified species concept reveals distinct lineages for disjunct endemics threatened with extinction in the *Brassica repanda* (Brassicaceae) complex

<u>Margherita Lega</u>¹, Simone Fior¹, Filippo Prosser², Alessio Bertolli², Mingai Li¹, Claudio Varotto¹

¹ Dipartimento Biodiversità e Ecologia Molecolare, Centro Ricerca e Innovazione, Fondazione Edmund Mach, Michele all'Adige, Italy

² Museo Civico di Rovereto, Rovereto, Italy

Species delimitation is an important issue in setting conservation priorities, especially for narrow endemics threatened with extinction. *Brassica repanda* is a highly polymorphic species complex with main centers of diversity in Spain and the Pyrenees, and an eastern disjunction formed by the endemic subspecies *glabrescens* and *baldensis*. Here, we utilize the general lineage concept of species to test for distinctiveness of these endemics. Phylogenetic and population genetic analyses based on AFLP data were conducted to examine compliance with different species criteria. The results show that the eastern endemics have acquired the properties of monophyly, diagnosability and genotypic clustering, and should, therefore, be considered as genetically distinct evolutionary lineages from one another and the remainder of the complex. Comparative population genetics analyses between the newly identified lineages show the lack of marked genetic structuring within both taxon, and low levels of expected heterozygosity. Conclusions on the threat status and on recommended conservation actions are drawn.

margherita.lega@iasma.it