



**Figure S7. Distribution of the number of individuals, the number of potentially adaptive alleles, the frequency of the potentially adaptive alleles, the number of neutral alleles and the frequency of neutral alleles as a function of the distance to the centre of the niche represented by 10 classes of the first PCA axis.** First PCA axis classes are evenly distributed between the minimum and the maximum PCA axis value of each species. Mean environmental conditions harbour more individuals, more neutral alleles, and more adaptive alleles. The results are jointly presented for the 21 alpine plant species. Frequencies correspond to the number of potentially adaptive (or neutral) alleles weighted by the number of individuals and by the number of loci for each class of OMip.