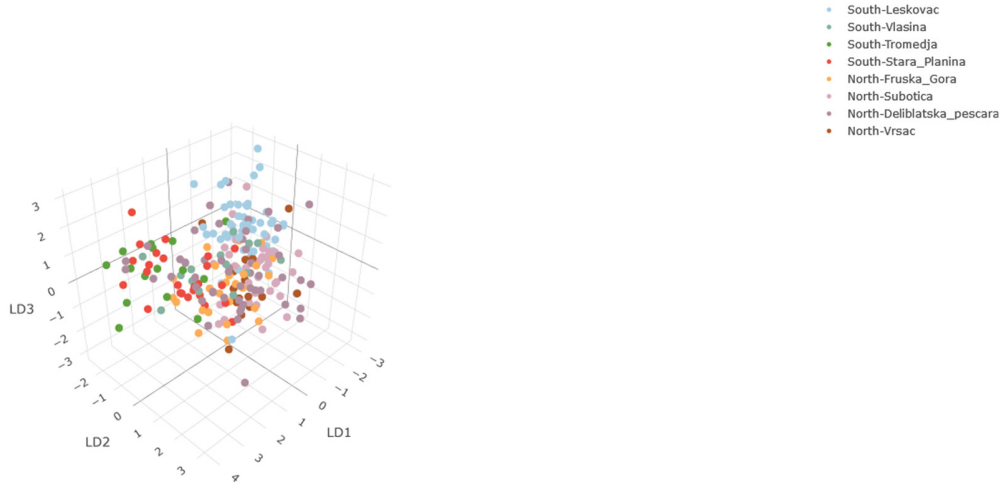

Figure S1. Discriminant analysis of principal components. The first three linear discriminants are presented in the plot.

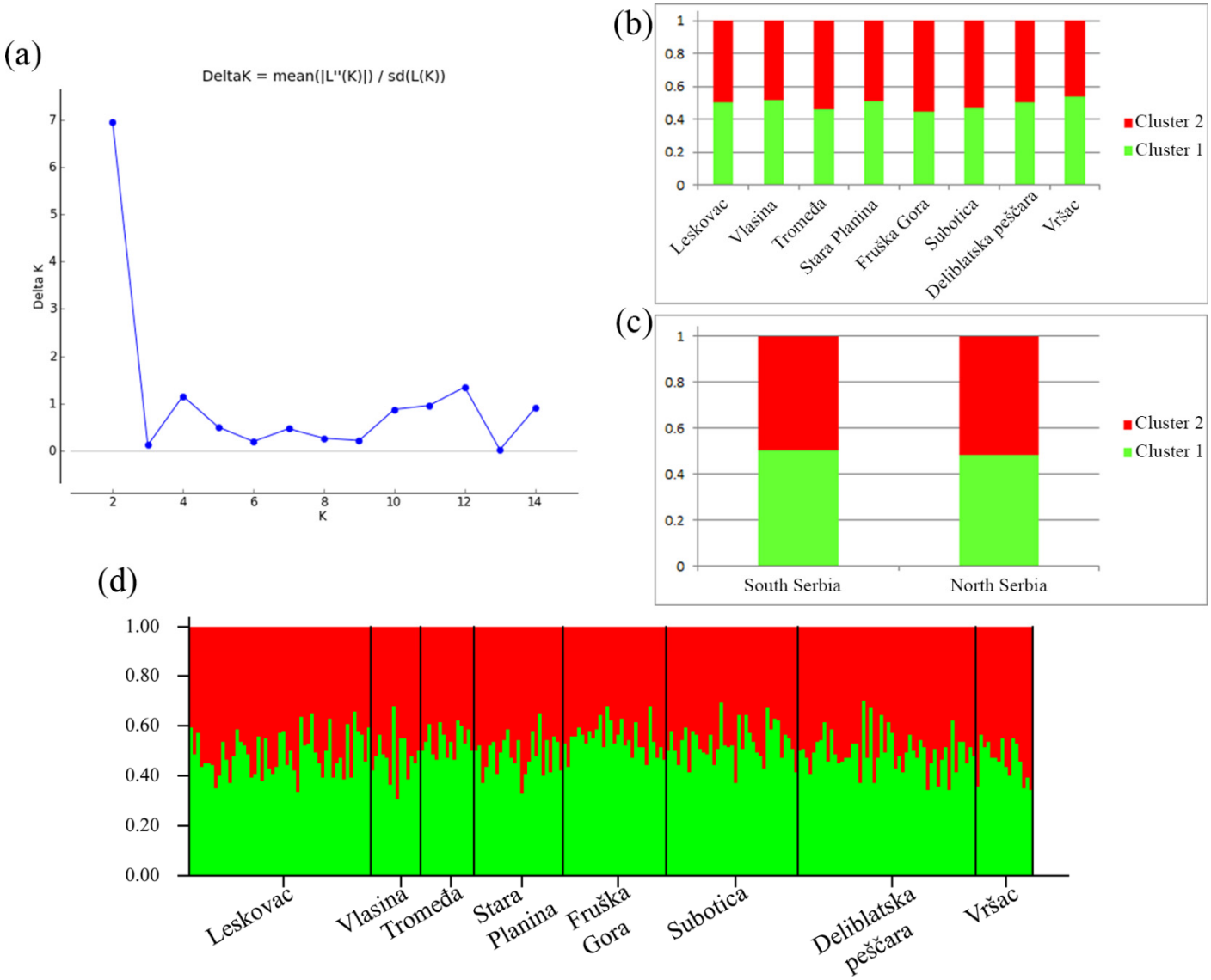

Figure S2. (a) Delta K values for the assumed number of genetic clusters. (b) Proportions of inferred STRUCTURE clusters (K = 2). (c) Proportions of the inferred STRUCTURE clusters (K = 2) from the individual worker bees. (d) Proportions of the inferred STRUCTURE clusters (*K* = 2) from the individuals.

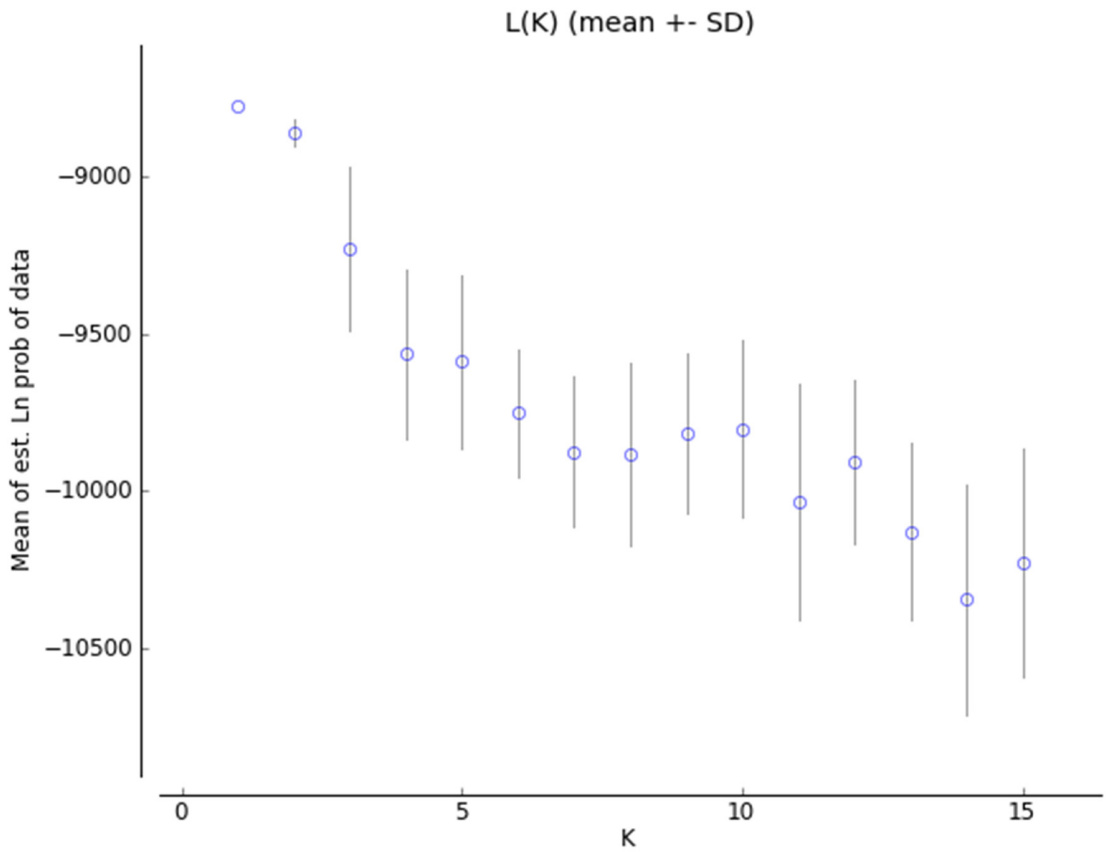

Figure S3. Ln values of probability for the assumed number of genetic clusters.

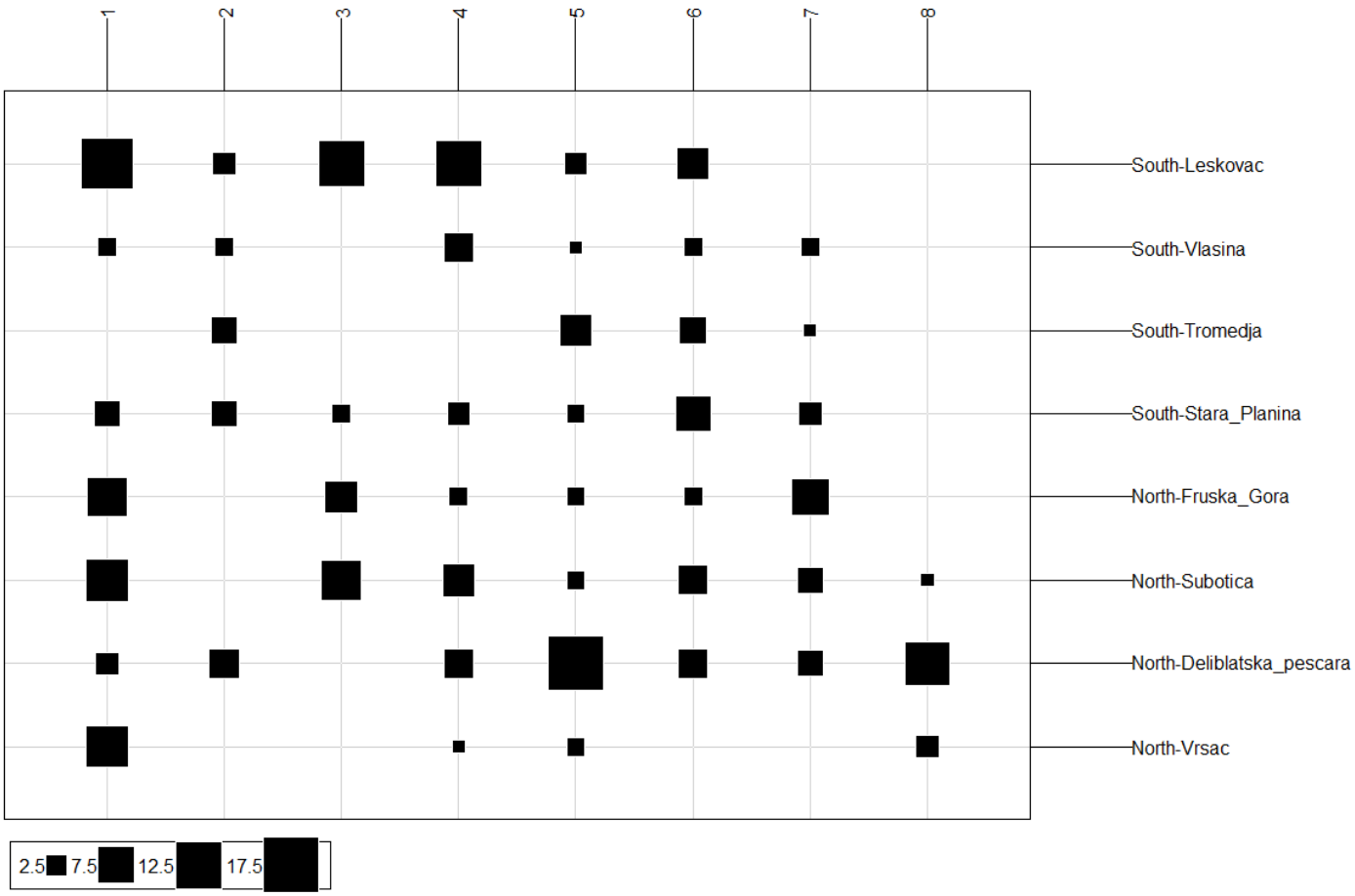

Figure S4. Distribution of clusters according to the DAPC method and inffered number of 8 clusters.

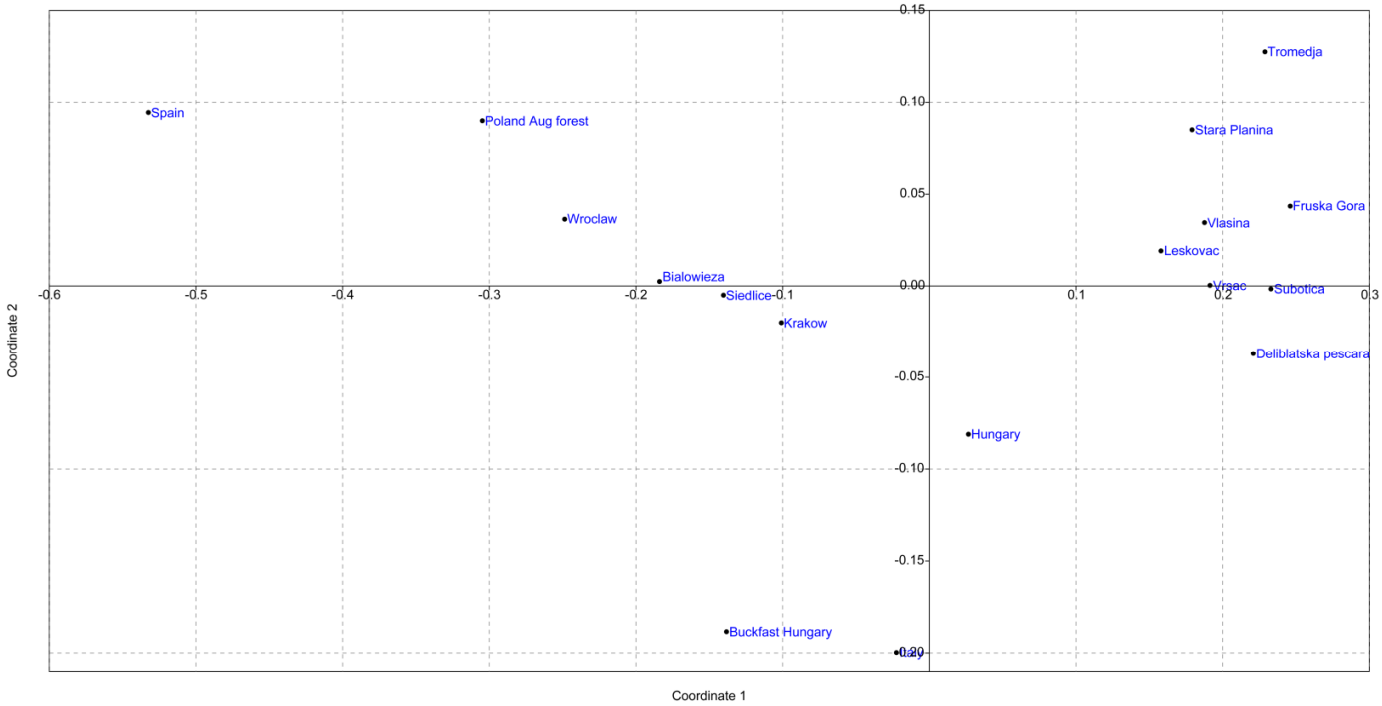

Figure S5. Non-metric multidimensional scaling plot of F_{ST} distances between 8 localities in Serbia (*A. m. carnica*) and other analysed *A. mellifera* populations from Hungary (*A. m. carnica* and Buckfast), Poland (Krakow and Wroclaw - *A. m. carnica*; August forest, Bialowieza and Siedlice – *A. m. mellifera*) Spain (*A. m. iberica*) and Italy (*A. m. ligustica*) . The goodness of fit is expressed with the stress value which is 0.07772 for this data set. Population pairwise F_{ST} values are presented in Table S11a.

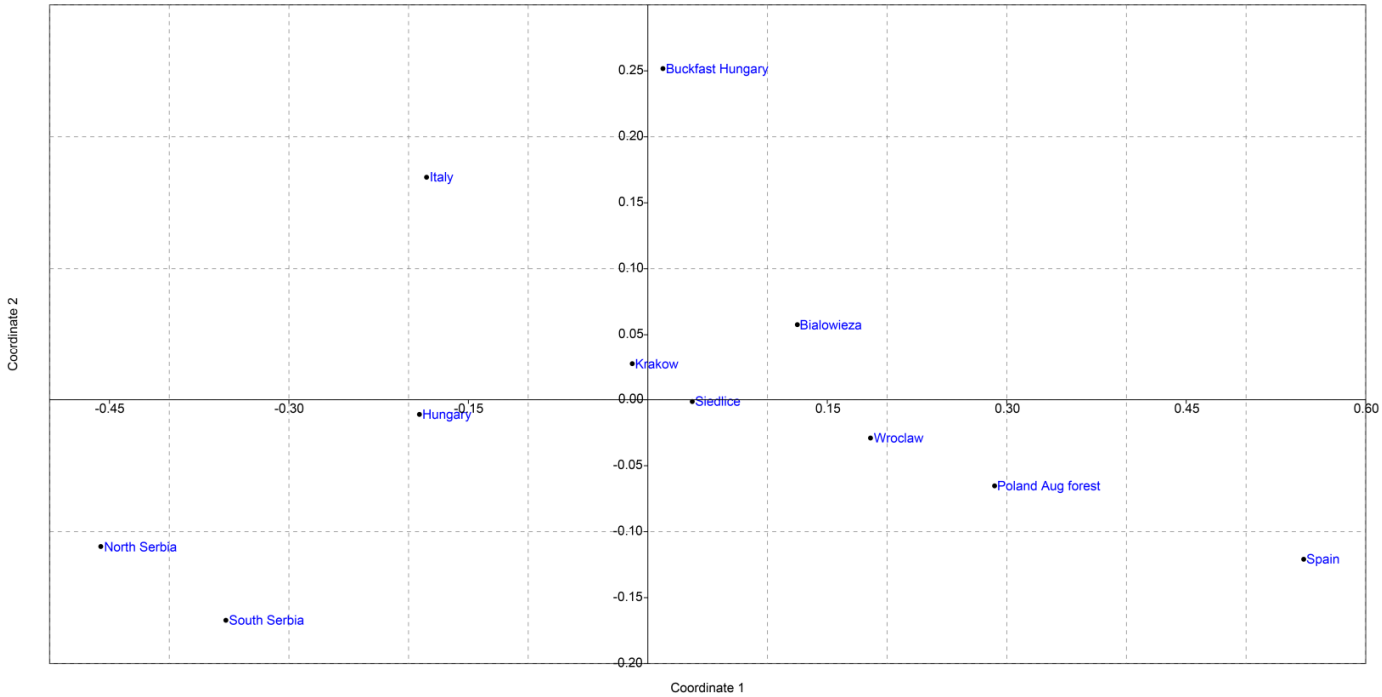

Figure S6. Non-metric multidimensional scaling plot of F_{ST} distances between 8 localities in Serbia (*A. m. carnica*) and other analysed *A. mellifera* populations from Hungary (*A. m. carnica* and Buckfast), Poland (Krakow and Wroclaw - *A. m. carnica*; August forest, Bialowieza and Siedlice – *A. m. mellifera*) Spain (*A. m. iberica*) and Italy (*A. m. ligustica*) . The goodness of fit is expressed with the stress value which is 0.08112 for this data set. Population pairwise F_{ST} values are presented in Table S11b.

Figure S7. Discriminant analysis of principal components. The first three linear discriminants are presented in the plot.

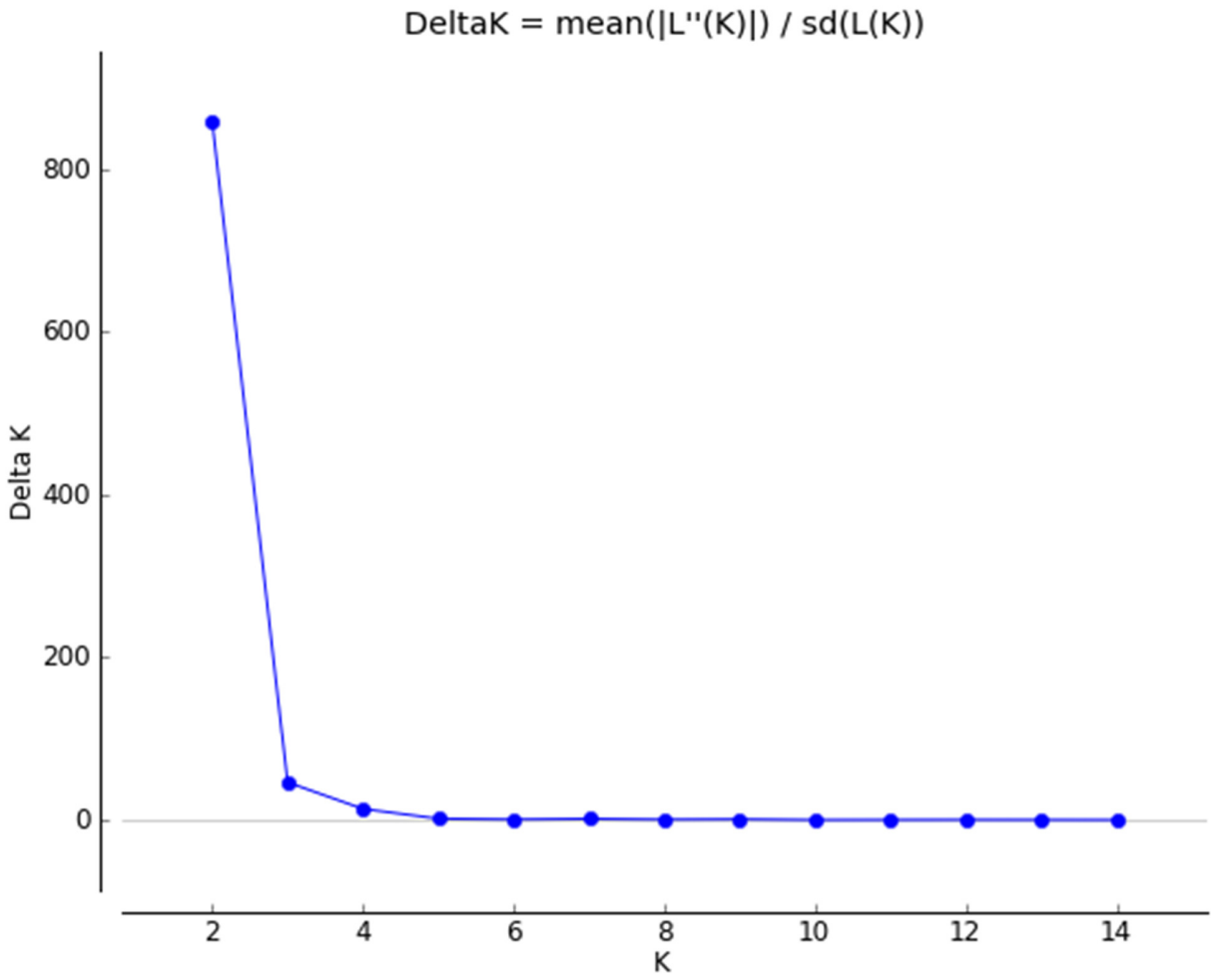

Figure S8. Delta *K* values for the assumed number of genetic clusters.

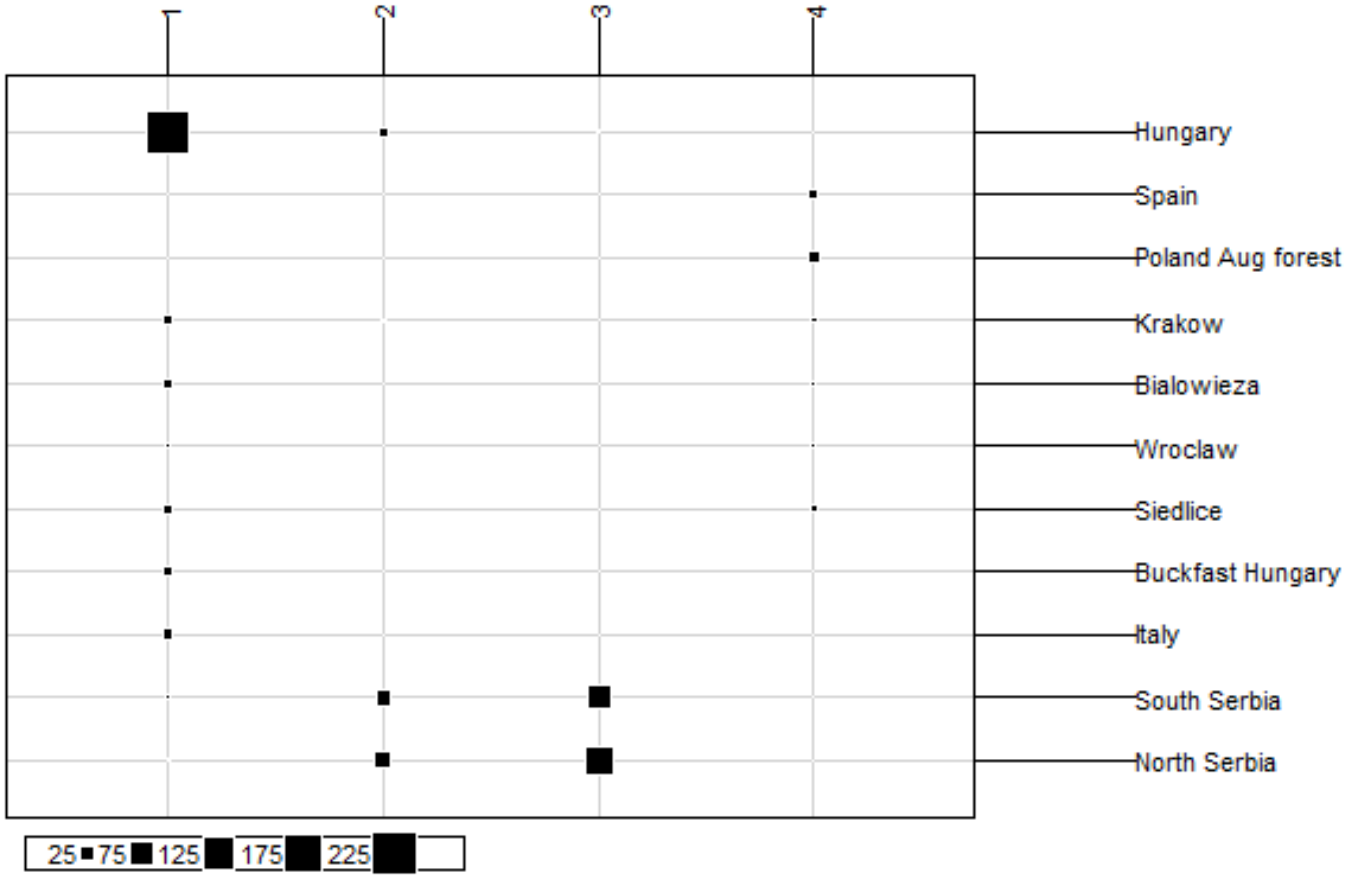

Figure S9. Distribution of clusters according to the DAPC method and inffered number of 4 clusters.