Supporting Information

Slik et al. 10.1073/pnas.1714977115

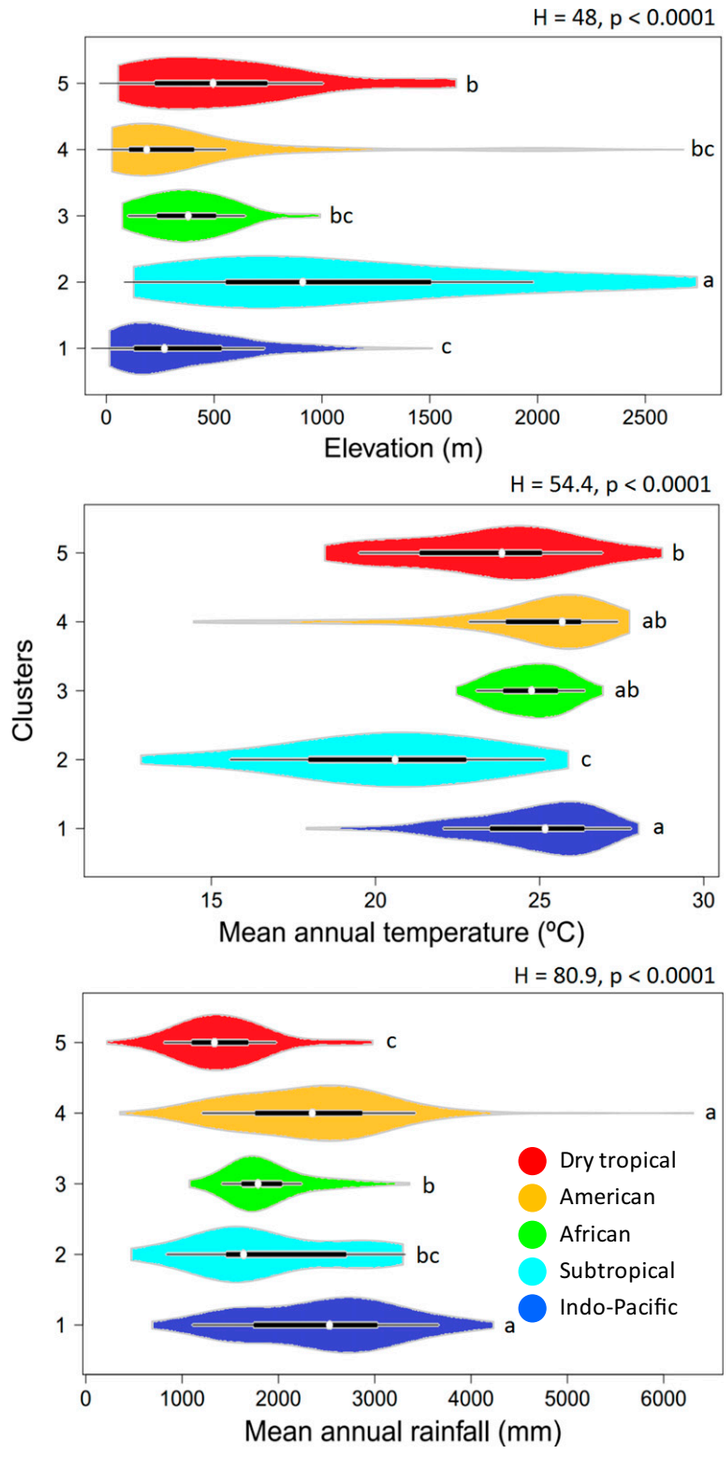


Fig. S1. Elevation and climatic variables (temperature and rainfall) of each of the five floristic clusters. Each violin plot indicates the probability density of the data at different values, the median (white dots), first and third quartiles (black thick lines), and range. Climate data were taken from WorldClim (32). Overall differences between clusters were tested with Kruskal–Wallis (*H*) test. The differences between pairs of clusters were assessed with Mann–Whitney tests with Bonferroni-corrected *P* values (indicated with different letters in each plot). Sample sizes: Indo-Pacific, 138; Subtropical, 34; African, 46; American, 105; Dry, 69.

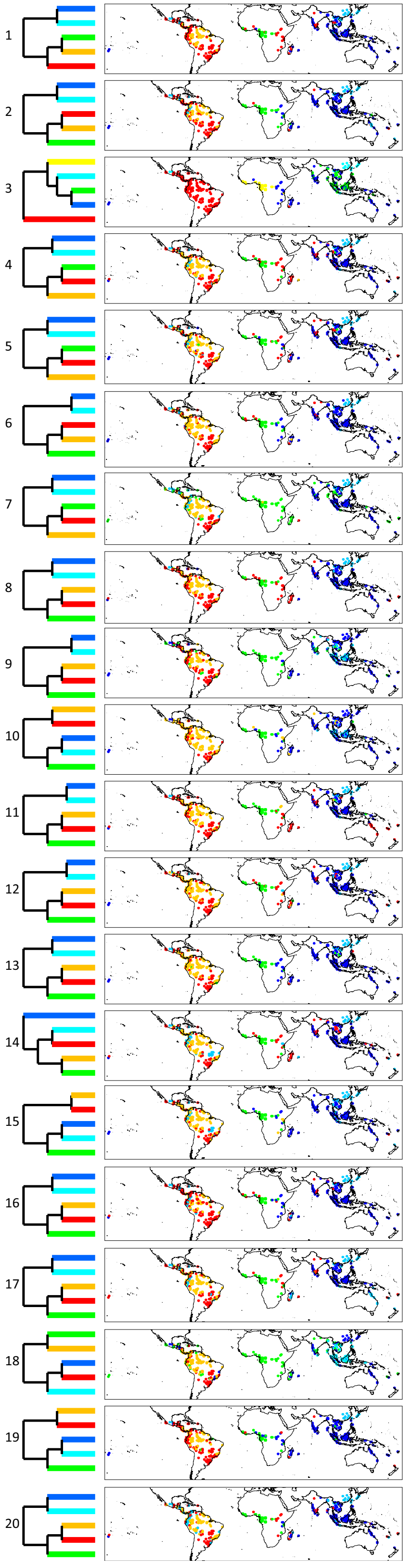


Fig. S2. Clustering results for the 20 datasets based on mean nearest taxon distance (MNTD). Each dataset is based on a random draw of 20 taxa for each location (n = 406).

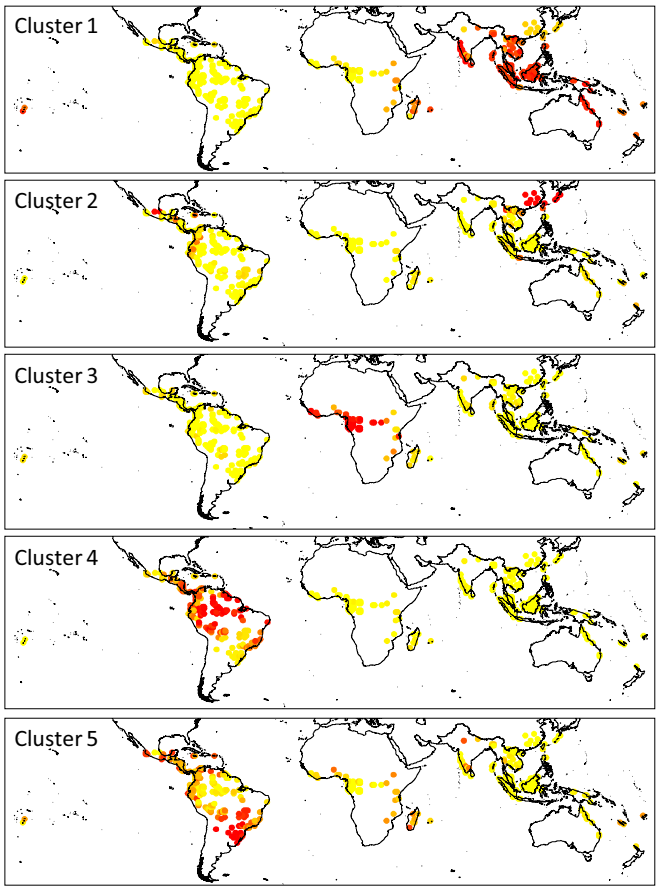


Fig. S3. Classification frequency of each location in one of the five identified clusters, based on the 20 classifications shown in Fig. S2. Colors range from yellow (zero) to red (one). Cluster numbers correspond to those indicated in Table S1.

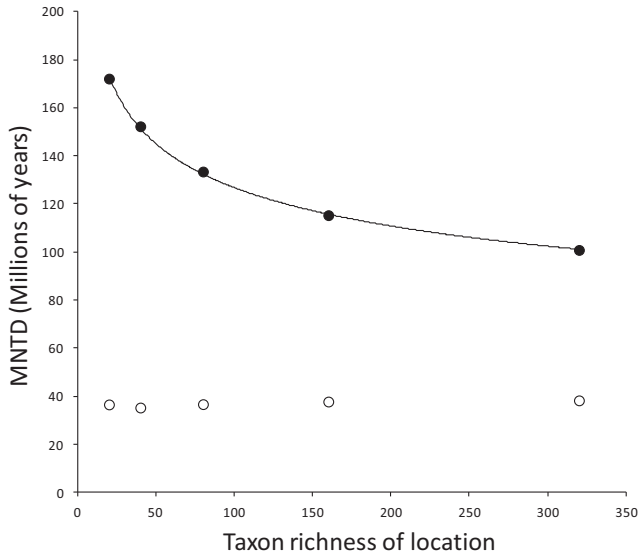
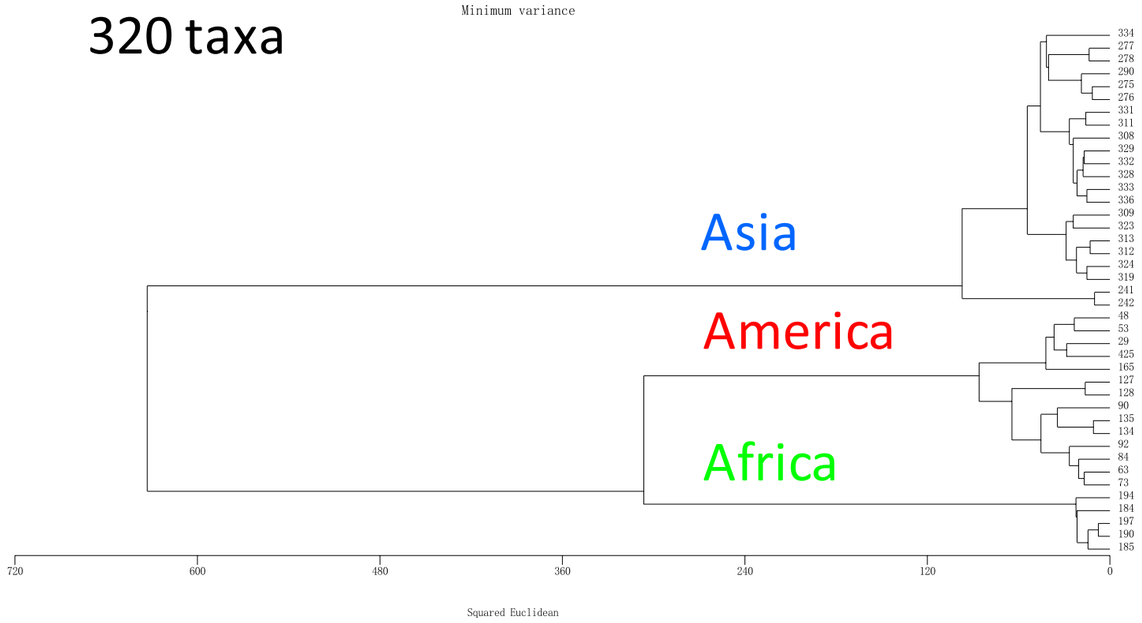
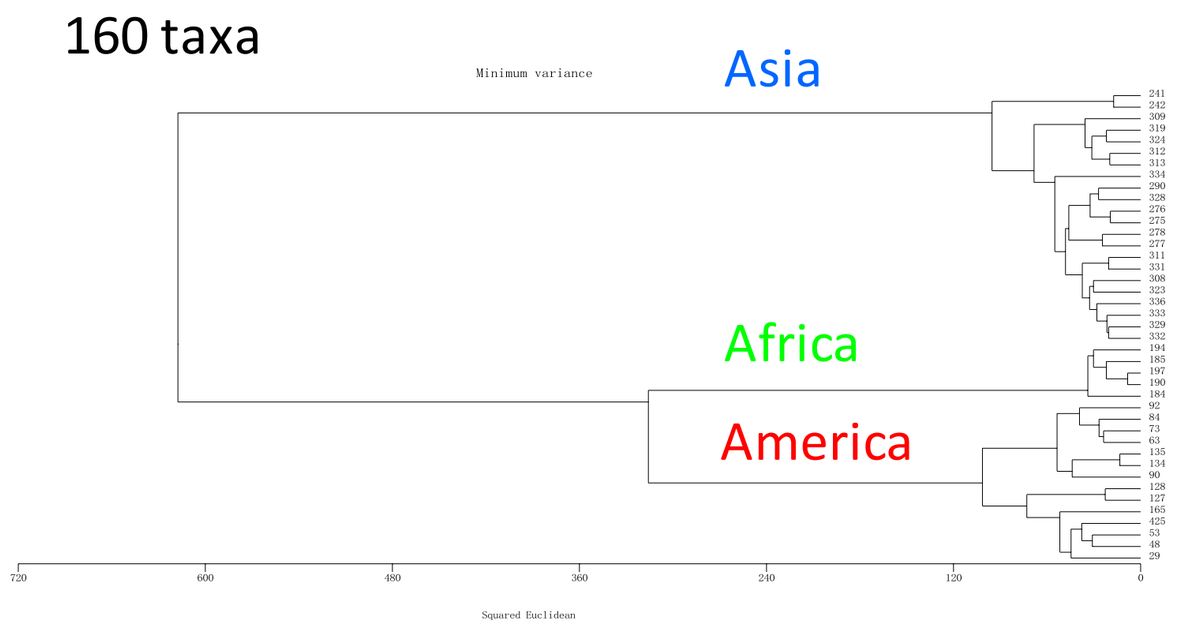
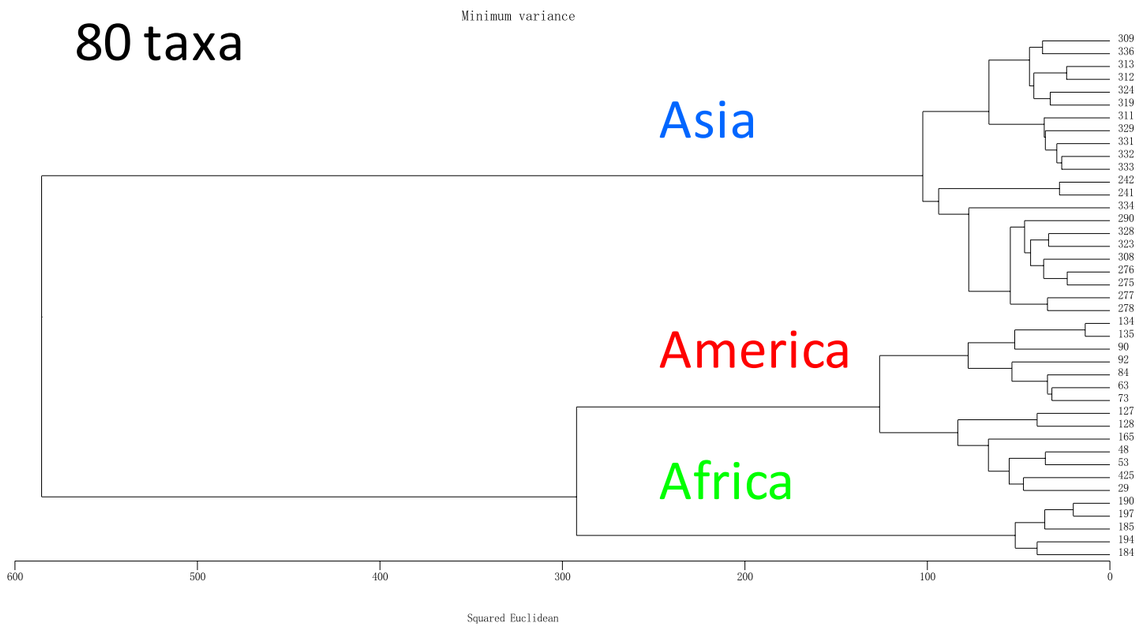
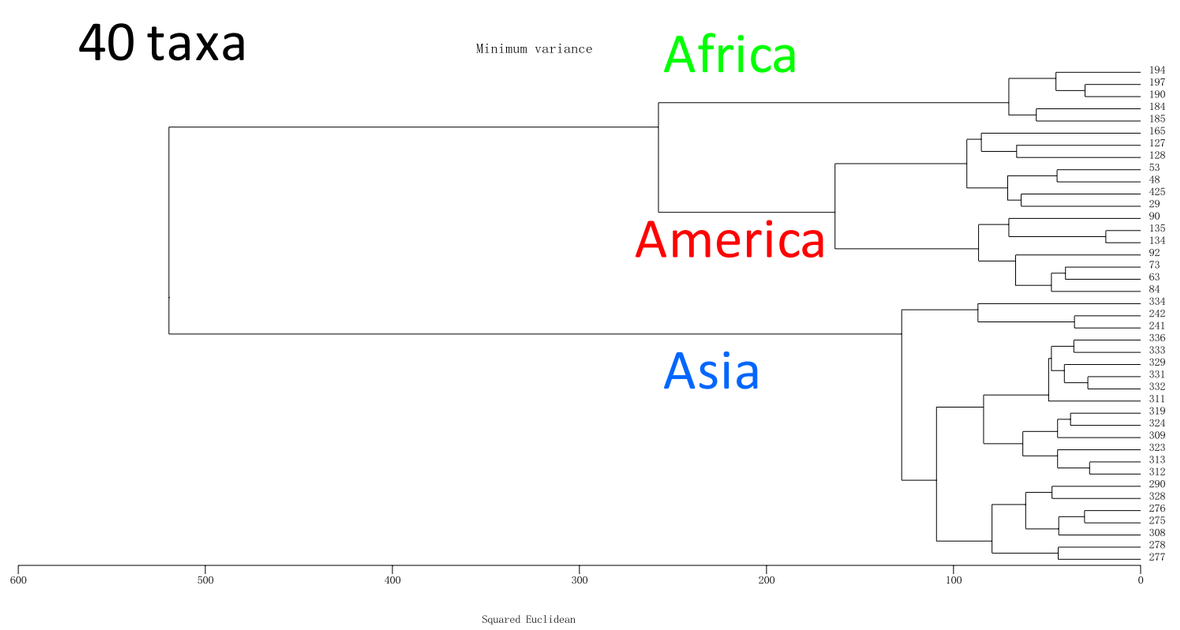


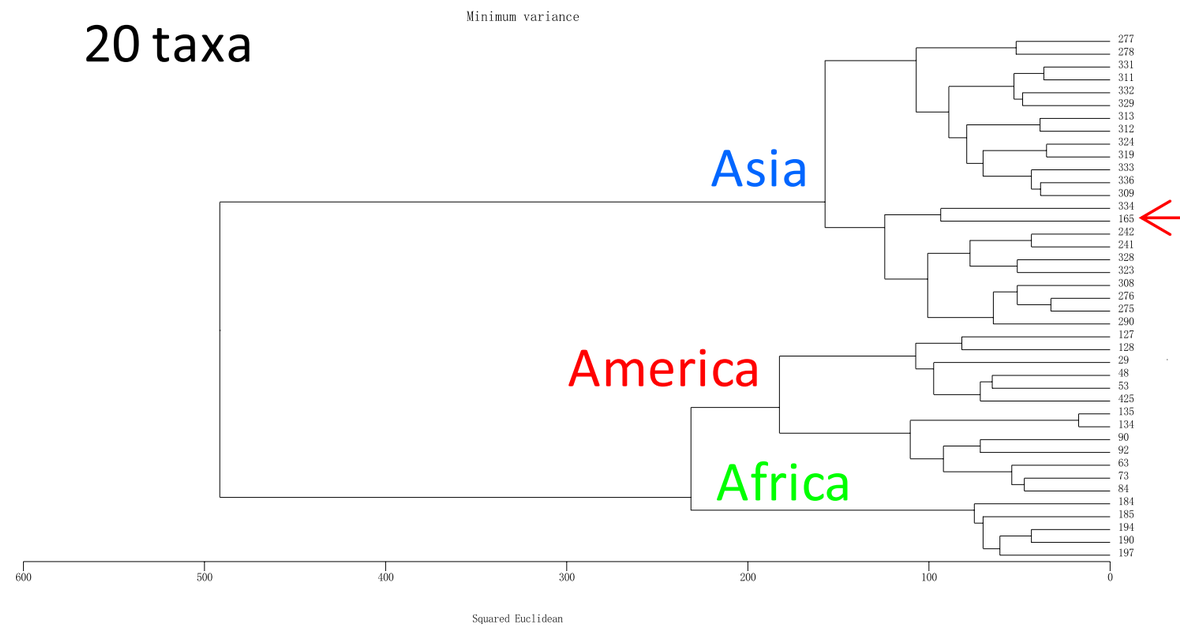
Fig. S4. Relationship between MNTD and taxon richness of locations (black dots), based on 41 locations which had more than 320 taxa. With increasing taxon richness of locations, MNTD decreased following a power function ($y = 310.4x^{-0.194}$). SD (white dots) was not influenced by taxon richness.











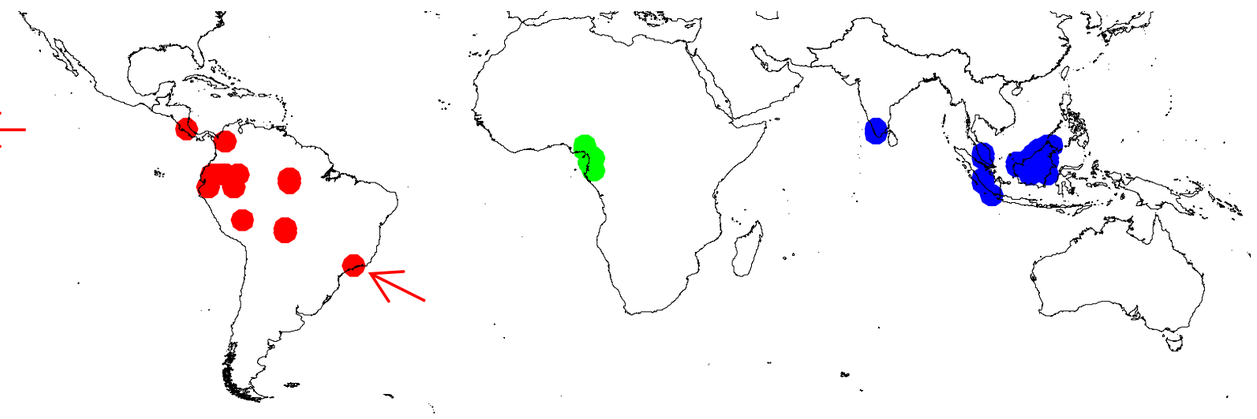


Fig. S5. Cluster results for 41 locations (indicated in *Lower Right* map) using decreasing numbers of taxa per location (320, 160, 80, 40, and 20 from *Top* to *Bottom*). All analyses recovered the same three main groups of locations in the same configuration (African and American versus Asian locations), although one American location (indicated with a red arrow) was grouped with the Asian cluster in the 20-taxon analysis.

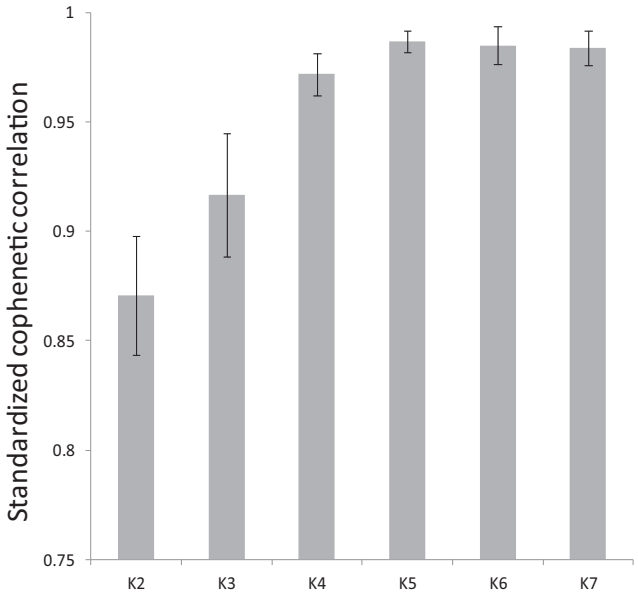


Fig. S6. Standardized cophenetic correlation coefficients for cluster levels K2 to K7 (mean with 95% confidence intervals of 20 cluster analyses). Cophenetic correlation coefficients show how well the distance data in the original data matrix fit the cluster dendrogram, that is, the higher the value, the better the fit. Cophenetic correlation increased to cluster level 5 (K5).

Other Supporting Information Files

Table S1 (DOCX)
Dataset S1 (DOCX)