

Island Area, Not Isolation, Drives Taxonomic, Phylogenetic and Functional Diversity of Ants on Land-bridge Islands

Running title: Taxonomic, phylogenetic and functional diversity of island ants

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File List:

JB1-19-0424_Ant_community_matrices_on_islands.xlsx (ant species presence absence on islands)

JB1-19-

0424_Ant_community_matrices_on_transects_of_seven_largest_islands.xlsx (ant species presence absence on transects)

JB1-19-0424_DNA_alignments (DNA alignments)

JB1-19-0424_island_data.xlsx (species richness, island area, isolation, phylogenetic diversity, functional diversity, mean pairwise distance, standardized effect size of mean pairwise distance, functional equivalent of mean pairwise distance, standardized effect size of functional equivalent of mean pairwise distance on all islands)

JB1-19-0424_phylogenetic_tree.tre (phylogenetic tree)

JB1-19-0424_Transect_data.xlsx (same to JB1-19-0424_island_data, but on transects)

File descriptions:

JB1-19-0424_Ant_community_matrices_on_islands.xlsx

33 islands (rows) × 97 species (columns) community matrix (i.e., island scale in published paper)

JB1-19-

0424_Ant_community_matrices_on_transects_of_seven_largest_islands.xlsx

57 transects (rows) × 97 species (columns) community matrix (i.e., transect scale in published paper)

JB1-19-0424_DNA_alignments

18S, 28S and wingless DNA alignments of 97 ant species captured in the Thousand Island Lake, China

JB1-19-0424_island_data.xlsx

Island ID, species richness (SR), island area (A), isolation (I), phylogenetic diversity (PD), functional diversity (FD), mean pairwise distance (MPD), standardized effect size of mean pairwise distance (sesMPD), functional equivalent of mean pairwise distance (FD_MPD), standardized effect size of functional equivalent of mean pairwise distance (sesFD_MPD) on 33 study islands in the Thousand Island Lake, China.

JB1-19-0424_phylogenetic_tree.tre

Phylogenetic tree of 97 ant species captured in captured in the Thousand Island Lake, China. The tree was constructed using BEAST v. 1.10.4 based on three nuclear genes (18S, 28S and wingless; i.e., **JB1-19-0424_DNA_alignments**).

JB1-19-0424_Transect_data.xlsx

Transect ID, Island ID, species richness (SR), island area (A), isolation (I), phylogenetic diversity (PD), functional diversity (FD), mean pairwise distance (MPD), standardized effect size of mean pairwise distance (sesMPD), functional equivalent of mean pairwise distance (FD_MPD), standardized effect size of functional equivalent of mean pairwise distance (sesFD_MPD) on 57 transects of 33 study islands in the Thousand Island Lake, China.