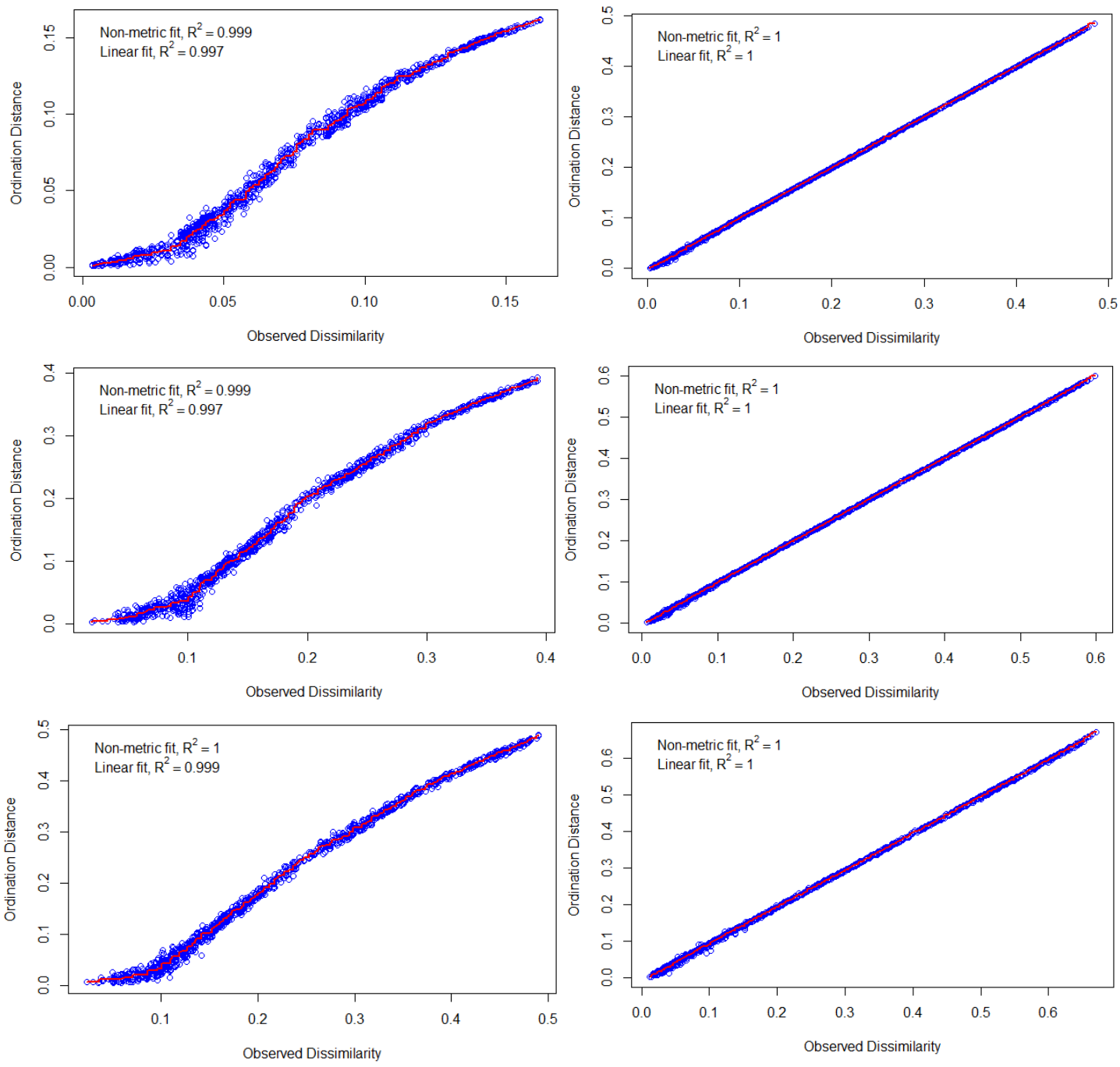
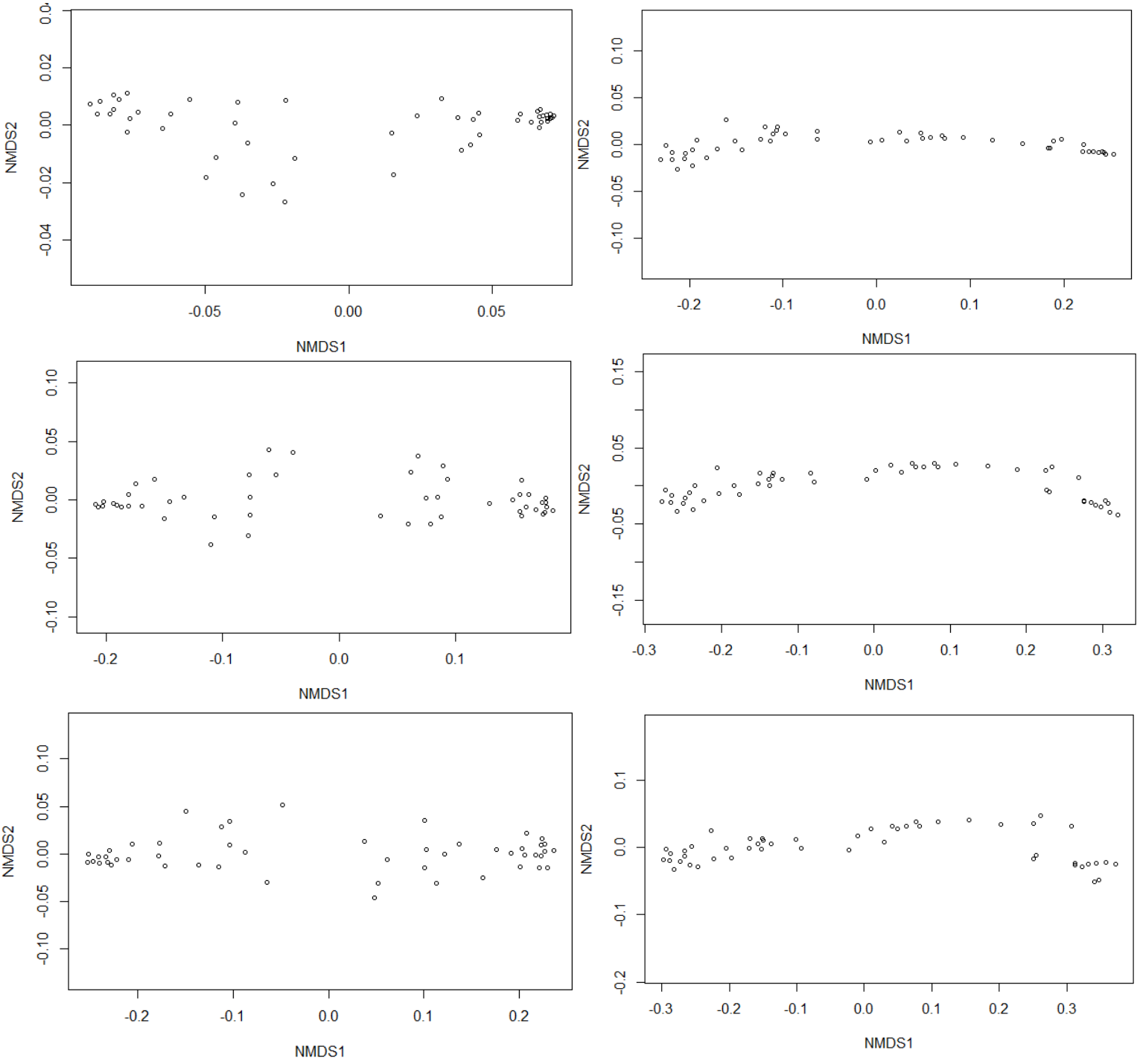
Genetic diversity limits of a marine microbiome

Supplementary materials

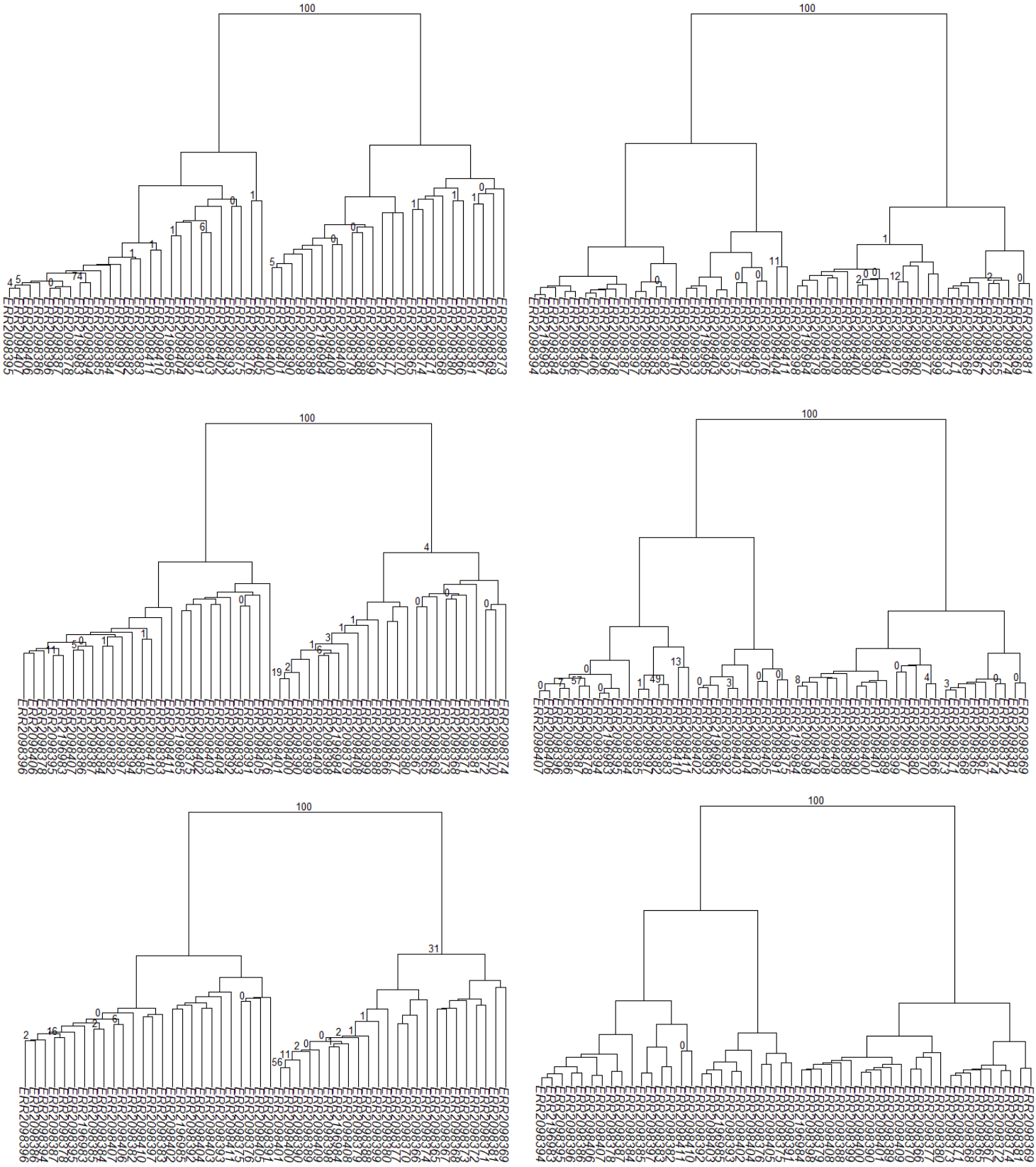
4.1 Functional tables consistency



***Supplementary material 1*. Functional tables stress plots.** 1-KEGG SCG, 2-KEGG-MetaGS, 3-COG SCG, 4-COG MetaGS, 5-PFAM SCG, 6-PFAM MetaGS.



***Supplementary material 2*. Functional tables NMDs sites plots.** 1-KEGG SCG, 2-KEGG-MetaGS, 3-COG SCG, 4-COG MetaGS, 5-PFAM SCG, 6-PFAM MetaGS.



***Supplementary material 3*. Functional tables bootstrapped trees.** 1-KEGG SCG, 2-KEGG-MetaGS, 3-COG SCG, 4-COG MetaGS, 5-PFAM SCG, 6-PFAM MetaGS.

4.2 Species diversity

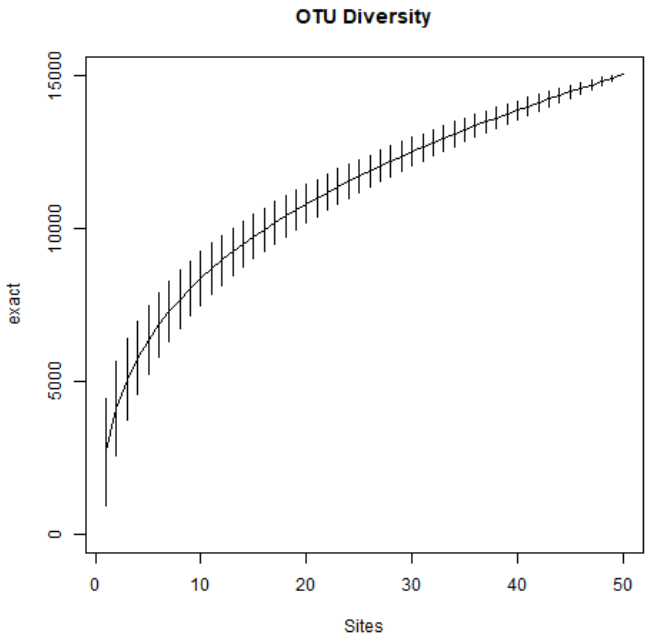


Fig. 1. Species diversity accumulation curve. The number of sites corresponds to the samples, the y axis corresponds to the number of species.

4.3 Genetic diversity

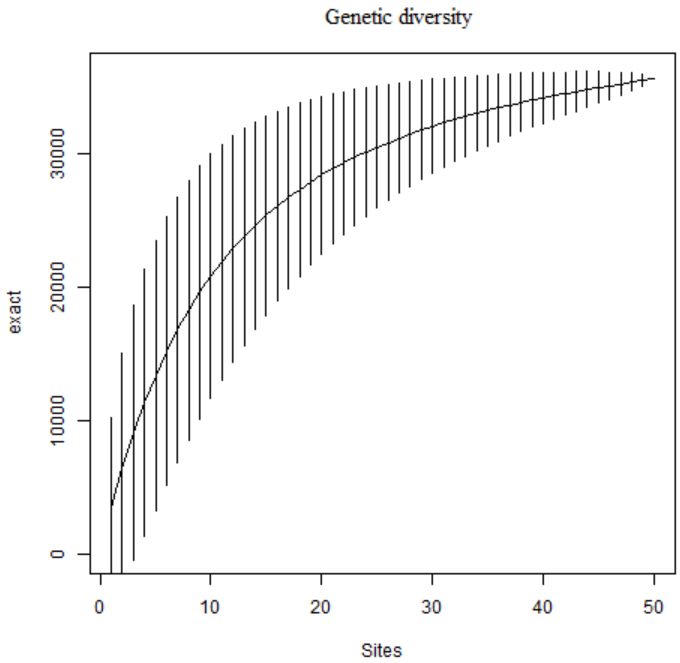


Fig. 2. Genetic diversity accumulation curve. The number of sites corresponds to the samples, the y axis corresponds to the number of genes.

4.4 Effects of filters

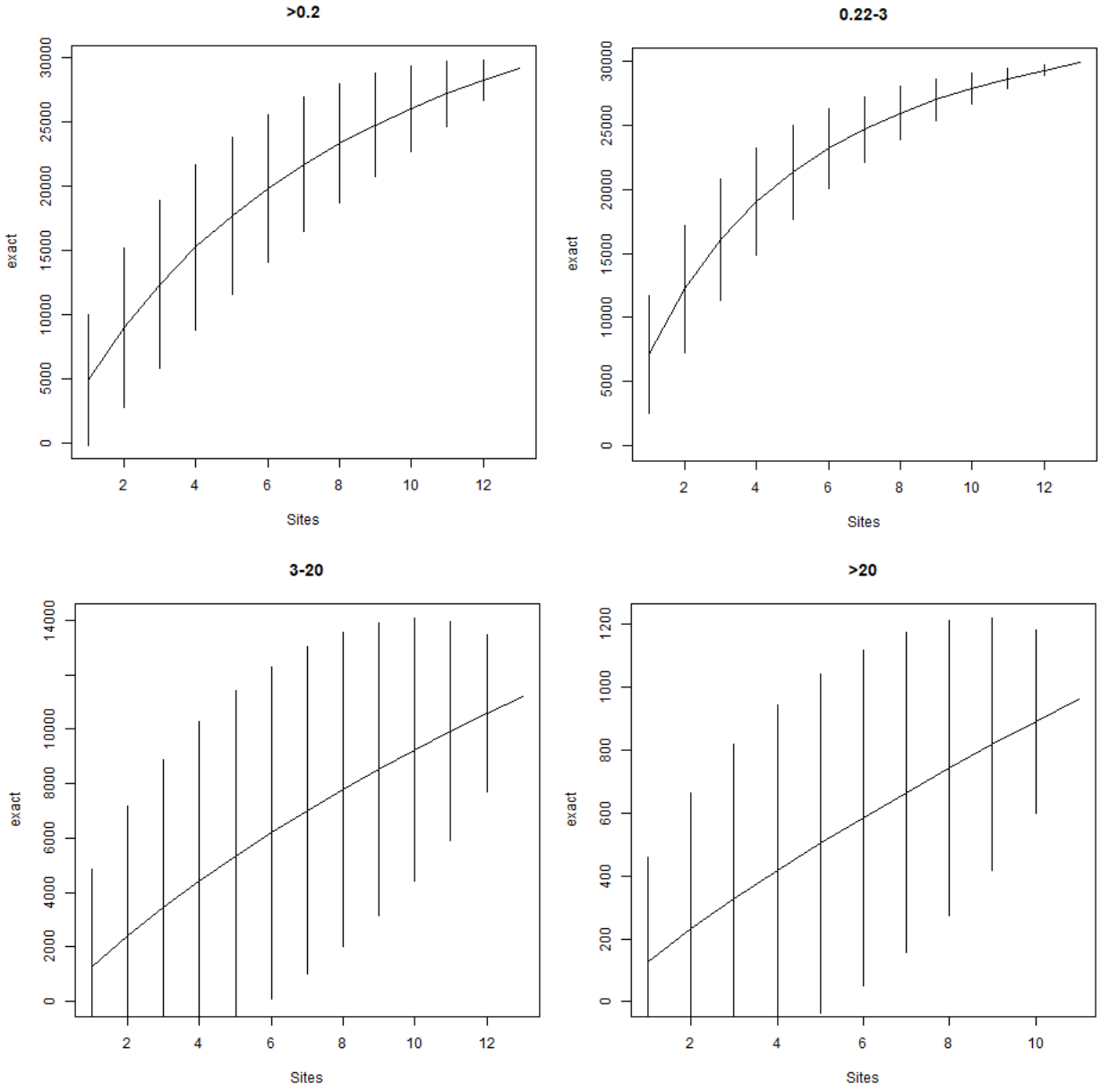
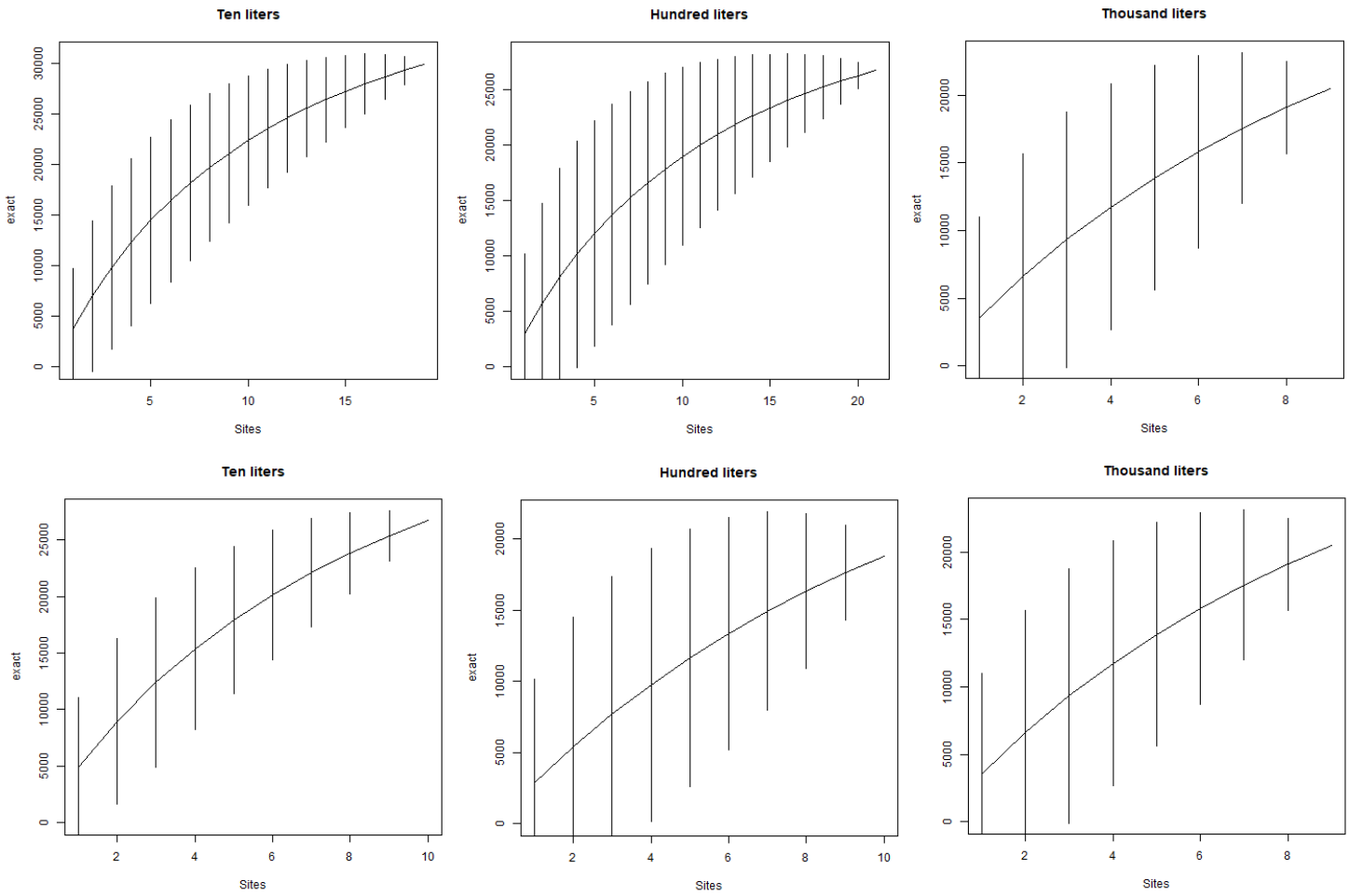


Fig. 3. Filters comparison genetic accumulation curves. The accumulation curves correspond to the filters >0.2µm, 0.22-3µm, 3-20µm and >20µm in that order.

4.5 Effects of water volumes



***Supplementary material 4*. Water volumes comparison genetic accumulation curves.** The accumulation curves correspond to the volumes ten, hundred and thousand, in that order. The first row is using all the available samples, the second row uses only ten samples for the volumes of ten and hundred.

4.6 Functional diversity

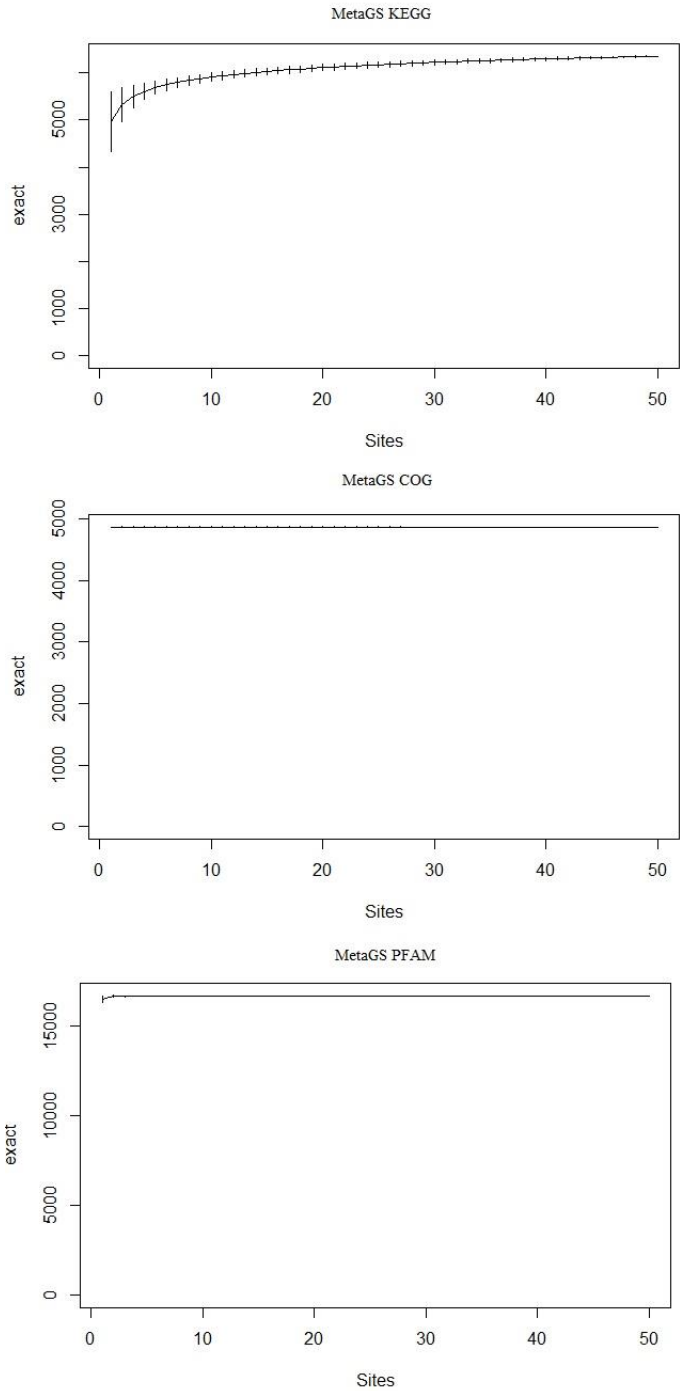


Fig. 4. Functional diversity accumulation curves. The number of sites corresponds to the samples, the y axis corresponds to the number of functions.

4.7 Comparison between species diversity, genetic diversity and function diversity

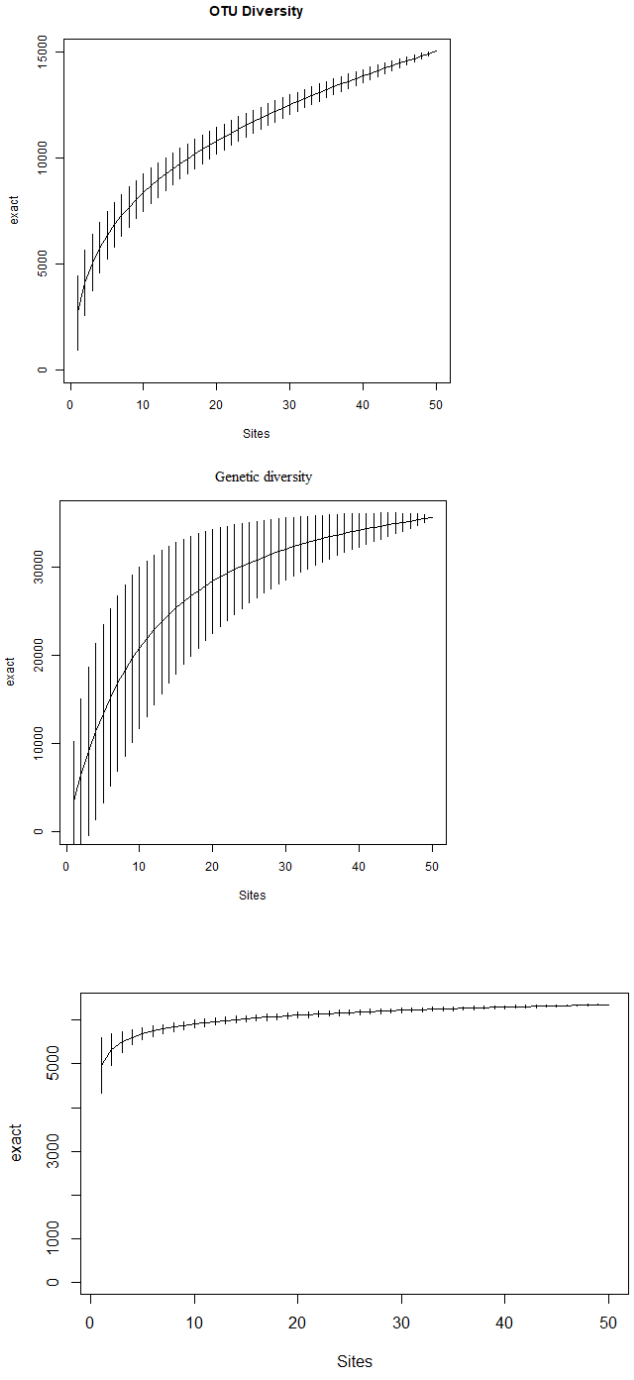


Fig.5. Comparison between species, genetic and function diversity. First species diversity, second genetic diversity and third function diversity.