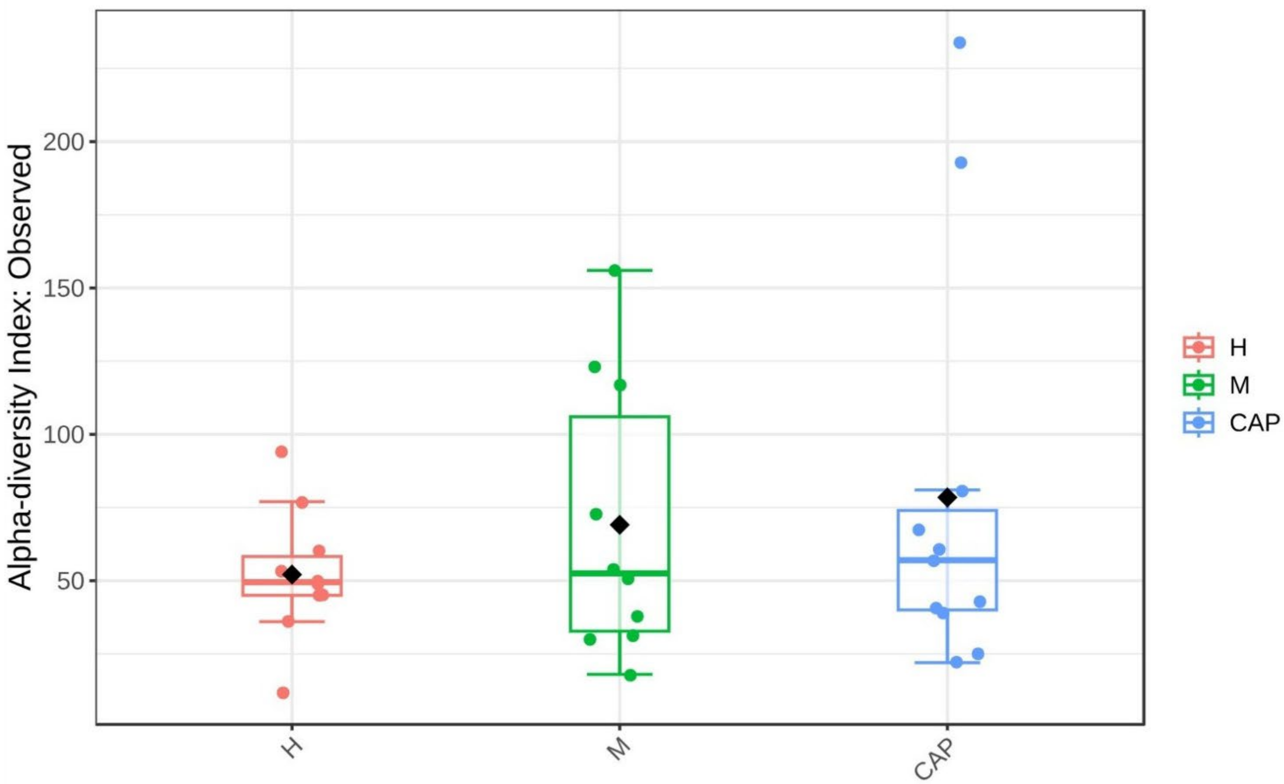
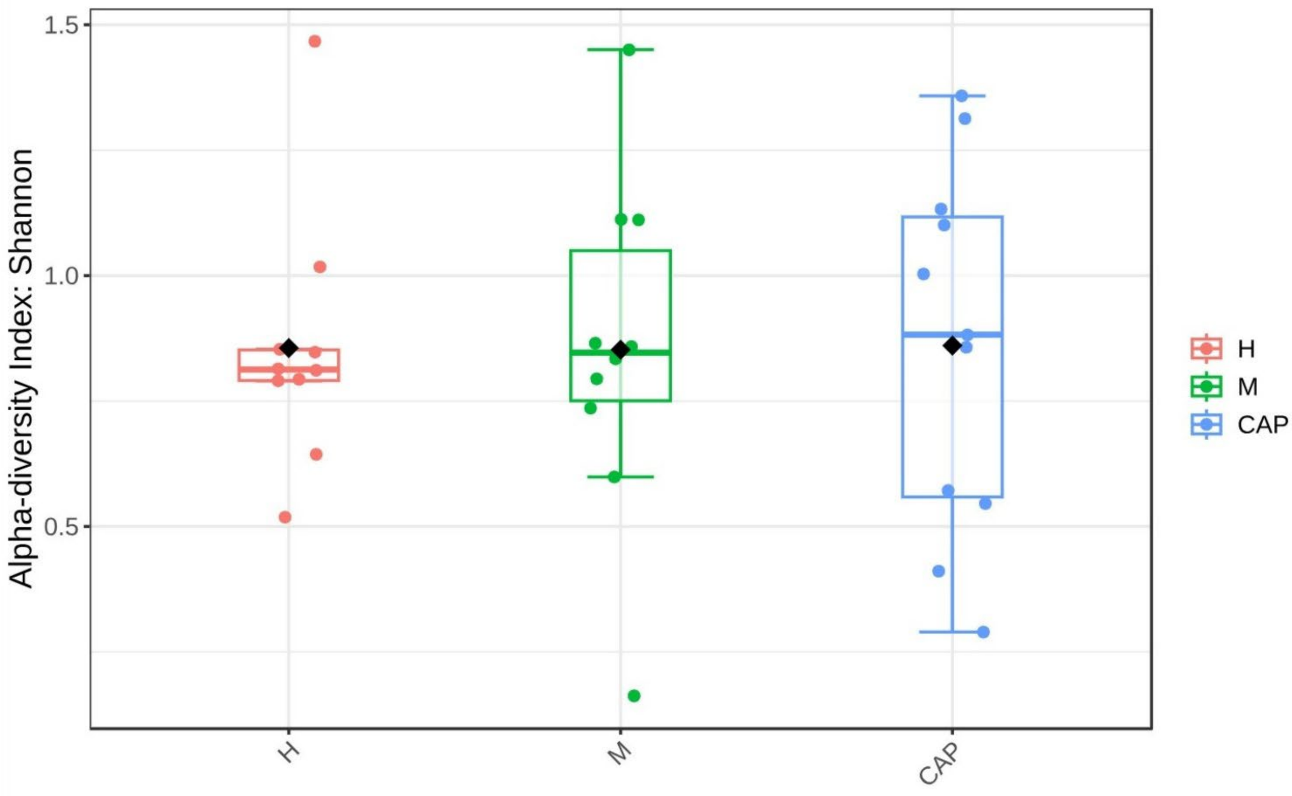
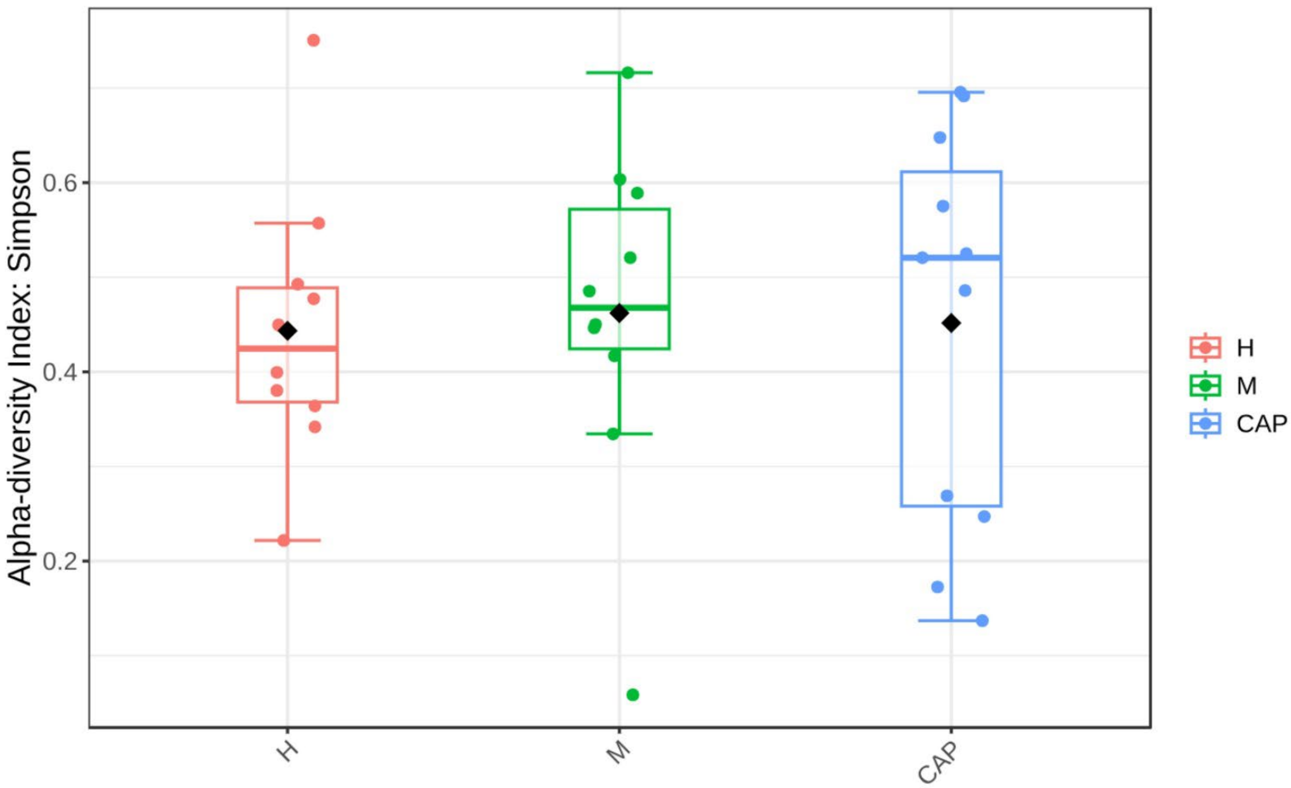


Suppl. Fig. 4: Alpha diversity across study groups. (a) Observed-species richness: Boxplots for mothers (M), healthy children (H), and CAP patients (CAP) show that mothers have the highest species count, healthy children are intermediate, and CAP children are lowest (ANOVA F = 0.713, p =0.499).



(b) Shannon diversity index: Reflects both richness and evenness, with the highest values in mothers, intermediate in healthy children, and the lowest in CAP patients (ANOVA F = 0.0017). Pairwise comparisons did not reach statistical significance.



(c) Simpson diversity index: Highlights dominance patterns, mothers exhibit the greatest diversity, healthy children are central, and CAP children show the lowest values (ANOVA F = 0.973). Variation across groups was directionally consistent, though not statistically significant in pairwise tests.