

Description of Additional Supplementary Information

Naturally occurring fire coral clones demonstrate a genetic and environmental basis of microbiome composition

Dubé CE, Ziegler M, Mercière A, Boissin E, Planes S, Bourmaud CAF, Voolstra CR

Contents

File Name: Supplementary Data 1

Description: Overview over sample colony sizes, geographic coordinates, allelic scores, MLG, genotype, habitat, and morphology IDs.

File Name: Supplementary Data 2

Description: Overview over sequence counts, taxonomic classification, and 16S RNA reference amplicon sequence for all 20 144 ASVs.

File Name: Supplementary Data 3

Description: Similarity percentage (SIMPER) analysis of bacterial community composition associated with fire corals (*Millepora cf. platyphylla*). Only significant variations of genotype and habitat combinations at the bacterial family level based on one-way PERMANOVA tests and post-hoc tests are shown.

File Name: Supplementary Data 4

Description: Indicspecies analysis of indicator ASVs/bacterial taxa associated with *Millepora cf. platyphylla* genotype and its reef habitat. The association statistic indicates the strength of association for the respective ASV with the tested sample group.

File Name: Supplementary Data 5

Description: Predicted metagenomic traits between genotypes and habitats (per sample data provided). Discriminant traits were determined using linear discriminant analysis (LDA) effect size method with a cut off > 2.5 for each MetaCyc pathway and a cut off > 2.0 for levels 1–3 for individual KOs. No dicriminant traits were identified between genotypes.

File Name: Supplementary Data 6

Description: Overview of weighted Nearest Sequenced Taxon Index (NSTI) scores over all fire coral samples at the genotype and habitat level.