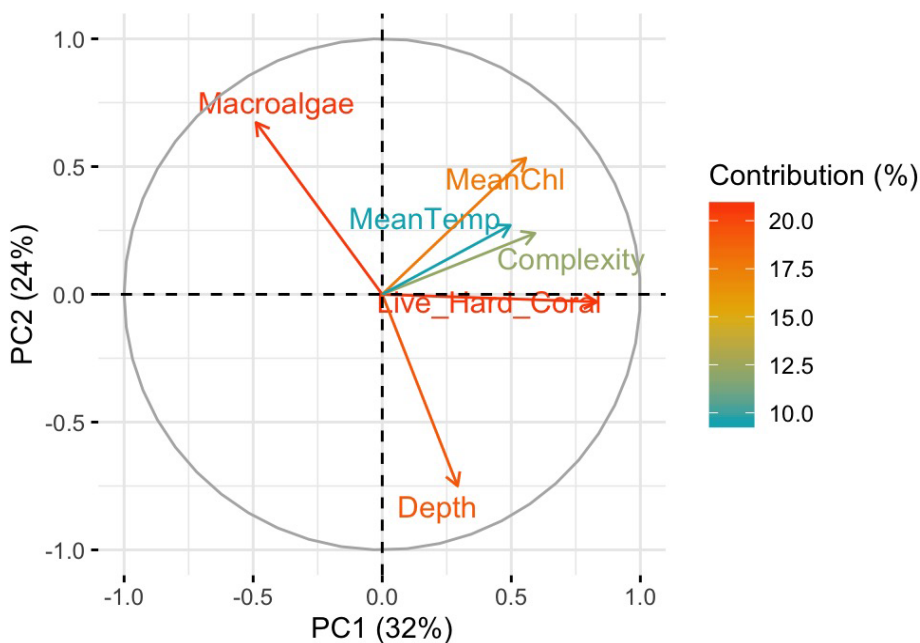


Appendix 1. Associations between environmental and benthic conditions of reefs through a Principal Component Analysis and corresponding loadings. The two first components (PC1 and PC2) mix both environmental and benthic variables and explain 56% of the variation observed between reefs. PC1 mostly reflects hard coral cover and complexity (i.e., reef condition and habitat quality) and PC2 mostly describes macroalgae and depth, two factors that can affect fish composition and biomass. PC1 and PC2 reflect potential ecological drivers of reef fish biomass and, as such, are important to retain in the models.



	PC1	PC2	PC3	PC4	PC5
<i>Depth</i>	0.21	-0.63	0.43	0.07	0.25
<i>Live_Hard_Coral</i>	0.6	-0.02	-0.11	0.31	-0.72
<i>Macroalgae</i>	-0.35	0.56	0.27	0.44	-0.08
<i>Complexity</i>	0.43	0.2	-0.53	0.34	0.6
<i>MeanChl</i>	0.4	0.45	0.16	-0.72	0.04
<i>MeanTemp</i>	0.36	0.23	0.65	0.27	0.23