

“Population and clonal structure of *Acropora* cf. *hyacinthus* to inform coral restoration practices on the central Great Barrier Reef” by Howlett et al.

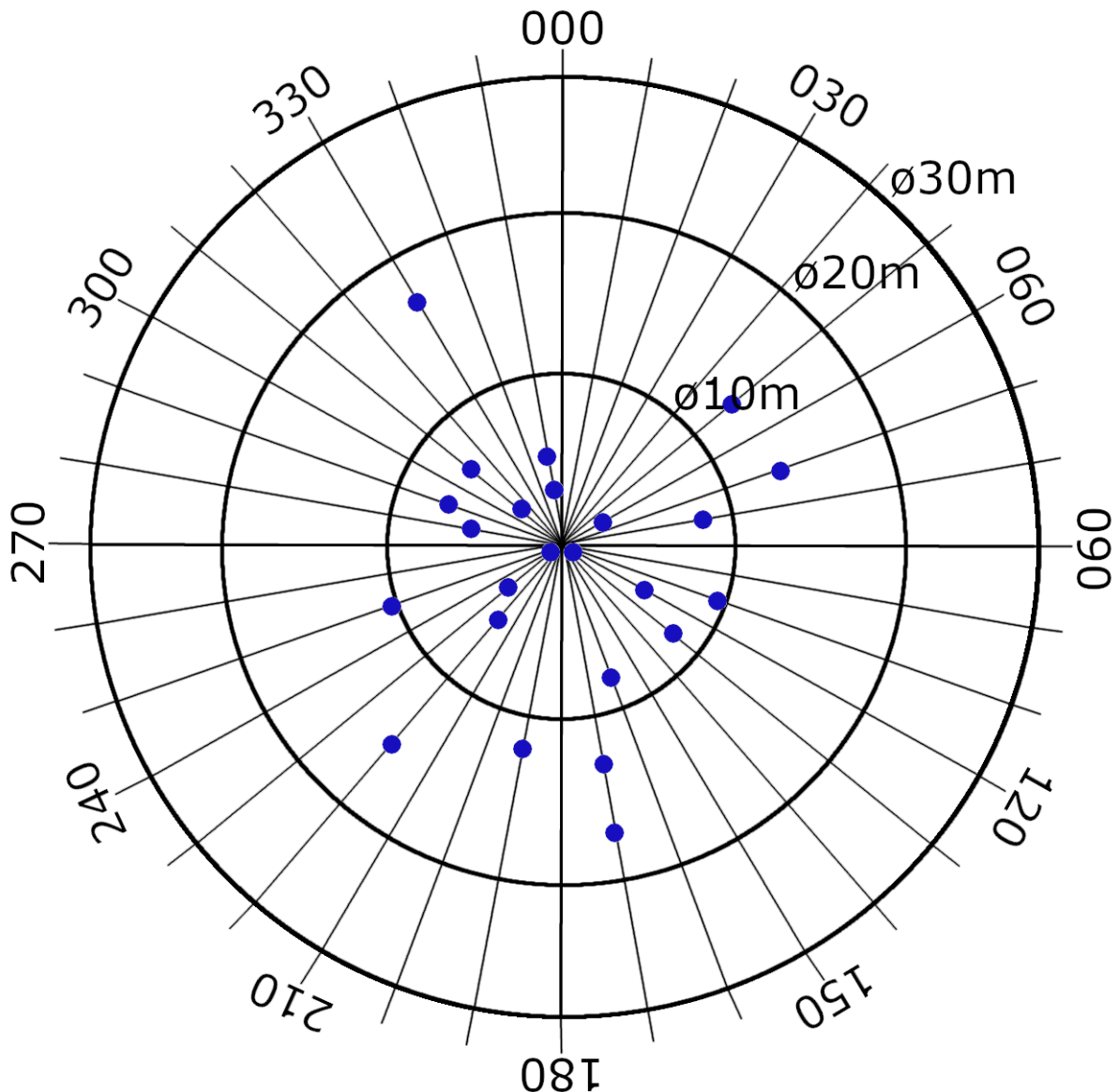


Figure S.1 Representative plot map showing sampling of tabular *Acropora* colonies at Opal Reef, Great Barrier Reef, using the “random” sampling design. Blue points represent locations of sampled colonies. Random numbers are generated within Microsoft Excel (Microsoft Corporation 2018) between 10 and 360 in increments of 10 to give compass bearings, shown here around the outer edge of the plot. Corresponding random numbers are then generated, between 0 and 5, 0 and 10, and 0 and 15, to give distance (m) from central point within the sampling site, for 3 nested sampling areas with diameter of 10, 20 and 30m. Tabular *Acropora* colonies that are beneath the resulting coordinates are sampled until 8 individuals are sampled from within each nested area.

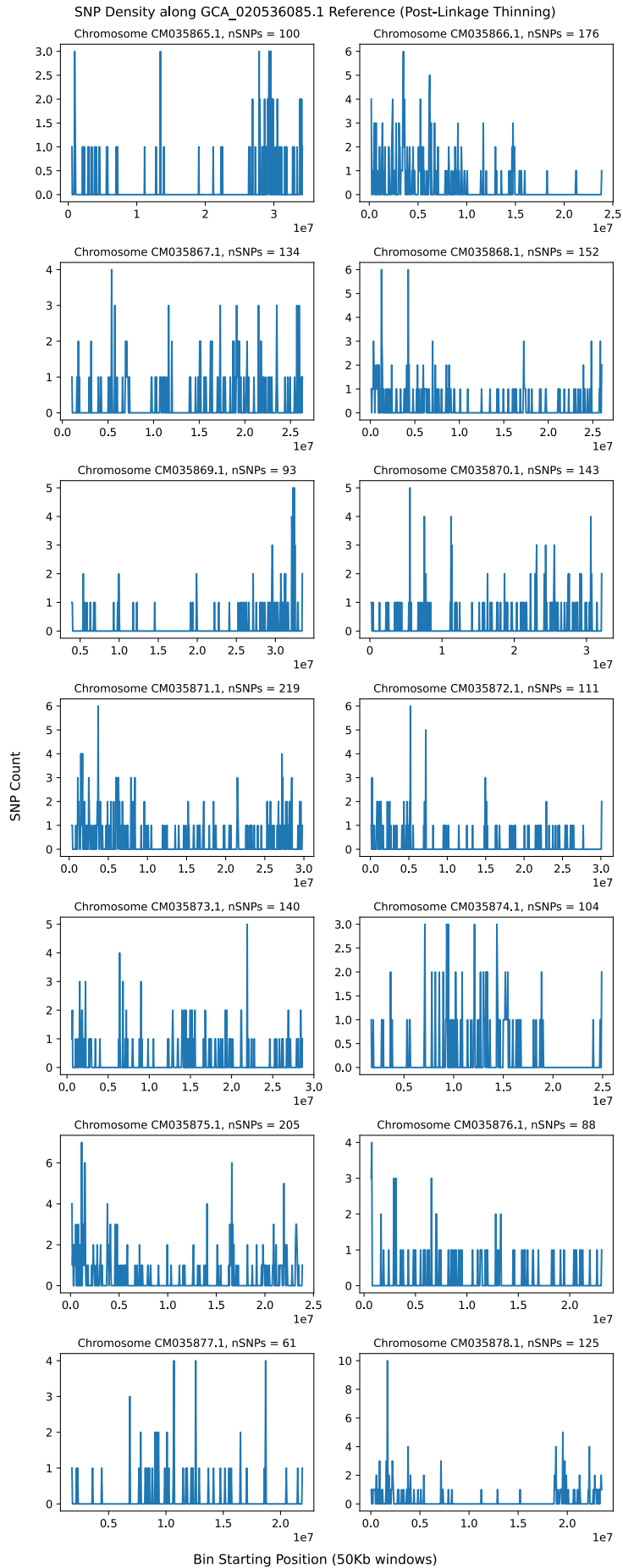


Figure S.2 The density of SNPs across the *Acropora cf. hyacinthus* chromosomes used in Principle Component Analyses.

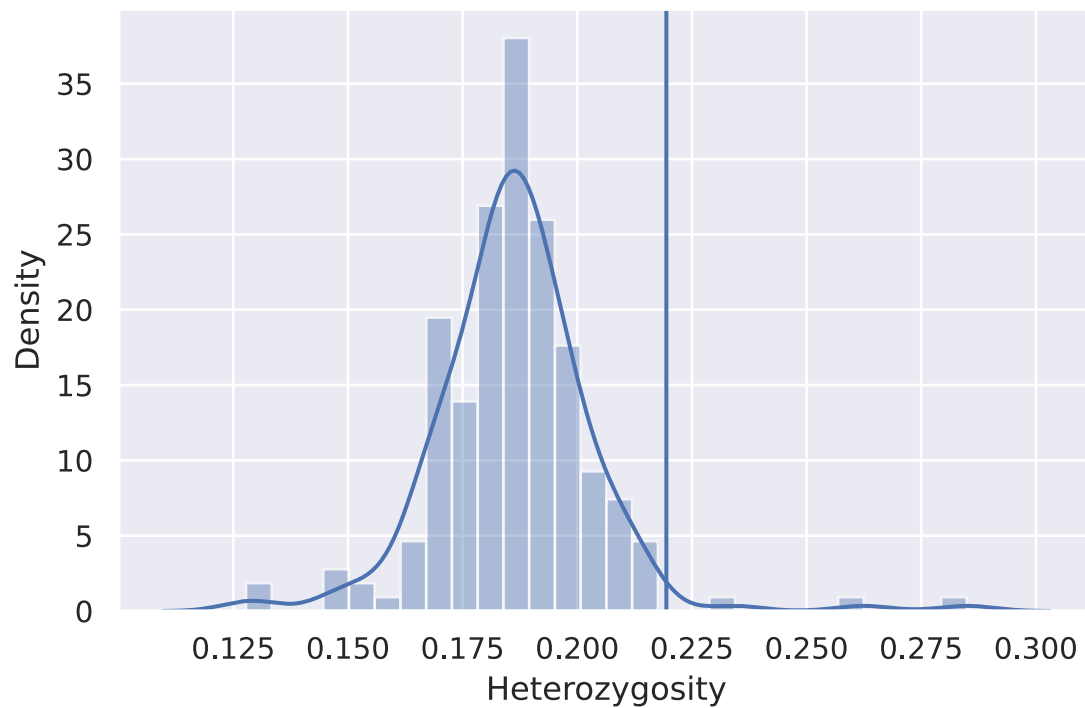


Figure S.3 Histogram of heterozygosities for tabulate *Acropora* colonies sampled across the northern-central Great Barrier Reef. Vertical line signifies cut-off for abnormally high heterozygosity samples.

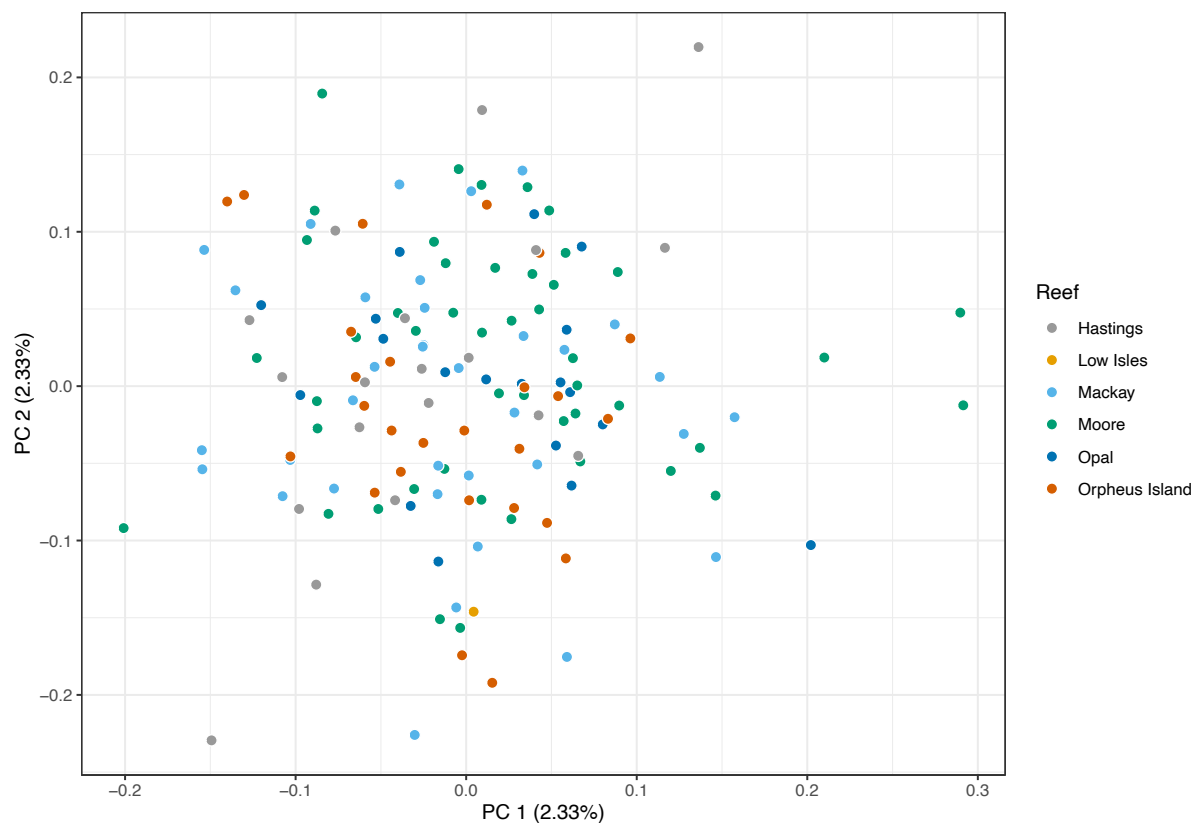


Figure S.4 Principal Component Analysis showing genetic divergence of *Acropora cf. hyacinthus* colonies sampled throughout 6 reef systems across the northern-central Great Barrier Reef.

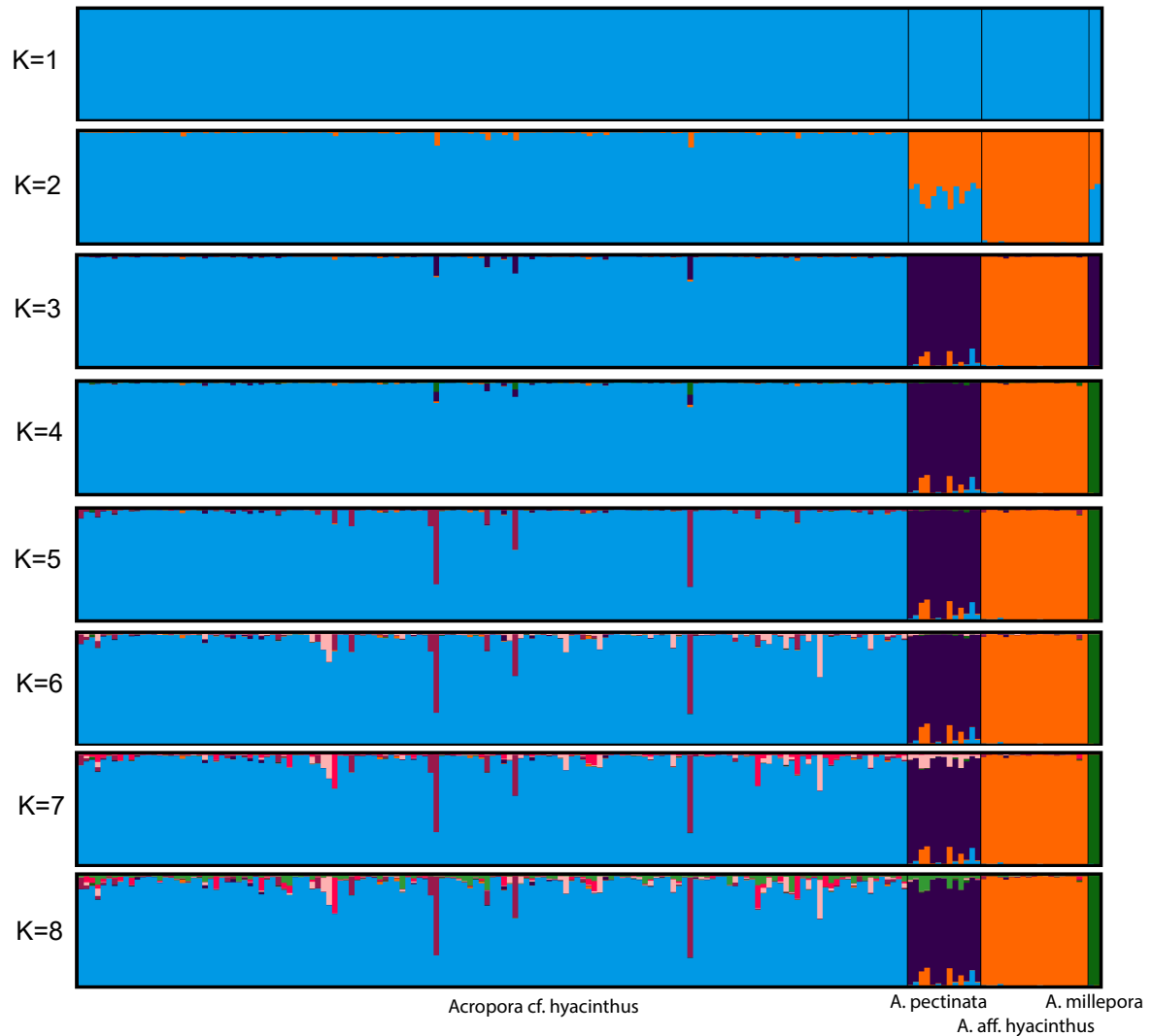


Figure S.5 STRUCTURE plots showing all possible values of K for sampled tabular *Acropora* species within northern-central Great Barrier Reef, grouped according to species clusters identified via principal components analysis.

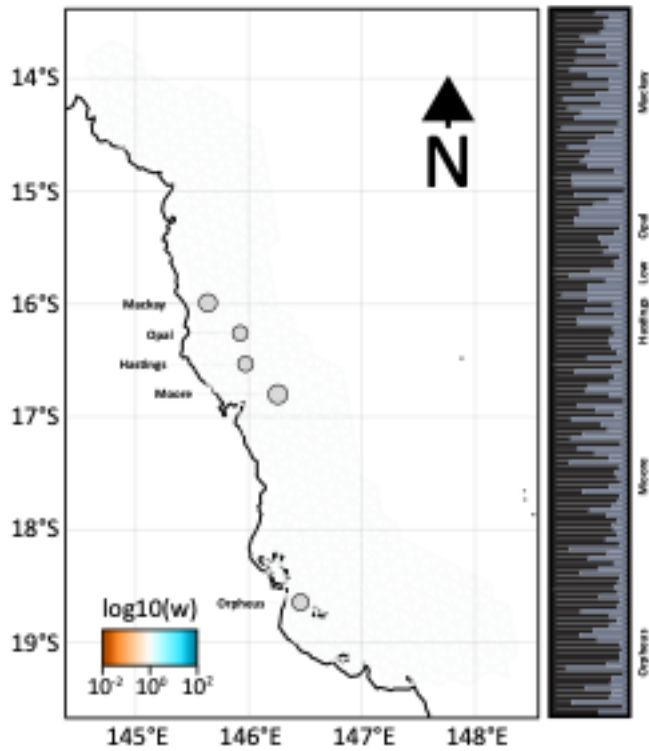


Figure S.6 Effective migration surfaces as estimated by FEEMS (Fast Estimation of Effective Migration Surface, Marcus et al., 2021) (left) and STRUCTURE (Pritchard 2000, $K=2$) plot (right) for *Acropora cf. hyacinthus*. Lower effective migration is depicted in orange and high effective migration is depicted in blue. Point size corresponds with sample size at each reef location. The lack of population structure and neutral migration surfaces (white with no areas of elevated or reduced migration) suggests a panmictic population at this spatial scale.

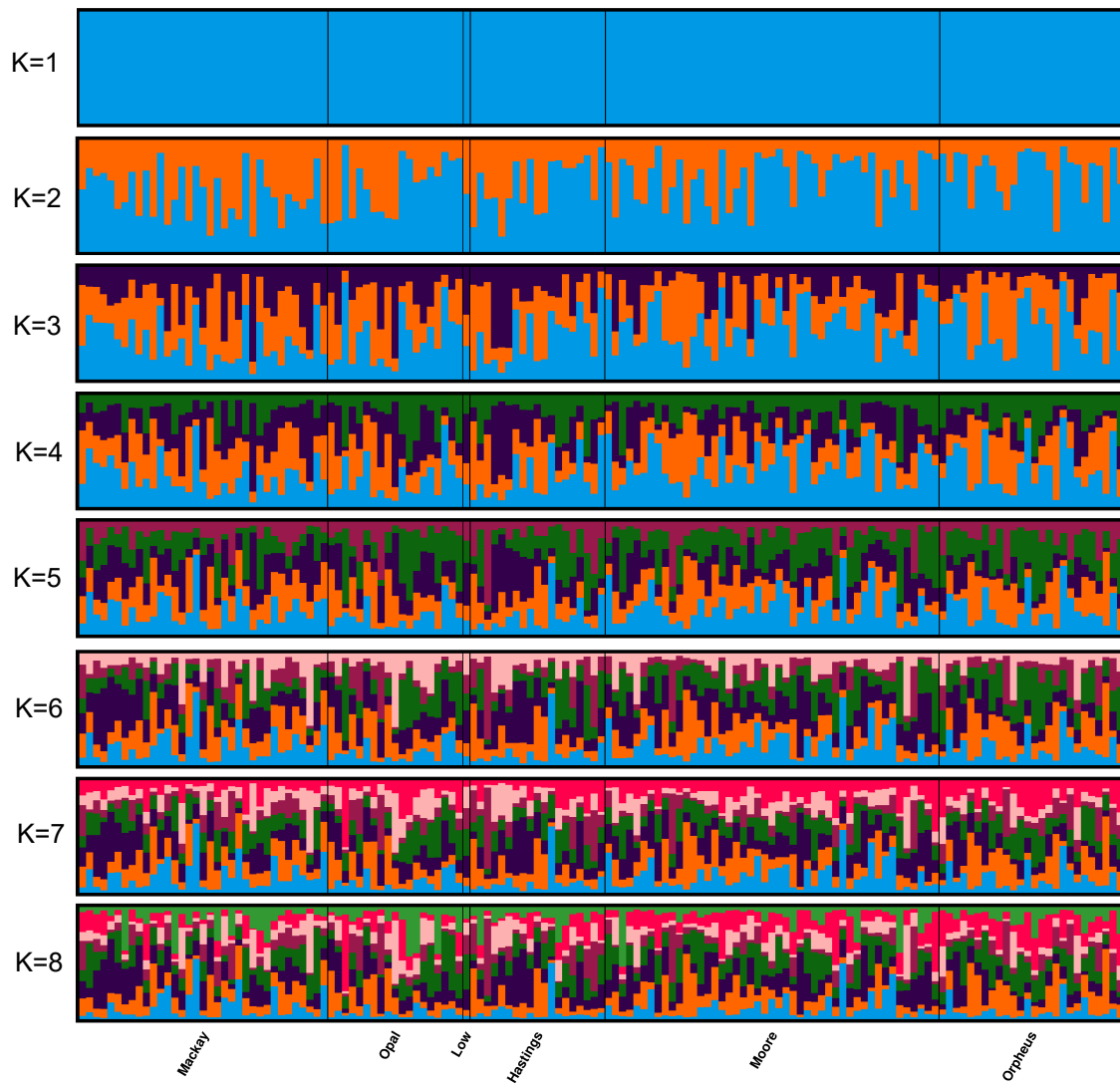


Figure S.7 STRUCTURE plots showing all possible values of K for sampled tabular *Acropora* species within northern-central Great Barrier Reef, grouped according to reef.