**Table 3.** PERMANOVA model results for in situ and ex situ experiments, split into coral host (M. cavernosa) and symbiont (Cladocopium spp.) datasets. Insignificant p values are shown as ns, with marginal p values denoted with \*, and † identifies significant interaction terms despite one of the main factors being insignificant. Model statistics generated using the adonis function of the R package vegan.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Experiment** | **Transcriptome** | **Factor** | **df** | **F** | ***p*** |
| *In situ* | *M. cavernosa* | time | 6 | 1.97015 | 0.0005 |
| site | 2 | 1.08488 | ns |
| time:site | 12 | 0.76551 | ns |
| *Cladocopium* spp. | time | 6 | 2.55542 | 0.0001 |
| site | 2 | 1.33834 | ns |
| time:site | 12 | 0.88555 | ns |
| *Ex situ* | *M. cavernosa* | genotype | 10 | 1.93917 | 0.0001 |
| temp | 1 | 1.50026 | 0.0197 |
| water | 1 | 1.34431 | 0.0516\* |
| genotype:temp | 10 | 1.01897 | ns |
| genotype:water | 10 | 0.9474 | ns |
| temp:water | 1 | 1.38031 | 0.0452 |
| tank:genotype | 22 | 1.02122 | ns |
| tank:temp | 2 | 1.15954 | ns |
| tank:water | 2 | 1.00889 | ns |
| genotype:temp:water | 10 | 0.95034 | ns |
| *Cladocopium* spp. | genotype | 10 | 1.10535 | 0.0871\* |
| temp | 1 | 2.32889 | 0.0013 |
| water | 1 | 1.20874 | ns |
| genotype:temp | 10 | 0.97299 | ns |
| genotype:water | 10 | 0.84455 | ns |
| temp:water | 1 | 1.61407 | 0.0208† |
| tank:genotype | 22 | 0.97218 | ns |
| tank:temp | 2 | 1.05123 | ns |
| tank:water | 2 | 0.97611 | ns |
| genotype:temp:water | 10 | 0.92919 | ns |