**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.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Experiment** | **Transcriptome** | **Factor** | **df** | **F** | ***R*2** | ***p*** |
| *In situ* | *M. cavernosa* | time | 6 | 1.97015 | 0.24537 | 0.0005 |
| site | 2 | 1.08488 | 0.04504 | ns |
| time:site | 12 | 0.76551 | 0.19067 | ns |
| *Cladocopium* spp. | time | 6 | 2.55542 | 0.27559 | 0.0001 |
| site | 2 | 1.33834 | 0.04811 | ns |
| time:site | 12 | 0.88555 | 0.19100 | ns |
| *Ex situ* | *M. cavernosa* | genotype | 10 | 1.93917 | 0.14197 | 0.0001 |
| temp | 1 | 1.50026 | 0.01098 | 0.0197 |
| water | 1 | 1.34431 | 0.00984 | 0.0516† |
| genotype:temp | 10 | 1.01897 | 0.07460 | ns |
| genotype:water | 10 | 0.9474 | 0.06936 | ns |
| temp:water | 1 | 1.38031 | 0.01011 | 0.0452 |
| tank:genotype | 22 | 1.02122 | 0.16449 | ns |
| tank:temp | 2 | 1.15954 | 0.01698 | ns |
| tank:water | 2 | 1.00889 | 0.01477 | ns |
| genotype:temp:water | 10 | 0.95034 | 0.06958 | ns |
| *Cladocopium* spp. | genotype | 10 | 1.10535 | 0.08906 | 0.0871† |
| temp | 1 | 2.32889 | 0.01876 | 0.0013 |
| water | 1 | 1.20874 | 0.00974 | ns |
| genotype:temp | 10 | 0.97299 | 0.07839 | ns |
| genotype:water | 10 | 0.84455 | 0.06805 | ns |
| temp:water | 1 | 1.61407 | 0.01300 | 0.0208† |
| tank:genotype | 22 | 0.97218 | 0.17232 | ns |
| tank:temp | 2 | 1.05123 | 0.01694 | ns |
| tank:water | 2 | 0.97611 | 0.01573 | ns |
| genotype:temp:water | 10 | 0.92919 | 0.07487 | ns |