Supplementary Material

# Supplementary Figures and Tables

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**Supplementary Figure 1.** Map of sample location for all *Oculina* *arbuscula* coral colonies as described in Rivera and Davies (2021).

**Supplementary Table 1.** Summary of Tukey’s HSD post-hoc test for δ15N for the aposymbiotic and symbiotic host as well as aposymbiotic host and symbiotic host + symbiont (experiment and type). SE = standard error, DF = degrees of freedom.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Contrast** | **Estimate** | **SE** | **DF** | **T-ratio** | **P-value** |
| ***δ15N Aposymbiotic ‘Host’(Apo) and Symbiotic ‘Host’ (Sym)*** |
|  | Comparison = experiment |
| 1 – 2 | 1.210 | 0.214 | 10.5 | 5.671 | 0.0002 |
|  | Comparison = type |
| Apo – Sym | 0.820 | 0.203 | 10 | 4.051 | 0.0023 |
|  | Comparison = experiment | type |
| 1,Apo – 2,Apo | 1.565 | 0.294 | 10.2 | 5.314 | 0.0015 |
| 1,Apo – 1,Sym | 1.173 | 0.302 | 10 | 3.884 | 0.0135 |
| 1,Apo – 2,Sym | 2.033 | 0.294 | 10.2 | 6.903 | 0.0002 |
| 2,Apo – 1,Sym | -0.392 | 0.294 | 10.2 | -1.332 | 0.5643 |
| 2,Apo – 2,Sym | 0.468 | 0.270 | 10 | 1.733 | 0.3573 |
| 1,Sym – 2,Sym | 0.860 | 0.294 | 10.2 | 2.921 | 0.0611 |
| ***δ15N Aposymbiotic ‘Host’ (Apo) and Symbiotic ‘Host + Sym’ (Sym)*** |
|  | Comparison = experiment |
| 1 – 2 | 1.050 | 0.285 | 10.8 | 3.681 | 0.0037 |
|  | Comparison = type |
| Apo – Sym | 2.500 | 0.271 | 10 | 9.237 | <.0001 |
|  | Comparison = experiment | type |
| 1,Apo – 2,Apo | 1.599 | 0.393 | 10.4 | 4.068 | 0.0094 |
| 1,Apo – 1,Sym | 3.050 | 0.403 | 10 | 7.559 | 0.0001 |
| 1,Apo – 2,Sym | 3.549 | 0.393 | 10.4 | 9.030 | <.0001 |
| 2,Apo – 1,Sym | 1.451 | 0.393 | 10.4 | 3.692 | 0.0173 |
| 2,Apo – 2,Sym | 1.950 | 0.361 | 10 | 5.404 | 0.0014 |
| 1,Sym – 2,Sym | 0.499 | 0.393 | 10.4 | 1.270 | 0.5999 |
| ***δ15N Symbiotic ‘Host’ (‘H’) and Symbiotic ‘Host + Sym’ (‘H+S’)*** |
|  | Comparison = experiment |
| 1 – 2 | 0.687 | 0.223 | 11.7 | 3.074 | 0.0099 |
|  | Comparison = type |
| ‘H’ – ‘H+ S’ | 1.660 | 0.211 | 11 | 7.873 | <.0001 |
|  | Comparison = experiment | type |
| 1,‘H’ – 2,‘H’ | 0.687 | 0.223 | 11.7 | 3.074 | 0.0427 |
| 1,‘H’ – 1,‘H + S’ | 1.658 | 0.211 | 11 | 7.873 | <.0001 |
| 1,‘H’ – 2,‘H + S’ | 2.345 | 0.307 | 11.4 | 7.636 | <.0001 |
| 2,‘H’ – 1,‘H + S’ | 0.971 | 0.307 | 11.4 | 3.162 | 0.0377 |
| 2,‘H’ – 2,‘H + S’ | 1.658 | 0.211 | 11 | 7.873 | <.0001 |
| 1,‘H + S’– 2,‘H + S’ | 0.687 | 0.223 | 11.7 | 3.074 | 0.0427 |

**Supplementary Table 2.** Summary of one-way ANOVA usinf a Tukey’s HSD post-hoc test for δ15N by experiment and genet (genet, type, and sample). SE = standard error, df = degrees of freedom.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Contrast** | **Mean Difference** | **SE** | **df** | **p-value** |
| ***Experiment 1*** |
|  | Comparison = genet | type | sample |
| A,Apo,Host – A,Sym,Host | 0.61 | 0.1784 | 9 | 0.0189 |
| A,Apo,Host – A,Sym,Host+Sym | 2.16 | 0.1784 | 9 | <0.0001 |
| A,Sym,Host – A,Sym,Host+Sym | 1.55 | 0.1784 | 9 | <0.0001 |
| C,Apo,Host – C,Sym,Host | 1.39 | 0.1034 | 3 | 0.0019 |
| C,Apo,Host – C,Sym,Host+Sym | 4.34 | 0.1034 | 3 | <0.0001 |
| C,Sym,Host – C,Sym,Host+Sym | 2.95 | 0.1034 | 3 | 0.0001 |
| E,Apo, Host – E,Sym,Host | 1.31 | 0.1407 | 3 | 0.0054 |
| E,Apo,Host – E,Sym,Host+Sym | 3.29 | 0.1407 | 3 | 0.0004 |
| E,Sym,Host – E,Sym,Host+Sym | 1.98 | 0.1407 | 3 | 0.0016 |
| F,Apo,Host – F,Sym,Host | 0.87 | 0.1034 | 3 | 0.0072 |
| F,Apo,Host – F,Sym,Host+Sym | 2.41 | 0.1034 | 3 | 0.0004 |
| F,Sym,Host – F,Sym,Host+Sym | 1.54 | 0.1034 | 3 | 0.0014 |
| ***Experiment 2*** |
|  | Comparison = genet | type | sample |
| A,Apo,Host – A,Sym,Host | -0.17 | 0.1749 | 3 | 0.6402 |
| A,Apo,Host – A,Sym,Host+Sym | 1.29 | 0.1749 | 3 | 0.0105 |
| A,Sym,Host – A,Sym,Host+Sym | 1.46 | 0.1749 | 3 | 0.0074 |
| C,Apo,Host – C,Sym,Host | 0.34 | 0.1749 | 3 | 0.2722 |
| C,Apo,Host – C,Sym,Host+Sym | 1.29 | 0.1749 | 3 | 0.0105 |
| C,Sym,Host – C,Sym,Host+Sym | 0.95 | 0.1749 | 3 | 0.0248 |
| D,Apo,Host – D,Sym,Host | 0.59 | 0.1838 | 3 | 0.0963 |
| D,Apo,Host – D,Sym,Host+Sym | 1.7 | 0.1838 | 3 | 0.0055 |
| D,Sym,Host – D,Sym,Host+Sym | 1.11 | 0.1838 | 3 | 0.0185 |
| E,Apo, Host – E,Sym,Host | 0.64 | 0.1838 | 3 | 0.0792 |
| E,Apo,Host – E,Sym,Host+Sym | 1.97 | 0.1838 | 3 | 0.0036 |
| E,Sym,Host – E,Sym,Host+Sym | 1.33 | 0.1838 | 3 | 0.0111 |
| F,Apo,Host – F,Sym,Host | 0.468 | 0.306 | 8 | 1.527 |
| F,Apo,Host – F,Sym,Host+Sym | 1.950 | 0.306 | 8 | 6.363 |
| F,Sym,Host – F,Sym,Host+Sym | 1.482 | 0.306 | 8 | 4.836 |