|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table S4.** Statistical analyses of nitrogen isotope values (δ15N) in coral and Symbiodiniaceae amino acids exposed to Light-by-Feeding nutrition treatments\*. | | | | | | | | | | | | | |
| *Amino acid δ15N* | | *Effect* | | *df* | | | *SS* | | *MS* | *F* | *P* | | |
| *Trophic amino acids* |  | |  | | |  | |  | |  | |  | |
| Alanine (Ala) | | Fraction | | | 1 | | 8.168 | | 8.168 | 3.392 | | 0.103 | |
|  | | Treatment | | | 2 | | 1.858 | | 0.929 | 0.386 | | 0.692 | |
|  | | Residual | | | 8 | | 19.262 | | 2.408 |  | |  | |
|  | |  | | |  | |  | |  |  | |  | |
| Aspartic acid (Asp) | | Fraction | | | 1 | | 3.333 | | 3.333 | 6.317 | | **0.036** | |
|  | | Treatment | | | 2 | | 1.420 | | 0.710 | 1.346 | | 0.314 | |
|  | | Residual | | | 8 | | 4.221 | | 0.528 |  | |  | |
|  | |  | | |  | |  | |  |  | |  | |
| Glutamic acid (Glu) | | Fraction | | | 1 | | 1.115 | | 1.115 | 2.361 | | 0.163 | |
|  | | Treatment | | | 2 | | 0.935 | | 0.467 | 0.990 | | 0.413 | |
|  | | Residual | | | 8 | | 3.777 | | 0.472 |  | |  | |
|  | |  | | |  | |  | |  |  | |  | |
| Isoleucine (Ile) | | Fraction | | | 1 | | 0.338 | | 0.338 | 0.091 | | 0.771 | |
|  | | Treatment | | | 2 | | 3.858 | | 1.929 | 0.518 | | 0.615 | |
|  | | Residual | | | 8 | | 29.800 | | 3.725 |  | |  | |
|  | |  | | |  | |  | |  |  | |  | |
| Leucine (Leu) | | Fraction | | | 1 | | 9.995 | | 9.995 | 19.904 | | **0.002** | |
|  | | Treatment | | | 2 | | 3.809 | | 1.904 | 3.792 | | 0.069 | |
|  | | Residual | | | 8 | | 4.017 | | 0.502 |  | |  | |
|  | |  | | |  | |  | |  |  | |  | |
| Proline (Pro) | | Fraction | | | 1 | | 22.935 | | 22.935 | 28.936 | | **0.001** | |
|  | | Treatment | | | 2 | | 4.117 | | 2.059 | 2.597 | | 0.135 | |
|  | | Residual | | | 8 | | 6.341 | | 0.793 |  | |  | |
|  | |  | | |  | |  | |  |  | |  | |
| Valine (Val) | | Fraction | | | 1 | | 0.225 | | 0.225 | 0.220 | | 0.652 | |
|  | | Treatment | | | 2 | | 0.042 | | 0.021 | 0.020 | | 0.980 | |
|  | | Residual | | | 8 | | 8.170 | | 1.021 |  | |  | |
|  | |  | | |  | |  | |  |  | |  | |
| *Source amino acids* | |  | | |  | |  | |  |  | |  | |
| Glycine (Gly) | | Fraction | | | 1 | | 4.226 | | 4.226 | 1.650 | | 0.235 | |
|  | | Treatment | | | 2 | | 1.569 | | 0.785 | 0.306 | | 0.744 | |
|  | | Residual | | | 8 | | 20.487 | | 2.561 |  | |  | |
|  | |  | | |  | |  | |  |  | |  | |
| Lysine (Lys) | | Fraction | | | 1 | | 0.105 | | 0.105 | 0.080 | | 0.785 | |
|  | | Treatment | | | 2 | | 0.245 | | 0.123 | 0.093 | | 0.912 | |
|  | | Residual | | | 8 | | 10.530 | | 1.316 |  | |  | |
|  | |  | | |  | |  | |  |  | |  | |
| Serine (Ser) | | Fraction | | | 1 | | 0.001 | | 0.001 | 0.000 | | 0.986 | |
|  | | Treatment | | | 2 | | 1.661 | | 0.831 | 0.440 | | 0.659 | |
|  | | Residual | | | 8 | | 15.113 | | 1.889 |  | |  | |
|  | |  | | |  | |  | |  |  | |  | |
| Phenylalanine (Phe) | | Fraction | | | 1 | | 1.400 | | 1.400 | 0.536 | | 0.485 | |
|  | | Treatment | | | 2 | | 0.801 | | 0.400 | 0.153 | | 0.861 | |
|  | | Residual | | | 8 | | 20.916 | | 2.615 |  | |  | |
|  | |  | | |  | |  | |  |  | |  | |
| Threonine (Thr) | | Fraction | | | 1 | | 13.327 | | 13.327 | 2.658 | | 0.142 | |
|  | | Treatment | | | 2 | | 3.612 | | 1.806 | 0.360 | | 0.708 | |
|  | | Residual | | | 8 | | 40.117 | | 5.015 |  | |  | |
|  | |  | | |  | |  | |  |  | |  | |
| Tyrosine (Tyr) | | Fraction | | | 1 | | 16.163 | | 16.163 | 8.950 | | **0.017** | |
|  | | Treatment | | | 2 | | 0.128 | | 0.064 | 0.035 | | 0.965 | |
|  | | Residual | | | 8 | | 14.448 | | 1.806 |  | |  | |
| \*‘Fraction’ is host coral or symbiont Symbiodiniaceae tissue. ‘Treatment’ represents combination of Light-by-Feeding nutrition treatments: Light–Not Fed, Light–Fed, Dark–Fed. | | | | | | | | | | | | |