**Supplementary material-Graeve et al.**

**Antarctic copepods: statistical data and turnover rates**

Table S1. Results of Fisher test (1-way ANOVA) - Percent fatty acid and alcohols assimilated from day 0 to day 9

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Compound  | *C. acutu*s CV |   | *C. acutu*s fem. |   | *C. propinquus* fem. |
|   | R2 | p-value |   | R2 | p-value |   | R2 | p-value |
|   |   |   |   |   |   |   |   |   |
| Fatty acids |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |
| 16:0 | 0.98 | < 0.001 |   | 0.93 | < 0.01 |   | 0.97 | < 0.05 |
| 16:1(n-7) | 0.96 | < 0.01 |   | 0.35 |  -  |   | 0.11 |  - |
| 20:1(n-9) | 0.94 | < 0.01 |   | 0.46 |  - |   | 0.13 |  - |
| 20:5(n-3) | 0.99 | < 0.001 |   | 0.95 | < 0.01 |   | 0.90 | < 0.01 |
| 22:1(n-11) | 0.95 | < 0.01 |   | 0.17 |  - |   | 0.23 |  - |
| 22:6(n-3) | 0.99 | < 0.001 |   | 0.93 | < 0.001 |   | 0.99 | < 0.001 |
|   |   |   |   |   |   |   |   |   |
| Alcohols |   |   |   |   |   |   |   |   |
| 16:0 | 0.82 | < 0.05 |   | 0.87 | < 0.05 |   |   |   |
| 16:1(n-7) | 0.72 | < 0.05 |   | 0.86 | < 0.05 |   |   |   |
| 20:1(n-9) | 0.81 | < 0.05 |   | 0.92 | < 0.01 |   |   |   |
| 22:1(n-11) | 0.86 | < 0.05 |   | 0.55 |  - |   |   |   |

Table S2. Results of Fisher test (1-way ANOVA) - Mass of fatty acids and alcohols assimilated from day 0 to day 9.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Compound  | *C. acutu*s CV |   | *C. acutu*s fem. |   | *C. propinquus* fem. |
|   | R2 | p-value |   | R2 | p-value |   | R2 | p-value |
|   |   |  |   |   |  |   |   |  |
| Fatty acids |   |  |   |   |  |   |   |  |
|   |   |  |   |   |  |   |   |  |
| 16:0 | 0.95 | < 0.01 |   | 0.96 | < 0.01 |   | 0.95 | < 0.01 |
| 16:1(n-7) | 0.98 | < 0.01 |   | 0.31 | - |   | 0.19 | - |
| 20:1(n-9) | 0.89 | < 0.05 |   | 0.50 | - |   | 0.33 | - |
| 20:5(n-3) | 0.99 | < 0.001 |   | 0.95 | < 0.01 |   | 0.99 | < 0.001 |
| 22:1(n-11) | 0.83 | < 0.05 |   | 0.25 | - |   | 0.29 | - |
| 22:6(n-3) | 0.82 | < 0.05 |   | 0.94 | < 0.01 |   | 0.87 | < 0.05 |
|   |   |  |   |   |  |   |   |  |
| Alcohols |   |  |   |   |  |   |   |  |
| 16:0 | 0.82 | < 0.05 |   | 0.67 | - |   |   |  |
| 16:1(n-7) | 0.77 | < 0.05 |   | 0.70 | - |   |   |  |
| 20:1(n-9) | 0.87 | < 0.05 |   | 0.83 | < 0.05 |   |   |  |
| 22:1(n-11) | 0.92 | < 0.01 |   | 0.66 | - |   |   |  |
|  |  |  |  |  |  |  |  |  |

Table S3. Carbon assimilation rates per day calculated from data at the end of the experiment.

|  |  |
| --- | --- |
| Compound  | Rates (%assiday-1) |
| Fatty acids | *C. acutus* CV | *C. acutus* fem. | *C. propinquus* fem. |
| 16:0 | 10.4 | 7.5 | 5.1 |
| 16:1(n-7) | 11.1 | 10.8 | 2.2 |
| 20:1(n-9) | 4.1 | 3.1 | 0.0 |
| 20:5(n-3) | 7.2 | 7.1 | 5.3 |
| 22:1(n-11) | 3.3 | 0.1 | 0.2 |
| 22:6(n-3) | 3.9 | 2.9 | 2.1 |
|  |  |  |  |
| Alcohols |  |  |  |
| 14:0 | 7.0 | 0.6 |  -  |
| 16:0 | 10.4 | 1.1 |  -  |
| 16:1(n-7) | 11.1 | 2.7 |  -  |
| 20:1(n-9) | 6.7 | 0.1 |  -  |
| 22:1(n-11) | 5.6 | 0.1 |  -  |