Supplemental table 1. Fatty acid composition (% total fatty acids) of 30 days after hatch larvae obtained from gilthead sea bream broodstock after feeding broodstock diets with progressive substitution of FO\*.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **100 FO** | **40FO**  **60LO** | **20FO**  **80LO†** | **100LO** |  | ***P*** |
| **Lipids..** | 17.60±2.54 | 18.70±2.10 |  | 18.71±1.20 |  | *0.632* |
| **FA(% of total)** |  |  |  |  |  |  |
| **14:0** | 0.90±0.07 | 0.75±0.00 |  | 0.81±0.07 |  | *0.107* |
| **14:1n-5** | 0.33±0.24 | 0.47±0.02 |  | 0.45±0.00 |  | *0.674* |
| **15:1n-5** | 0.04±0.01 | 0.04±0.00 |  | 0.04±0.00 |  | *0.635* |
| **16:0iso** | 0.34±0.08 | 0.33±0.00 |  | 0.33±0.01 |  | *0.319* |
| **16:0** | 16.53±0.59 | 16.85±0.71 |  | 16.00±0.20 |  | *0.741* |
| **16:1n-7** | 2.13±0.88 | 1.46±0.01 |  | 1.56±0.13 |  | *0.497* |
| **16:1n-5** | 0.78±0.06 | 0.72±0.02 |  | 0.70±0.01 |  | *0.176* |
| **16:2n-6** | 0.04±0.00 | 0.04±0.01 |  | 0.05±0.00 |  | *0.302* |
| **16:2n-4** | 0.16±0.07 | 0.10±0.04 |  | 0.15±0.02 |  | *0.871* |
| **17:0** | 0.60±0.10 | 0.60±0.00 |  | 0.60±0.00 |  | *0.999* |
| **16:3n-4** | 0.21±0.08 | 0.23±0.00 |  | 0.23±0.01 |  | *0.902* |
| **16:3n-3** | 0.07±0.01 | 0.06±0.01 |  | 0.08±0.01 |  | *0.924* |
| **16:3n-1** | 0.79±0.20 | 0.75±0.05 |  | 0.66±0.02 |  | *0.644* |
| **16:4n-3** | 0.33±0.03 | 0.34±0.00 |  | 0.32±0.02 |  | *0.735* |
| **16:4n-1** | 0.20±0.02 | 0.19±0.00 |  | 0.17±0.01 |  | *0.238* |
| **18:0** | 9.57±0.34 | 9.29±0.06 |  | 9.26±0.07 |  | *0.333* |
| **18:1n-9** | 15.40±0.89 | 14.05±1.05 |  | 15.61±0.11 |  | *0.614* |
| **18:1n-7** | 5.80±0.78 | 5.24±0.31 |  | 5.77±0.12 |  | *0.805* |
| **18:1n-5** | 0.25±0.12 | 0.16±0.00 |  | 0.17±0.02 |  | *0.494* |
| **18:2n-9** | 0.26±0.03 | 0.25±0.01 |  | 0.26±0.02 |  | *0.966* |
| **18:2n-6** | 6.32±0.08 | 6.07±1.30 |  | 7.64±0.37 |  | *0.216* |
| **18:2n-4** | 0.06±0.00 | 0.06±0.01 |  | 0.07±0.01 |  | *0.435* |
| **18:3n-6** | 0.23±0.05 | 0.23±0.02 |  | 0.25±0.02 |  | *0.856* |
| **18:3n-4** | 0.05±0.01 | 0.04±0.01 |  | 0.05±0.01 |  | *0.973* |
| **18:3n-3** | 8.82±3.41 | 9.02±0.81 |  | 9.97±0.28 |  | *0.870* |
| **18:4n-3** | 1.10±0.44 | 1.20±0.15 |  | 1.28±0.18 |  | *0.229* |
| **18:4n-1** | 0.03±0.03 | 0.01±0.00 |  | 0.02±0.01 |  | *0.471* |
| **20:0** | 0.26±0.05 | 0.23±0.01 |  | 0.25±0.00 |  | *0.868* |
| **20:1n-9** | 0.10±0.06 | 0.06±0.02 |  | 0.09±0.00 |  | *0.796* |
| **20:1n-7** | 0.87±0.18 | 0.68±0.13 |  | 0.89±0.04 |  | *0.713* |
| **20:1n-5** | 0.27±0.09 | 0.20±0.00 |  | 0.21±0.01 |  | *0.513* |
| **20:2n-9** | 0.15±0.12 | 0.09±0.01 |  | 0.08±0.02 |  | *0.594* |
| **20:2n-6** | 0.43±0.00 | 0.37±0.06 |  | 0.46±0.01 |  | *0.362* |
| **20:3n-9** | 0.12±0.12 | 0.08±0.04 |  | 0.05±0.03 |  | *0.589* |
| **20:3n-6** | 0.38±0.13 | 0.33±0.05 |  | 0.29±0.03 |  | *0.531* |
| **20:4n-6** | 3.07±0.09 | 3.41±0.28 |  | 3.03±0.02 |  | *0.514* |
| **20:3n-3** | 0.64±0.56 | 1.01±0.08 |  | 1.11±0.03 |  | *0.423* |
| **20:4n-3** | 0.76±0.11 | 0.74±0.08 |  | 0.80±0.07 |  | *0.865* |
| **20:5n-3** | 3.69±0.41 | 3.78±0.07 |  | 3.99±0.14 |  | *0.585* |
| **22:1n-11** | 0.18±0.05 | 0.15±0.14 |  | 0.35±0.00 |  | *0.185* |
| **22:1n-9** | 0.35±0.12 | 0.22±0.05 |  | 0.29±0.00 |  | *0.513* |
| **22:4n-6** | 0.11±0.03 | 0.09±0.00 |  | 0.09±0.00 |  | *0.616* |
| **22:5n-6** | 3.47±0.74 | 4.23±0.94 |  | 3.00±0.15 |  | *0.713* |
| **22:5n-3** | 0.67±0.12 | 0.58±0.10 |  | 0.67±0.07 |  | *0.971* |
| **22:6n-3** | 12.65±4.07 | 14.96±2.37 |  | 11.59±0.02 |  | *0.864* |
| **Total FA** |  |  |  |  |  |  |
| **Saturated** | 28.32±0.99 | 27.72±0.74 |  | 26.91±0.34 |  | *0.473* |
| **n-3** | 26.73±1.27 | 31.69±1.07 |  | 29.80±0.54 |  | *0.194* |
| **n-6** | 13.17±0.75 | 14.76±0.13 |  | 14.81±0.17 |  | *0.274* |
| **n-9** | 17.83±0.84 | 14.67±1.12 |  | 16.34±0.12 |  | *0.531* |
| **n-3 LC-PUFA** | 16.25±3.66 | 21.08±2.04 |  | 18.16±0.05 |  | *0.852* |

\* Mean±SD, n=3 (one pool of whole larvae from per tank), no statistical differences were found among the groups (P>0.05).

† No data available.