**Appendix 5.** Pearson correlation matrix among biometric parameters of high feed converters (FCR-) fish. Upper values are the correlation coefficients and lower values are the p-values (statistical significance when p<0.1). In green those values that present positive correlation, in red those with negative.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **HFC** | **Length** | **CF** | **Carcass Index** | **Muscle Fat** | **HSI** | **VSI** | **ACT Mesor** | **ACT Amplitude** | **ACT Acrophase** | **RESP Mesor** | **RESP Amplitude** | **RESP Acrophase** | **Phase Shift** |
| **Weight** | 0.944 | 0.840 | 0.190 | 0.717 | 0.274 | 0.146 | -0.118 | -0.010 | 0.334 | -0.131 | -0.580 | -0.215 | 0.288 |
| 3.99E-06 | 0.001 | 0.554 | 0.009 | 0.389 | 0.651 | 0.746 | 0.977 | 0.345 | 0.718 | 0.079 | 0.551 | 0.419 |
| **Length** |  | 0.631 | 0.108 | 0.619 | 0.335 | 0.123 | -0.053 | 0.073 | 0.400 | -0.056 | -0.505 | -0.151 | 0.249 |
|  | 0.028 | 0.737 | 0.032 | 0.288 | 0.703 | 0.884 | 0.841 | 0.252 | 0.879 | 0.137 | 0.677 | 0.488 |
| **CF** |  |  | 0.315 | 0.704 | 0.115 | 0.166 | -0.258 | -0.219 | 0.111 | -0.317 | -0.501 | -0.155 | 0.171 |
|  |  | 0.318 | 0.011 | 0.723 | 0.607 | 0.472 | 0.544 | 0.759 | 0.371 | 0.140 | 0.670 | 0.637 |
| **Carcass Index** |  |  |  | 0.454 | 0.379 | 0.107 | -0.478 | -0.583 | -0.529 | -0.107 | -0.690 | 0.368 | -0.482 |
|  |  |  | 0.138 | 0.224 | 0.741 | 0.162 | 0.077 | 0.116 | 0.768 | 0.027 | 0.296 | 0.158 |
| **Muscle Fat** |  |  |  |  | 0.330 | 0.146 | -0.408 | -0.348 | 0.110 | -0.294 | -0.728 | -0.165 | 0.180 |
|  |  |  |  | 0.294 | 0.650 | 0.242 | 0.324 | 0.761 | 0.410 | 0.017 | 0.649 | 0.619 |
| **HSI** |  |  |  |  |  | 0.357 | -0.073 | -0.072 | 0.408 | 0.252 | -0.412 | -0.198 | 0.294 |
|  |  |  |  |  | 0.254 | 0.842 | 0.843 | 0.242 | 0.482 | 0.236 | 0.584 | 0.410 |
| **VSI** |  |  |  |  |  |  | -0.265 | -0.166 | 0.343 | -0.249 | -0.328 | 0.581 | -0.430 |
|  |  |  |  |  |  | 0.460 | 0.648 | 0.332 | 0.488 | 0.354 | 0.079 | 0.215 |
| **ACT Mesor** |  |  |  |  |  |  |  | 0.980 | 0.035 | 0.832 | 0.721 | -0.412 | 0.383 |
|  |  |  |  |  |  |  | 6.78E-07 | 0.924 | 0.003 | 0.019 | 0.237 | 0.274 |
| **ACT Amplitude** |  |  |  |  |  |  |  |  | 0.147 | 0.790 | 0.701 | -0.394 | 0.399 |
|  |  |  |  |  |  |  |  | 0.686 | 0.007 | 0.024 | 0.259 | 0.254 |
| **ACT Acrophase** |  |  |  |  |  |  |  |  |  | -0.124 | 0.067 | -0.198 | 0.460 |
|  |  |  |  |  |  |  |  |  | 0.732 | 0.854 | 0.584 | 0.181 |
| **RESP Acrophase** |  |  |  |  |  |  |  |  |  |  |  |  | -0.961 |
|  |  |  |  |  |  |  |  |  |  |  |  | 9.30E-06 |