**Table 1** *P*-values from multivariate tests computed using mvabund highlighting the main and interaction effects of silver, chloride and day on microbial community composition. Significant differences are denoted by asterisk (*P* < 0.05\*, *P* < 0.01\*\*, *P* < 0.001\*\*\*).

|  |  |  |
| --- | --- | --- |
|  | Bacteria | Fungi |
| Ag | 0.001\*\* | 0.003\*\* |
| Cl | 0.001\*\* | 0.001\*\* |
| Day | 0.001\*\* | 0.001\*\* |
| Ag:Cl | 0.001\*\* | 0.636 |
| Ag:Day | 0.001\*\* | 0.212 |
| Cl:Day | 0.001\*\* | 0.001\*\* |
| Ag:Cl:Day | 0.046\* | 0.537 |

**Table 2** *P*-values from multivariate GLM post-hoc results computed using mvabund highlighting difference in bacterial community composition between treatments and relative to the controls within each time point. Significant differences are denoted by asterisk (*P* < 0.05\*, *P* < 0.01\*\*, *P* < 0.001\*\*\*).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Treatment 1** | | **Treatment 2** | | **Day** | | | |
| Ag  (mg kg-1) | Cl  (g kg-1) | Ag  (mg kg-1) | Cl  (g kg-1) | 3 | 7 | 30 | 90 |
| 0 | 0 | 0 | 1 | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* |
| 0 | 0 | 0 | 2 | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* |
| 0 | 1 | 0 | 2 | 0.005\*\* | 0.002\*\* | 0.001\*\* | 0.006\*\* |
| 1 | 0 | 1 | 1 | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* |
| 1 | 0 | 1 | 2 | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* |
| 1 | 1 | 1 | 2 | <0.001\*\*\* | <0.001\*\*\* | 0.002\*\* | 0.002\*\* |
| 10 | 0 | 10 | 1 | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* |
| 10 | 0 | 10 | 2 | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* |
| 10 | 1 | 10 | 2 | <0.001\*\*\* | 0.001\*\* | <0.001\*\*\* | 0.014\* |
|  |  |  |  |  |  |  |  |
| 0 | 0 | 1 | 0 | 0.039\* | <0.001\*\*\* | 0.047\* | 0.185 |
| 0 | 0 | 10 | 0 | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* |
| 1 | 0 | 10 | 0 | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* | 0.003\*\* |
| 0 | 1 | 1 | 1 | 0.039\* | 0.011\* | 0.041\* | 0.081 |
| 0 | 1 | 10 | 1 | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* | 0.046\* |
| 1 | 1 | 10 | 1 | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* | 0.076 |
| 0 | 2 | 1 | 2 | <0.001\*\*\* | 0.272 | 0.041\* | 0.039\* |
| 0 | 2 | 10 | 2 | <0.001\*\*\* | <0.001\*\*\* | 0.002\*\* | 0.071 |
| 1 | 2 | 10 | 2 | <0.001\*\*\* | <0.001\*\*\* | 0.019\* | 0.111 |

**Table 3** *P*-values from multivariate GLM post-hoc results computed using mvabund highlighting difference in fungal community composition between treatments and relative to the controls within each time point. Significant differences are denoted by asterisk (*P* < 0.05\*, *P* < 0.01\*\*, *P* < 0.001\*\*\*).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Treatment 1** | | **Treatment 2** | | **Day** | | | |
| Ag  (mg kg-1) | Cl  (g kg-1) | Ag  (mg kg-1) | Cl  (g kg-1) | 3 | 7 | 30 | 90 |
| 0 | 0 | 0 | 1 | 0.014\* | 0.100 | 0.083 | 0.057 |
| 0 | 0 | 0 | 2 | 0.023\* | 0.016\* | 0.154 | 0.321 |
| 0 | 1 | 0 | 2 | 0.249 | 0.050 | 0.256 | 0.540 |
| 1 | 0 | 1 | 1 | 0.023\* | 0.035\* | 0.012\* | 0.032\* |
| 1 | 0 | 1 | 2 | 0.021\* | 0.003\*\* | 0.039\* | 0.041\* |
| 1 | 1 | 1 | 2 | 0.231 | 0.003\*\* | 0.021\* | 0.231 |
| 10 | 0 | 10 | 1 | 0.036\* | 0.009\*\* | 0.003\*\* | 0.021\* |
| 10 | 0 | 10 | 2 | 0.031\* | 0.002\*\* | 0.002\*\* | 0.021\* |
| 10 | 1 | 10 | 2 | 0.118 | 0.003\*\* | 0.384 | 0.048\* |
|  |  |  |  |  |  |  |  |
| 0 | 0 | 1 | 0 | 0.012\* | 0.118 | 0.321 | 0.601 |
| 0 | 0 | 10 | 0 | 0.046\* | 0.008\*\* | 0.003\*\* | 0.825 |
| 1 | 0 | 10 | 0 | 0.016\* | 0.020\* | 0.011\* | 0.514 |
| 0 | 1 | 1 | 1 | 0.231 | 0.560 | 0.176 | 0.061 |
| 0 | 1 | 10 | 1 | 0.184 | 0.023\* | 0.278 | 0.082 |
| 1 | 1 | 10 | 1 | 0.084 | 0.027\* | 0.030\* | 0.143 |
| 0 | 2 | 1 | 2 | 0.258 | 0.202 | 0.478 | 0.666 |
| 0 | 2 | 10 | 2 | 0.740 | 0.003\*\* | 0.321 | 0.391 |
| 1 | 2 | 10 | 2 | 0.431 | 0.003\*\* | 0.335 | 0.143 |

**Table 4** *P*-values from linear mixed-effects models computed using lme4 and lmerTest highlighting the main and interaction effects of silver, chloride and day on three measures of microbial diversity. Significant differences are denoted by asterisk (*P* < 0.05\*, *P* < 0.01\*\*, *P* < 0.001\*\*\*).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Bacteria | | | | Fungi | | |
|  | Sobs | Chao1 | Shannon |  | Sobs | Chao1 | Shannon |
| Ag | <0.001\*\*\* | 0.001\*\* | <0.001\*\*\* |  | 0.118 | 0.267 | 0.121 |
| Cl | 0.129 | 0.092 | 0.142 |  | 0.902 | 0.116 | 0.069 |
| Day | 0.025\* | <0.001\*\*\* | 0.009\*\* |  | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* |
| Ag:Cl | 0.406 | 0.858 | 0.124 |  | 0.975 | 0.989 | 0.410 |
| Ag:Day | 0.076 | 0.098 | 0.325 |  | 0.619 | 0.513 | 0.258 |
| Cl:Day | 0.013\* | 0.005\*\* | 0.025\* |  | 0.003\*\* | 0.090 | <0.001\*\*\* |
| Ag:Cl:Day | 0.164 | 0.196 | 0.106 |  | 0.010\*\* | 0.133 | 0.003\*\* |