Table S2 – Results from AMOVA, GSI and IBD analyses. AMOVA analyses show the hierarchical partitioning scheme of locales within regions (**ΦSC**), locales within total distribution (**ΦST**), and between regions (**ΦCT**). Mantel *r* values are reported for the IBD analyses. Asterisks denote significant values (\* < 0.05 – 0.01; \*\* < 0.01 – 0.001; \*\*\* < 0.001).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Taxa** | **ΦSC** | **ΦST** | **ΦCT** | **GSIE** | **GSIW** | **IBD** |
| Fungi1 | -0.0790 | 0.0171 | 0.0891 | 0.1905 | 0.1026 | 0.8911 |
| Fungi2 | -0.1873 | 0.1595\*\* | 0.2920 | 0.2560\* | 0.2647\*\* | 0.6555 |
| Fungi3 | -0.0266 | 0.2030\*\* | 0.2237 | 0.1711 | 0.3750\* | 0.6687 |
| Fungi4 | 0.0035\*\*\* | 0.0025\*\* | -0.0010 | 0.0200 | 0.0400 | -0.2124 |
| Fungi5 | 0.0369 | 0.0472\* | 0.0108 | 0.1848\*\* | 0.0326 | 0.0021 |
| Fungi6 | -0.0021 | -0.0170 | -0.0149 | 0.1077 | 0.1919\*\*\* | -0.5135 |
| Fungi7 | 0.0350 | 0.0115 | -0.0243 | 0 | 0.0468 | -0.0657 |
| Fungi8 | -0.0340 | 0.0747\* | 0.1051 | 0.0744 | 0.0473 | 0.6378 |
| Fungi9 | 0.1850 | 0.0844 | -0.1235 | 0 | 0.0417 | -0.2010 |
| Fungi10 | 0.0200 | -0.0172 | -0.0380 | 0 | 0.0546 | -0.0680 |
| Fungi11 | -0.0041 | -0.0043 | -0.0001 | 0 | 0.0269 | 0.0450 |
| Fungi12 | 0.5276 | 0.5914\*\*\* | 0.1351 | 1\*\*\* | 0.7111\*\* | 0.8576 |
| Fungi13 | 0.0277 | 0.0382 | 0.0109 | 0 | 0.0972 | 0.6806\*\* |
| Fungi14 | 0.0063\* | 0.0152\*\*\* | 0.0089 | 0.0158 | 0.0421 | 0.5492\* |
| Fungi15 | -0.0538 | -0.0691 | -0.0145 | 0 | 0.0667 | -0.5888 |
| Amoebozoa1 | 0.0006 | -0.0043 | -0.0048 | 0 | 0.0163 | -0.4741 |
| Alveolata1 | NA | NA | NA | 0.1736 | 0 | NA |
| Nematoda1 | -0.3959 | -0.0960 | 0.2148 | 0.0474 | 0 | -0.0356 |
| Nematoda2 | 0.4389 | 0.0147 | -0.7560 | 0.1037 | 0.0270 | -0.6878 |
| Nematoda3 | NA | NA | NA | 0.1111 | 0 | NA |
| Insect1 | 0.6965\*\*\* | 0.4416\*\*\* | -0.8399 | 0.1930\*\* | 0.0555 | -0.3276 |
| Insect2 | 0.0548 | 0.0537 | -0.0011 | 0.1750 | 0.0579 | 0.4669 |
| Insect3 | 0.7490\*\*\* | 0.4277\*\*\* | -1.2799 | 0.1597 | 0.1209 | 0.1049 |
| Mite1 | 0.0099\*\* | 0.0198\*\*\* | 0.0100 | 0.1220\*\*\* | 0.0773\*\* | 0.1900 |
| Mite2 | -0.1093 | -0.0400 | 0.0625 | 0.2232 | 0.0938 | 0.2335 |
| Mite3 | 0.0098\*\*\* | 0.0232\*\*\* | 0.0135 | 0.2108\*\*\* | 0.1017\*\*\* | 0.6383 |
| Mite4 | 0.0181 | 0.0313 | 0.0134 | 0.2361\* | 0.1270 | 0.1497 |
| Mite5 | -0.1100 | -0.1131 | -0.0028 | 0.1406 | 0 | 0.3589 |
| Mite6 | 0.1470\*\* | 0.1250\*\* | -0.0257 | 0.1478 | 0.1600 | -0.1140 |
| Mite7 | 0.0447 | 0.0194 | -0.0265 | 0.0507 | 0.0963 | 0.3238 |
| Unknown | -0.1937 | -0.1484 | 0.0379 | 0.0681 | 0 | 0.2020 |
| Host plant | 0.7342\*\*\* | 0.9190\*\*\* | 0.6952\*\* | 1\*\*\* | 1\*\*\* | 0.6427\*\* |