|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Order** | **Pairwise comparison** | **Z score** | **p-value** | **Bonferroni corrected p-value** |
| **Thiotrichales** | 1 - 2 | 3.182 | 0.001 | 0.009 |
|  | 2 - 3 | -1.347 | 0.178 | 1 |
|  | 3 - 4 | -5.443 | < 0.001 | < 0.001 |
| **Campylobacterales** | 1 - 2 | -9.842 | < 0.001 | < 0.001 |
|  | 2 - 3 | -5.666 | < 0.001 | < 0.001 |
|  | 3 - 4 | 1.295 | 0.195 | 1 |
| **Alteromonadales** | 1 - 2 | -0.462 | 0.644 | 1 |
|  | 2 - 3 | -5.138 | < 0.001 | < 0.001 |
|  | 3 - 4 | -3.997 | < 0.001 | < 0.001 |
| **Bacteroidales** | 1 - 2 | 4.388 | < 0.001 | < 0.001 |
|  | 2 - 3 | 8.998 | < 0.001 | < 0.001 |
|  | 3 - 4 | 2.218 | 0.027 | 0.160 |
| **Flavobacteriales** | 1 - 2 | -3.394 | < 0.001 | 0.004 |
|  | 2 - 3 | -0.343 | 0.732 | 1 |
|  | 3 - 4 | 1.573 | 0.116 | 0.694 |
| **Desulfobacterales** | 1 - 2 | 4.857 | < 0.001 | < 0.001 |
|  | 2 - 3 | 6.503 | < 0.001 | < 0.001 |
|  | 3 - 4 | 2.755 | 0.006 | 0.035 |
| **Chromatiales** | 1 - 2 | 3.030 | 0.002 | 0.015 |
|  | 2 - 3 | 6.715 | < 0.001 | < 0.001 |
|  | 3 - 4 | 0.863 | 0.388 | 1 |
| **Pirellulales** | 1 - 2 | 3.699 | < 0.001 | 0.001 |
|  | 2 - 3 | 3.826 | < 0.001 | < 0.001 |
|  | 3 - 4 | 3.190 | 0.001 | 0.009 |
|  |  |  |  |  |