Table S2

Functional groups related to the carbon cycle.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Samples | Chemoheterotrophy | Aerobic chemoheterotrophy | Phototrophy | Photoautotrophy | Photoheterotrophy | Anoxygenic photoautotrophy S oxidizing | Anoxygenic photoautotrophy |
| PC | 26.526±2.90aA | 25.64±2.84aA | 1.75±0.09aA | 1.75±0.09aA | 1.28±0.23aA | 1.20±0.22aA | 1.21±0.22aA |
| PT | 31.565±3.96aA | 30.58±3.82aA | 1.16±0.25bB | 1.16±0.25bB | 0.74±0.29bA | 0.68±0.23bA | 0.68±0.26bA |
| PS | 31.73±0.44aA | 29.89±0.64aA | 0.90±0.04bB | 0.90±0.04bB | 0.79±0.04bA | 0.69±0.04bA | 0.69±0.04bA |
| Samples | Cellulolysis | Oxygenic photoautotrophy | Methylotrophy | Methanol oxidation | Hydrocarbon degradation | Methanotrophy |
| PC | 0.89±0.58aA | 0.47±0.14aA | 0.20±0.10bA | 0.17±0.07bB | 0.04±0.03aA | 0.04±0.03aA |
| PT | 0.67±0.19aA | 0.42±0.08aA | 0.21±0.10bA | 0.13±0.04bB | 0.08±0.07aA | 0.08±0.07aA |
| PS | 0.38±0.12aA | 0.11±0.02bB | 0.38±0.03aA | 0.33±0.04aA | 0.09±0.02aA | 0.05±0.02aA |

Note:

Data are means ± standard error (n =3). PC: *Populus* × *canadensis* Moench; PS: *Pinus* *sylvestris* var. *mongolica*; PT: *Pinus* *tabuliformis*. Different small letters meant significant difference at 0.05 level. Different big letters meant significant difference at 0.01 level