Table S3

Functional groups related to the nitrogen cycle.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Samples | nitrification | Nitrate reduction | Nitrogen respiration | Nitrate respiration | Aerobic nitrite oxidation | Aerobic ammonia oxidation |
| PC | 5.39±1.23aA | 3.81±0.24aA | 3.48±0.26aA | 3.47±0.25aA | 3.36±0.39aA | 2.03±0.84aA |
| PT | 4.60±1.37aA | 3.04±0.67abAB | 2.82±0.71abA | 2.77±0.67abA | 2.73±0.63abA | 1.87±0.827aA |
| PS | 4.26±0.44aA | 2.54±0.01bB | 2.23±0.08bA | 2.22±0.09bA | 2.29±0.173bA | 1.96±0.32aA |
| Samples | Nitrogen fixation | Nitrite respiration | Nitrate denitrification | Nitrite denitrification | Nitrous oxide denitrification | denitrification |
| PC | 1.15±0.325aA | 1.18±0.23aA | 1.18±0.23aA | 1.17±0.23aA | 1.17±0.23aA | 1.18±0.23aA |
| PT | 1.185±0.495aA | 0.73±0.29bA | 0.68±0.27bA | 0.68±0.27bA | 0.68±0.27bA | 0.68±0.27bA |
| PS | 0.995±0.13aA | 0.72±0.03bA | 0.71±0.03bA | 0.71±0.03bA | 0.71±0.03bA | 0.71±0.03bA |

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.