**Table S5**. Topsoil characteristics (mean ± standard deviation) of revegetated sites and mobile dune site in the southeastern fringe of the Tengger Desert, northern China. 0, 14, 23, 34, 43 and 50 represent sand-fixing years, respectively. Data from Li et al., (2007a).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Soil properties** | **0** | **14** | **23** | **34** | **43** | **50** |
| **Silt (%)** | 0.01±0.07 | 15.6±1.35 | 23.59±1.92 | 24.18±1.82 | 24.79±1.58 | 22.59±2.02 |
| **Clay (%)** | 0.22±0.28 | 4.54±2.20 | 4.87±0.97 | 5.34±0.87 | 6.93±1.12 | 11.01±0.83 |
| **Depth of soil and crusts (cm)** | 0 | 0.72±0.02 | 1.40±0.04 | 1.70±0.02 | 2.20±0.16 | 2.50±0.03 |
| **WHC (%)** | 9.32±1.38 | 11.27±2.12 | 13.38±2.26 | 15.44±1.35 | 16.87±1.62 | 16.22±1.71 |
| **Topsoil water content (%)** | 1.55±0.18 | 1.92±0.34 | 2.09±0.53 | 2.1±0.21 | 2.2±0.38 | 2.56±0.16 |
| **Bulk density (%)** | 1.53±0.02 | 1.52±0.02 | 1.50±0.02 | 1.50±0.02 | 1.47±0.03 | 1.44±0.02 |
| **pH** | 7.42±0.26 | 7.82±0.05 | 7.9±0.13 | 7.91±0.09 | 7.93±0.05 | 7.99±0.07 |
| **Organic C (g kg−1)** | 0.37±0.13 | 1.65±0.34 | 4.32±0.31 | 5.56±0.41 | 7.59±0.29 | 7.74±0.20 |
| **Total N ((g kg−1)** | 0.17±0.02 | 0.22±0.05 | 0.52±0.08 | 0.66±0.09 | 0.74±0.10 | 1.02±0.21 |
| **C:N ratio** | 2.17±0.83 | 7.50±2.94 | 8.31±1.51 | 8.42±1.12 | 10.49±1.47 | 7.94±2.05 |
| **Total P ((g kg−1)** | 0.40±0.06 | 0.44±0.05 | 0.71±0.03 | 0.72±0.02 | 0.75±0.02 | 0.77±0.02 |
| **Total K ((g kg−1)** | 0.11±0.04 | 0.99±0.13 | 1.17±0.09 | 1.23±0.10 | 1.25±0.09 | 1.32±0.05 |
| **EC (m s−1)** | 0.09±0.05 | 0.14±0.02 | 0.15±0.07 | 0.17±0.03 | 0.17±0.05 | 0.19±0.05 |
| **Total salt (g kg−1)** | 0.40±0.08 | 0.60±0.06 | 0.80±0.23 | 0.80±0.09 | 1.10±0.13 | 1.10±0.14 |
| **CaCO3 content ((g kg−1)** | 0.30±0.04 | 1.20±0.07 | 1.90±0.07 | 1.98±0.04 | 2.30±0.12 | 2.39±0.02 |
| **CEC (cmol kg−1)** | 3.68±0.35 | 3.84±0.27 | 3.84±0.25 | 3.74±0.23 | 3.71±0.23 | 3.69±0.17 |
| **Exchangeable cations K+ (cmol kg−1)** | 0.37±0.03 | 0.36±0.02 | 0.35±0.03 | 0.41±0.05 | 0.36±0.05 | 0.42±0.05 |
| **Exchangeable cation Na+ (cmol kg−1)** | 0.09±0.03 | 0.17±0.02 | 0.18±0.05 | 0.15±0.03 | 0.16±0.04 | 0.17±0.02 |

WHC, EC and CEC represent maximum water-holding capacity, electrical conductivity and cation exchange capacity, respectively.