**Table 1**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Treatments** | **Cell length (µm)** | **Cell width (µm)** | **Cell shape** | **Apical cell shape** |
| 4°C ;00L: 24D | 0.95±0.05 ***A*** | 1.02±0.08 ***A*** | Cylindrical, mostly isodiametric | Rounded with aerotopes |
| 4°C; 12L:12D | 2.1±0.13 ***B*** | 1.54±0.1 ***B*** | Cylindrical, some longer than wide | Rounded with aerotopes |
|  4°C; 16L:08D  | 2.85±0.1 ***C*** | 1.73±0.65 ***B, C*** | Cylindrical, mostly longer than wide | Rounded with aerotopes |
| 4°C; 24L:00D | 2.4±1.11 ***C*** | 1.8±0.05 ***C, D*** | Cylindrical, mostly longer than wide | Rounded with aerotopes |
| 15°C; 00L: 24D | 2.74±0.1 ***C*** | 1.7±0.05 ***B, C*** | Cylindrical, mostly isodiametric  | Rounded with aerotopes |
| 15°C; 12L:12D | 3.4±0.12 ***D*** | 2±0.05 ***D*** | Cylindrical, mostly longer than wide | Rounded with aerotopes |
| 15°C; 16L:08D | 1.9±0.12 ***C*** | 1.99±0.06 ***D*** | Cylindrical, mostly longer than wide | Rounded with aerotopes |
| 15°C; 24L:00D | 2.97±0.09 ***C*** | 3.01±0.06 ***B, C*** | Cylindrical, mostly longer than wide | Rounded with aerotopes |
| 25°C; 00L: 24D | 2.22±0.08 ***B*** | 1.59±0.06 ***B, C*** | Cylindrical, mostly longer than wide | Rounded with aerotopes |
|  25°C; 12L:12D | 5.7±0.07 ***E*** | 1.79±0.05 ***C, D*** | Cylindrical, mostly longer than wide | Rounded with aerotopes |
| 25°C; 16L:08D | 3.04±0.1 ***C*** | 3.2±0.11 ***E*** | Cylindrical, mostly longer than wide | Rounded with aerotopes |
| 25°C; 24L:00D | 2.82±0.08 ***C*** | 1.73±0.04 ***B, C*** | Cylindrical, mostly isodiametric | Rounded with aerotopes |

 Table 2

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Morphotypes | Acession number | Length of ITS | Spacer | tRNAIle | Spacer | tRNAAla | Spacer |
| *P*.cf.*amphigranulata* USMACC18 | MF754077 | 603 | 194 | 74 | 96 | 76 | 163 |
| *Pseudanabaena* sp. RK46 | KY379894 | 553 | 126 | 74 | 87 | 76 | 190 |
| *Pseudanabaena* sp. CCY0471 | EU119301 | 536 | 129 | 74 | 88 | 76 | 169 |
| *Pseudanabaena* sp. CCY9705 | EU119320 | 498 | 129 | 74 | 295 | - | - |
| *Pseudanabaena* sp. CCY9702 | EU119317 | 497 | 129 | 74 | 51 | 76 | 167 |
| *P. mucicola* KLL-C016 | KP726258 | 598 | 138 | 74 | 96 | 76 | 214 |
| *P. catenata* USMAC16 | KX668261 | 599 | 194 | 74 | 51 | 76 | 204 |
| *P. minima* GSE-PSE20-05C | HQ132935 | 507 | 139 | 74 | 51 | 73 | 170 |
| *Limnothrix redekei* CCAP 1443/1 | AJ580007 | 490 | 137 | 74 | 38 | 77 | 164 |

 Table 3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Morphotypes | Cell length (µm) | Cell width (µm) | Shape of apical cell | Aerotopes |
| *P*.cf.*amphigranulata* | 2–5 (7) | 1.2–2 (2.5) | Rounded | + |
| *P. mucicola* | 2.2-4 (6) | 1.2-2 (2.8) | Conical rounded | - |
| *P. catenata* | 2–5 | 1.2–2.2 | Rounded | - |
| *P. minima* | 1.5-4 | 1.3-2.5 | Rounded | - |
| *Limnothrix redekei* | (2.5) 6-16 | 1.2-2.5 (3.5) | Rounded | + |