**Supplementary Table 2.** Identity and the range of similarity and e-value of ≥ 50% of the sequences of each *Lophodermella* spp. and *Lophophacidium dooksii* generated from this study at the three loci as inferred from NCBI Basic Local Alignment Search Tool (BLAST).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sample Species** | **Sequences used for BLAST search (%)** | **Top BLAST ID hit** | **GenBank Accession** | **Similarity (%)** | **e-value** |
| **ITS** |
| *L. arcuata* | 100 | *L. arcuata* BPI842080 | AY465518.1 | 98.60 – 98.64  | 0.0 |
| *L. concolor* | 100 | Fungal Endophyte 5744 | DQ79779.1 | 85.78 – 87.89 | 8e-130 – 5e-122 |
| *L. conjuncta* | 100 | *Lophodermium pinastri* US2-2-2i | KY742594.1 | 84.42 – 84.72 | 7e-146 – 9e-140 |
| *L. montivaga* | 100 | *Lophophacidium dookisii* QFB14721N4 | KF889694.1 | 95.35 – 96.26 | 3e-158 – 0.0 |
| *L. sulcigena* | 100 | *L. dooksii* B13N3 | KF889704.1 | 95.4 | 0.0 |
| *Lophodermella* sp. | 100 | *L. dooksii* QFB14721N3 | KF889693.1 | 98.38 | 0.0 |
| *L. dooksii* | 100 | *L. dooksii* DAOM183323 | KF889652.1 | 98.94 | 0.0 |
| **LSU** |
| *L. arcuata* | 100 | *Coccomyces pinicola* HOU486A | KP322585.1 | 93.16 – 93.32  | 0.0 |
| *L. concolor* | 50 | *Lophodermium piceae* voucher Lantz 317 (UPS) | HM140551.1 | 92.28 – 93.14 | 0.0 |
| *L. conjuncta* | 67 | *Pseudographis elatina* voucher GJO:0090016 | MK781803.1 | 95.27 | 0.0 |
| *L. montivaga* | 93 | *Lophodermium* *nitidum* Lantz 435 (UPS) | HM140547.1 | 93.04 – 93.40 | 0.0 |
| *L. sulcigena* | 100 | *Lophodermium arundinaceum* Lantz 323 (UPS) | HM140535.1 | 94.16 | 0.0 |
| *Lophodermella* sp. | 100 | *Lophodermium* *nitidum* Lantz 435 (UPS) | HM140547.1 | 93.43 | 0.0 |
| *L. dooksii* | 100 | *Lophodermium* *nitidum* Lantz 435 (UPS) | HM140547.1 | 93.08 | 0.0 |
| **TEF1α** |
| *L. arcuata* | 100 | *Lophodermium resinosum* DAOMC 251482 | KY702582.1 | 94.24 – 94.25 | 0.0 |
| *L. concolor* | 100 | *Lophodermium* *resinosum* DAOMC 251482 | KY702582.1 | 94.18 - 94.30 | 0.0 |
| *L. conjuncta* | 100 | *Tryblidiopsis pinastri* AFTOL-ID 1319 | DQ471106.1 | 90.99-91.11 | 0.0 |
| *L. montivaga* | 82 | *Lophodermium* *resinosum* DAOMC 251482 | KY702582.1 | 94.99-95.15 | 0.0 |
| *L. sulcigena* | 100 | *Lophodermium* *resinosum* DAOMC 251482 | KY702582.1 | 95.03 | 0.0 |
| *Lophodermella* sp. | 100 | *Lophodermium* *resinosum* DAOMC 251482 | KY702582.1 | 94.99 | 0.0 |
| *L. dooksii* | 100 | *Lophodermium* *resinosum* DAOMC 251482 | KY702582.1 | 94.71 | 0.0 |