**Supplementary Table 1.** Sequences downloaded from NCBI GenBank and used in phylogenies.

|  |  |  |  |
| --- | --- | --- | --- |
| Species | Gene Region | Isolate/Strain/Voucher ID | GenBank Accession Number |
| *Bifusella camelliae* | LSU | HOU561 | KF797450.1 |
| *Bifusella linearis* | ITS | BPI843543 | AY465527.1 |
| *Bifusella linearis* | ITS | EBJul30-15 | KT000195.1 |
| *Chalara* sp. | ITS | MFLU 18-1812 | MK584986.1 |
| *Chalara* sp. | LSU | MFLU-18-1812 | MK592006.1 |
| *Chalara* sp. | ITS | MFLU 15-3167 | MK584995.1 |
| *Chalara* sp. | LSU | MFLU 15-3167 | MK591953.1 |
| *Chalara* sp. | TEF1α | MFLU 15-3167 | MK348529.1 |
| *Coccomyces mucronatus* | ITS | R73 | GU138732.1 |
| *Coccomyces strobi* | LSU | DAOMC251589 | MH457157.1 |
| *Coccomyces strobi* | TEF1α | AFTOL-ID1250 | DQ471099.2 |
| *Colpoma quercinum* | ITS | -- | U92306.1 |
| *Colpoma quercinum* | LSU | Lantz 368 (UPS) | HM140513.1 |
| *Cudonia confusa* | TEF1α | C315 | KC833384.1 |
| *Cudonia sichuanensis* | ITS | C328 | KC833122.1 |
| *Cudonia sichuanensis* | LSU | C328 | KC833220.1 |
| *Cudonia sichuanensis* | TEF1α | C328 | KC833386.1 |
| *Elytroderma deformans* | ITS | -- | AF203469.1 |
| Fungal Endophyte | ITS | 3277 | DQ979552.1 |
| Fungal Endophyte | LSU | 3277 | DQ79426.1 |
| Fungal Endophyte | ITS | 5744 | DQ979779.1 |
| *Hypoderma campanulatum* | LSU | ICMP: 17383 | HM140517.1 |
| *Hypoderma hederae* | LSU | Lantz & Minter 421 (UPS) | HM140522.1 |
| *Hypoderma minterii* | ITS | 275B/ BJTC201203 | JX232416.1 |
| *Hypoderma rubi* | ITS | PRJ R902 | JF683416.1 |
| *Lirula macrospora* | ITS | LM-CASTCBS | AF462441.1 |
| *Lirula macrospora* | LSU | 13 | HQ902152.1 |
| *Lophodermella arcuata* | ITS | BPI842080 | AY465518.1 |
| *Lophodermium australe* | ITS | 1 | EU934074.1 |
| *Lophodermium conigenum* | ITS | A08 | LC033959.1 |
| *Lophodermium culmigenum* | LSU | Lantz 442 (UPS) | HM140540.1 |
| *Lophodermium molitoris* | ITS | CV1\_3a | KM106803.1 |
| *Lophodermium nitidum* | LSU | Lantz 435 (UPS) | HM140547.1 |
| *Lophodermium sphaeroides* | LSU | Lantz 382 (UPS) | HM140556.1 |
| *Lophodermium picea* | ITS | P1 | KX009045.1 |
| *Lophodermium pinastri* | ITS | Yinggao | AY422490.1 |
| *Lophodermium* sp.  (*Lophodermium resinosum*) | ITS | JBT-2017a | KY485127.1 |
| *Lophodermium* sp.  (*Lophodermium resinosum*) | LSU | JBT-2017a/ NB-770-1/ DAOMC 251482 | KY485135.1/ NG\_060349.1 |
| *Lophodermium resinosum* | TEF1α | DAOMC 251482 | KY702582.1 |
| *Lophophacidium dooksii* | ITS | 737873 | KF889651.1 |
| *Lophophacidium dooksii* | ITS | B13N3 | KF889704.1 |
| *Meloderma desmazieresii* | ITS | -- | AF203470.1 |
| *Rhytisma acerinum* | ITS | Hou et al. 203 | GQ253100.1 |
| *Rhytisma punctatum* | ITS | WA-1 | MH507272.1 |
| *Rhytisma salicinum* | ITS | BPI843550 | AY465516.1 |
| *Spathularia flavida* subsp. *rufa* | ITS | H336 | KC833071.1 |
| *Spathularia flavida* subsp. *rufa* | LSU | H336 | KC833228.1 |
| *Spathularia flavida* subsp. *rufa* | TEF1α | H336 | KC833395.1 |
| *Spatularia velutipes* | TEF1α | S3/ JC32 | KC833431.1 |
| *Terriera minor* | LSU | Lantz & Minter 418 (UPS) | HM140569.1 |
| *Therrya fuckelii* | ITS | CBS 377.58 | JF683416.1 |
| *Therrya pini* | ITS | CBS 177.56 | MH857568.1 |
| *Therrya pini* | LSU | CBS 177.56 | MH869111.1 |
| *Tryblidiopsis pinastri* | ITS | CBS 445.71 | JF793678.1 |
| *Tryblidiopsis pinastri* | LSU | CBS 445.71 | MH871979.1 |
| *Tryblidiopsis pinastri* | TEF1α | AFTOL-ID 1319 | DQ471106.1 |