**Appendix S2**. List of taxa, specimen-vouchers or herbarium accessions numbers (see Thiers [continuously updated]), and DNA sequences produced (in bold) or analyzed during this study.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Taxa** | **Specimen-voucher or Herb. accession no.** | **GenBank accession nos.** | | | |
| **28S** | **18S** | ***rpb2*** | **ITS** |
| *Alloclavaria purpurea* | BD299 | DQ284900 | — | — | — |
| *Alloclavaria purpurea* | DJM1317 | DQ284899 | — | — | — |
| *Alloclavaria purpurea* | H 6034547 | **MF318904** | **MF318994** | — | **MF319052** |
| *Alloclavaria purpurea* | H 6034567 | **MF318894** | **MF318987** | — | **MF319053** |
| *Alloclavaria purpurea* | H 6047394 | **MF318895** | **MF318986** | — | **MF319044** |
| *Alloclavaria purpurea* | H 6047434 | **MF318893** | **MF318988** | — | **MF319054** |
| *Alloclavaria purpurea* | H 6047663 | **MF318905** | **MF318995** | — | **MF319055** |
| *Alloclavaria purpurea* | PBM2731 (WTU) | DQ457657 | DQ437679 | — | — |
| *Atheloderma mirabile* | TAA 169235 | DQ873592 | — | — | — |
| *Auricularia subglabra* | JGI TFB10046 v1.0 | JGI 60553 | JGI 60553 | JGI 60553 | — |
| *Basidioradulum radula* | GEL2493 | AY700184 | AY771611 | — | — |
| *Bjerkandera adusta* | JGI HHB-12826-sp v1.0 | JGI 74757 | JGI 74757 | JGI 74757 | — |
| *Blasiphalia pseudogrisella* | H 6059312 | **MF318898** | **MF318989** | — | **MF319047** |
| *Blasiphalia pseudogrisella* | H 7031951 | **MF318899** | **MF318990** | — | **MF319048** |
| *Blasiphalia pseudogrisella* | Lutzoni 930728-3 | U66437 | — | — | U66437 |
| *Cantharellopsis prescotii* | H 6035464 | **MF318901** | **MF318992** | — | **MF319050** |
| *Cantharellopsis prescotii* | HRL2135 (TENN) | **MF318900** | **MF318991** | — | **MF319049** |
| *Coltricia perennis* | H 6002974 | **MF318907** | **MF318996** | **MF288856** | **MF319056** |
| *Coltricia perennis* | H 6013608 | **MF318908** | **MF318997** | **MF288857** | — |
| *Coltricia perennis* | H 6029159 | **MF318909** | **MF318998** | — | **MF319057** |
| *Coltricia perennis* | H 6049336 | **MF318910** | **MF318999** | **MF288858** | **MF319058** |
| *Contumyces rosellus* | MGW1462 (TENN) | **MF318912** | **MF319001** | **MF288859** | **MF319059** |
| *Contumyces rosellus* | Redhead 7501 | U66452 | — | — | U66452 |
| *Contumyces vesuvianus* | TUR 203608 | **MF318913** | **MF319002** | **MF288860** | — |
| *Cotylidia aurantiaca* var. *alba* | RV.PR98/28 | AF261458 | — | — | — |
| *Cotylidia pannosa* | H 6059288 | **MF318916** | **MF319000** | — | **MF319061** |
| *Cotylidia* sp. | MB5 | AY629317 | AY705958 | — | — |
| *Fibricium rude* | GEL2121 | AY700202 | AY654888 | — | — |
| *Fomitiporia aethiopica* | MUCL 44777 | AY618204 | — | JQ087956 | — |
| *Fomitiporia australiensis* | MUCL 49406 | GU462001 | — | JQ087959 | — |
| *Fomitiporia calkinsii* | MUCL 51100 | JQ087902 | — | JQ087963 | — |
| *Fomitiporia cupressicola* | MUCL 52486 | JQ087904 | — | JQ087965 | — |
| *Fomitiporia hippophaeicola* | MUCL 31747 | JQ461977 | — | JQ087977 | — |
| *Fomitiporia ivindoensis* | MUCL 51312 | GU461978 | — | JQ087979 | — |
| *Fomitiporia mediterranea* | AFTOL-ID 688 | AY684157 | AY662664 | AY803748 | — |
| *Fomitiporia mediterranea* | JVI v1.0 | JGI 56107 | JGI 56107 | JGI 56107 | — |
| *Fomitiporia nobilissima* | MUCL 47580 | GU461985 | — | JQ087986 | — |
| *Fomitiporia* sp. | ML46 | AB777980 | — | AB778012 | — |
| *Fomitiporia* sp. | MUCL 51105 | JQ087911 | — | JQ087991 | — |
| *Fomitiporia* sp. | MUCL 51464 | JX093842 | — | JX093884 | — |
| *Fomitiporia* sp. | MUCL 52350 | JQ087912 | — | JQ087992 | — |
| *Fomitiporia* sp. | MUCL 53114 | JX093836 | — | JX093880 | — |
| *Fomitiporia* sp. | MUCL 53705 | JX093840 | — | JX093882 | — |
| *Fomitiporia* sp. | MUCL FG10282 | JQ087916 | — | JQ087996 | — |
| *Fomitiporia* sp. PS5 | MUCL53797 | JX093854 | — | JX093896 | — |
| *Fomitiporia* sp. PS6 | MUCL 53798 | JX093855 | — | JX093897 | — |
| *Fomitiporia* sp. | TH8904 | JX093838 | — | JX093794 | — |
| *Fomitiporia tabaquilio* | MUCL 47754 | GU461994 | — | JQ088009 | — |
| *Fomitiporia texana* | MUCL 47690 | JQ087921 | — | JQ088013 | — |
| *Globulicium hiemale* | Hjm 19007 | DQ873595 | DQ873594 | — | DQ873595 |
| *Globulicium hiemale* | KHL 961221 | EU118626 | — | — | — |
| *Hydnochaete duportii* | CBS939.96 | AY635770 | AY662669 | — | — |
| *Hymenochaete corrugata* | FP-104124-sp | AF518620 | AF518579 | — | — |
| *Hyphoderma capitatum* | KHL 8464 | DQ677491 | — | — | — |
| “*Hyphoderma* *orphanellum*” | GEL 3251 | DQ340376 | — | — | — |
| *Hyphodontia* sp. | H Berglund 1117 | DQ873634 | DQ873632 | — | — |
| *Inonotus hispidus* | FPL-3597 | AF518623 | AF026584 | — | — |
| *Inonotus hispidus* | S45 | EU282484 | EU282483 | — | — |
| *Leifia flabelliradiata* | KG Nilsson 36270 | DQ873635 | — | — | — |
| *Loreleia marchantiae* | Lutzoni 930826-1 | U66432 | — | — | — |
| *Loreleia postii* | R. Saarenoksa 48384 | **MF318927** | **MF319005** | — | **MF319071** |
| *Muscinupta laevis* | H 6003362 | **MF318928** | — | **MF288862** | **MF319072** |
| *Muscinupta laevis* | H 6059292 | **MF318921** | **MF319004** | **MF288861** | **MF319066** |
| *Mycoacia pinicola* | KHL 12224 | DQ873637 | DQ873636 | — | — |
| *Odonticium romellii* | H 6059319 | **MF318929** | — | — | **MF319073** |
| *Odonticium romellii* | H 6059330 | **MF318932** | — | — | — |
| *Odonticium romellii* | KHL s.n. – 1514a | DQ873639 | DQ873638 | — | — |
| *Onnia scaura* | JGI P | JGI 245618 | JGI 245618 | JGI 245618 | — |
| *Onnia tomentosa* | H 6048516 | **MF318931** | **MF319006** | — | **MF319075** |
| *Oxyporus corticola* | KHL 13217 | DQ873641 | DQ873640 | — | — |
| *Oxyporus corticola* | UPM-G4 | — | JF972586 | — | — |
| *Oxyporus corticola* | UPM-K1 | — | JF972589 | — | — |
| *Oxyporus populinus* | FO35584 | AJ406467 | — | — | — |
| *Oxyporus* sp. | DSH93-188 | AF287877 | AF026616 | — | — |
| *Peniophorella echinocystis* | KHL 6284 | DQ681200 | — | — | — |
| *Peniophorella guttulifera* | NH 12012 | AY586667 | — | — | — |
| *Peniophorella praetermissa* | GEL 2181 | AY700185 | AY707094 | — | — |
| *Peniophorella pubera* | KHL 13154 | DQ873599 | DQ873598 | — | DQ873599 |
| *Peniophorella pubera* | NH 13228 | DQ677502 | — | — | DQ677502 |
| *Phellinus laevigatus* | KCTC 6229 | AF458460 | AY178020 | — | — |
| *Phellinus lundelii* | WEN1 | KC551859 | — | KU139302 | — |
| *Phellinus johnsonianus* | ATCC 60051 | AF458458 | QY178015 | — | — |
| *Phellinus nigricans* | H 6012648 | **MF318933** | **MF319007** | — | — |
| *Phellinus rhabarbarinus* | ATCC 26713 | AF458466 | AY178016 | — | — |
| *Phlebia brevispora* | JGI HHB-7030 v1.0 | JGI 64423 | JGI 64423 | JGI 64423 | — |
| *Phlebia georgica* | KHL 12019 | DQ873645 | DQ873644 | — | — |
| *Polyporus brumalis* | JGI BRFM 1820 v1.0 |  |  |  |  |
| *Porodaedalea niemelaei* | JGI PN7 | JGI 333975 | JGI 333975 | JGI 333975 | — |
| *Punctularia strigosozonata* | JGI HHB-11173 v1.0 | JGI 52407 | JGI 52407 | JGI 52407 | — |
| *Ramaria rubella* | JGI UT-36052-T v1.0 | JGI 196021 | JGI 196021 | JGI 196021 | — |
| *Repetobasidium conicum* | KHL 12338 | DQ873647 | DQ873646 | — | — |
| *Repetobasidium mirificum* | FP-133558-sp | AY293208 | AY293155 | — | — |
| *Resinicium bicolor* | FP-135104-sp. | AF518645 | AF518588 | — | — |
| *Resinicium bicolor* (as “*Hyphodontia alutaria*”) | GEL2071 | AF393061 | AF026615 | AY218490 | — |
| *Resinicium bicolor* | GEL4664 | AY700183 | — | — | — |
| *Resinicium bicolor* | H 6012328 | **MF318935** | — | — | **MF319078** |
| *Resinicium bicolor* | H 6013629 | **MF318937** | — | — | — |
| *Resinicium bicolor* | HHB10108 | — | DQ834914 | — | — |
| *Resinicium bicolor* | NH11540 | AY586709 | — | — | — |
| *Resinicium chiricahuaense* | JLL-14605 | DQ863692 | DQ834912 | — | — |
| *Resinicium friabile* | FP-102983 | DQ863690 | DQ834915 | — | — |
| *Resinicium furfuraceum* | FP-101917 | DQ863696 | DQ834913 | — | — |
| *Resinicium meridionale* | FP110438 | — | DQ834910 | — | — |
| *Resinicium meridionale* | FP-150236 | AY293197 | AY293142 | — | — |
| *Resinicium meridionale* | FP-150352 | DQ863693 | — | — | — |
| *Resinicium meridionale* | FP150352 | KX065986 | DQ974210 | — | — |
| *Resinicium mutabile* | FP102989 | DQ863699 | DQ834917 | — | — |
| *Resinicium pinicola* | KUC20121109-05 | KJ668316 | — | — | — |
| *Resinicium saccharicola* | FP-102754 | DQ863691 | DQ834916 | — | — |
| *Rickenella fibula* | BPL872 (TENN) | **MF318939** | **MF319010** | **MF288863** | — |
| *Rickenella fibula* | H 6019327 | **MF318949** | **MF319027** | — | **MF319088** |
| *Rickenella fibula* | H 6034921 | **MF318945** | **MF319028** | — | **MF319089** |
| *Rickenella fibula* | H 6059291 | **MF318947** | **MF319016** | **MF288869** | **MF319091** |
| *Rickenella fibula* | H 6059302 | **MF318948** | **MF319025** | — | **MF319092** |
| *Rickenella fibula* | HBK013 (TENN) | **MF318941** | **MF319012** | **MF288865** | **MF319081** |
| *Rickenella fibula* | HBK014 (TENN) | **MF318942** | **MF319013** | **MF288866** | **MF319082** |
| *Rickenella fibula* | HBK015 (TENN) | **MF318943** | **MF319014** | **MF288867** | **MF319083** |
| *Rickenella fibula* | HBK016 (TENN) | **MF318944** | **MF319015** | **MF288868** | **MF319084** |
| *Rickenella fibula* | HBK330 v1.0 (TENN) | JGI 333301 | JGI 333301 | JGI 333301 | JGI 333301 |
| *Rickenella fibula* | HBK M.2 (TENN) | — | — | — | **MG273682** |
| *Rickenella fibula* | HBK M.8 (TENN) | — | — | — | **MG321262** |
| *Rickenella fibula* | JMB101914-06 (TENN) | **MF318950** | **MF319017** | **MF288871** | **MF319086** |
| *Rickenella fibula* | JMB101914-07 (TENN) | **MF318951** | **MF319018** | **MF288872** | **MF319087** |
| *Rickenella fibula* | MES950 (FLAS) | **MF318957** | **MF319024** | **MF288877** | **MF319096** |
| *Rickenella fibula* | MGW992 (TENN) | **MF318952** | **MF319020** | **MF288873** | — |
| *Rickenella fibula* | PBM2503 (TENN) | **MF318953** | **MF319021** | — | — |
| *Rickenella fibula* | PBM2503 AFTOL-ID 486 (TENN) | AY700195 | AY771599 | DQ408115 | DQ241782 |
| *Rickenella fibula* | PBM2506 (TENN) | **MF318954** | **MF319022** | **MF288874** | **MF319093** |
| *Rickenella fibula* | RAS051 9TENN) | **MF318972** | **MF319019** | **MF288875** | **MF319094** |
| *Rickenella fibula* | SAT11-173-02 (TENN) | **MF318955** | **MF319029** | **MF288878** | — |
| *Rickenella fibula* | TFB12057 (TENN) | **MF318973** | **MF319026** | — | **MF319095** |
| *Rickenella fibula* | TFB13109 (TENN) | **MF318938** | **MF319023** | **MF288876** | — |
| *Rickenella fibula* | TFB13157 (TENN) | **MF318974** | — | — | — |
| *Rickenella fibula* | TFB13163 (TENN) | **MF319041** | **MF318975** | — | — |
| *Rickenella fibula* | GG154\_88 | — | — | — | GU234163 |
| *Rickenella* “*fibula*” | PDD 95782 | — | — | — | JQ694100 |
| *Rickenella indica* | K(M) 190585 | — | — | — | KJ187769 |
| *Rickenella mellea* | SZMC22713 v1.0 | JGI 334780 | JGI 334780 | JGI 334780 | — |
| *Rickenella mellea* | Lamoure 74-20h 1/9.91 | U66438 | — | — | U66438 |
| *Rickenella mellea* | BSI 13/255 | — | — | — | KR606033 |
| *Rickenella mellea* (as “*fibula*”) | HBK012 (TENN) | **MF318940** | **MF319011** | **MF288864** | **MF319080** |
| *Rickenella minuta* I | MES1054 (FLAS) | **MF318965** | **MF319033** | **MF288879** | **KY559319** |
| *Rickenella minuta* I | MES1535 (FLAS) | **MF318958** | **MF319034** | **MF288883** | **KY559316** |
| *Rickenella minuta* I | MES1558 (FLAS) | **MF318969** | **MF319038** | **MF288885** | **KY559320** |
| *Rickenella minuta* I | MES1656 (FLAS) | **MF318962** | **MF319036** | **MF288884** | **MF319103** |
| *Rickenella minuta* I | MES1781 (FLAS) | **MF318959** | **MF319031** | **MF288882** | **KY559323** |
| *Rickenella minuta* I | MES1891 (FLAS) | **MF318961** | **MF319037** | **MF288887** | **KY559315** |
| *Rickenella minuta* I | MES2110 (FLAS) | **MF318960** | **MF319035** | — | **KY559318** |
| *Rickenella minuta* II | MES1259 (FLAS) | **MF318967** | — | **MF288880** | **KY559322** |
| *Rickenella minuta* II | MES1892 (FLAS) | **MF318966** | **MF319032** | **MF288881** | **KY559324** |
| *Rickenella minuta* II | MES1950 (FLAS) | **MF318964** | **MF319039** | **MF288888** | **KY559314** |
| *Rickenella minuta* II | MES1965 (FLAS) | **MF318963** | **MF319040** | **MF288886** | **KY559321** |
| *Rickenella minuta* II | MES2168 (FLAS) | **MF318970** | — | **MF288889** | **KY559317** |
| *Rickenella minuta* II | TFB8524 (TENN) | — | — | — | **KY352655** |
| *Rickenella minuta* II | TFB8526 (TENN) | **MF318956** | **MF319030** | — | **KY559327** |
| *Rickenella minuta* II | TFB8528 (TENN) | — | — | — | **KY352654** |
| *Rickenella minuta* II | C252 | — | — | — | KC759484 |
| *Rickenella minuta* II | C6b10.7yRicken.Arg\_Co | — | — | — | JX316244 |
| *Rickenella minuta* II | CHA15z | — | — | — | JX316513 |
| *Rickenella setipes* | H 6019330 | — | — | — | **MF319109** |
| *Rickenella setipes* | H 6059301 | — | — | — | **MF319111** |
| *Rickenella setipes* | GG119\_88 | — | — | — | GU234136 |
| *Rickenella* sp. | FUNNZ2017/1686 | — | — | — | **MF461619** |
| *Rickenella swartzii* | HBK017 (TENN) | **MF318976** | **MF319042** | — | **MF319085** |
| *Rickenella swartzii* | HRL1399 (TENN) | **MF318977** | — | — | **MF319112** |
| *Rickenella* “*swartzii*” | HRL1452 (TENN) | **MF318978** | — | — | **MF319113** |
| *Rickenella swartzii* | MGW1341 (TENN) | **MF318980** | **MF319043** | — | **MF319114** |
| *Schizopora paradoxa* | JGI KUC8140 v1.0 | JGI 239088 | JGI 239088 | JGI 239088 | — |
| *Skvortzovia furfurella* | HHB-3173 | DQ863695 | DQ834911 | — | — |
| *Skvortzovia furfurella* | KHL 10180 | DQ873649 | — | — | — |
| *Sphagnomphalia brevibasidiata* | Lutzoni 930826-1 | U66441 | — | — | — |
| *Trichaptum abietinum* | FPL-8973 | AF518659 | AF026585 | — | — |
| *Trichaptum abietinum* | GEL5237 | AJ406473 | — | — | — |
| *Trichaptum abietinum* | JGI | JGI 406473 | JGI 406473 | JGI 406473 | — |
| *Tsugacorticium kenaicum* | CFMR HHB17347 | JN368221 | JN368234 | — | — |
| *Tubulicrinis subulatus* | GEL5286 | AJ406448 | — | — | — |
| *Tubulicrinis subulatus* | KHL11079 | AY586722 | — | — | — |
| *Xylodon* sp. | CFMR FP102957 | JN368220 | JN368233 | — | — |