**Table S3.** Strains used in the phylogenetic analysis of hosts and regional distribution of *Alternaria alternata* (sect. *Alternaria*) and their corresponding GenBank numbers, including two outgroup taxa (*Alternaria eichhorniae* CBS 489.92 and CBS 119778). The type strains are indicated by superscript “T” and the reference strains are indicated by superscript “R”. The newly generated sequences are indicated in blue.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Strain number (Taxa name)** | **Origin** | **Host** | **GenBank accession numbers** | | | | | | |
| **ITS** | **LSU** | **SSU** | ***TEF1-α*** | ***RPB2*** | ***GAPDH*** | ***Alt-a1*** |
| IT1994 | Italy | *Reseda* sp. | MZ960790 | MZ960839 | MZ961487 | MZ960887 | MZ961532 | MZ961397 | MZ961442 |
| IT 2053 | Italy | *Sonchus* sp. | MZ960758 | MZ960807 | MZ961455 | MZ960855 | MZ961500 | MZ961365 | MZ961410 |
| IT 2063 | Italy | *Centaurea* sp. | MZ960759 | MZ960808 | MZ961456 | MZ960856 | MZ961501 | MZ961366 | MZ961411 |
| IT 2064 | Italy | *Centaurea* sp. | MZ960760 | MZ960809 | MZ961457 | MZ960857 | MZ961502 | MZ961367 | MZ961412 |
| IT 2087 | Italy | *Agropyron* sp. | MZ960761 | MZ960810 | MZ981458 | MZ960858 | MZ961503 | MZ961388 | MZ961413 |
| IT 2090 | Italy | *Robinia* sp*.* | MZ960762 | MZ960811 | MZ961459 | MZ960859 | MZ961504 | MZ961369 | MZ961414 |
| IT 2103 | Italy | *Echinochloa* sp*.* | MZ960763 | MZ960812 | MZ961460 | MZ960860 | MZ961505 | MZ961370 | MZ961415 |
| IT 2114 | Italy | *Cephalaria* sp. | MZ960764 | MZ960813 | MZ961561 | MZ960861 | MZ961506 | MZ961371 | MZ961416 |
| IT 2115 | Italy | *Aster* sp. | MZ960765 | MZ960814 | MZ961462 | MZ960862 | MZ961507 | MZ961372 | MZ961417 |
| IT 2125 | Italy | *Euphorbia* sp. | MZ960766 | MZ960815 | MZ961463 | MZ960863 | MZ961508 | MZ961373 | MZ961418 |
| IT 2143 | Italy | *Ailanthus* sp. | MZ960767 | MZ960816 | MZ961464 | MZ960864 | MZ961509 | MZ961374 | MZ961419 |
| IT 2144 | Italy | *Agrostis* sp. | MZ960768 | MZ960817 | MZ961465 | MZ960865 | MZ961510 | MZ961375 | MZ961420 |
| IT 2145 | Italy | *Arundo* sp. | MZ960769 | MZ960818 | MZ961466 | MZ960866 | MZ961511 | MZ961376 | MZ961421 |
| IT 2162 | Italy | *Hedysarum* sp. | MZ960770 | MZ960819 | MZ961467 | MZ960867 | MZ961512 | MZ961377 | MZ961422 |
| IT 2166 | Italy | *Dipsacus* sp. | MZ960771 | MZ960820 | MZ961468 | MZ960868 | MZ961513 | MZ961378 | MZ961423 |
| IT 2277 | Italy | *Salsola tragus* | MZ960772 | MZ960821 | MZ961469 | MZ960869 | MZ961514 | MZ961379 | MZ961424 |
| IT 2347 | Italy | *Fraxinus oxycarpa* | MZ960773 | MZ960822 | MZ961470 | MZ960870 | MZ961515 | MZ961380 | MZ961425 |
| IT 2427 | Italy | *Wisteria* sp. | MA960774 | MZ960823 | MZ961471 | MZ960871 | MZ961516 | MZ961381 | MZ961426 |
| IT 2454 | Italy | *Urtica* sp. | MZ960775 | MZ960824 | MZ961472 | MZ760872 | MZ961517 | MZ961382 | MZ961427 |
| IT 2900 | Italy | *Pinus nigra* | MZ960776 | MZ960825 | MZ961473 | MZ960873 | MZ861518 | MZ961383 | MZ961428 |
| IT 3048 | Italy | *Acer opalus* | MZ960777 | MZ960826 | MZ961474 | MZ960874 | MZ961519 | MZ961384 | MZ961429 |
| IT 3160 | Italy | *Citrus paradisi* | MZ960778 | MZ960827 | MZ961475 | MZ960875 | MZ961520 | MZ961385 | MZ961430 |
| IT 3168 | Italy | *Ostrya carpinifolia* | MZ960779 | MZ960828 | MZ961476 | MZ960876 | MZ961521 | MZ961386 | MZ961431 |
| IT 3419 | Italy | *Calamintha nepeta* | MZ960780 | MZ960829 | MZ961477 | MZ960877 | MZ961522 | MZ961387 | MZ961432 |
| IT 3426 | Italy | *Malva alcea* | MZ960781 | MZ960830 | MZ961478 | MZ960878 | MZ961523 | MZ961388 | MZ961433 |
| IT 3439 | Italy | *Reseda luteola* | MZ960782 | MZ960831 | MZ961479 | MZ960879 | MZ961524 | MZ961389 | MZ961434 |
| IT 3442 | Italy | *Valeriana* sp. | MZ960783 | MZ960832 | MZ961480 | MZ960880 | MZ961525 | MZ961390 | MZ961435 |
| IT 3449 | Italy | *Tanacetum* sp. | MZ960784 | MZ960833 | MZ961481 | MZ960881 | MZ961526 | MZ961391 | MZ961436 |
| IT 3504 | Italy | *Orobanche* sp. | MZ960785 | MZ960834 | MZ961482 | MZ960882 | MZ961527 | MZ961392 | MZ961437 |
| IT 3556 | Italy | *Sorbus aria* | MA960786 | MZ960835 | MZ961483 | MZ960883 | MZ961528 | MZ961393 | MZ961438 |
| IT 3598 | Italy | *Quercus pubescens* | MZ960787 | MZ960836 | MZ961484 | MZ960884 | MZ961529 | MZ961394 | MZ961439 |
| IT 3651 | Italy | *Sambucus nigra* | MZ960788 | MZ960837 | MZ961485 | MZ960885 | MZ961530 | MZ961395 | MZ961440 |
| CBS 102596  (=*A. citrimacularis*T) | USA | *Citrus jambhiri* | KP124328 | KP124480 | KP124950 | KP125104 | KP124796 | KP124183 | KP123877 |
| CBS 102599 (=*A. turkisafria*T) | Turkey | *Minneola tangelo* | KP124330 | KP124482 | KP124952 | KP125106 | KP124798 | KP124185 | KP123879 |
| CBS 102600 (=*A. toxicogenica*T) | USA | *Citrus reticulate* | KP124331 | KP124483 | KP124953 | KP125107 | KP124799 | KP124186 | KP123880 |
| CBS 102602 (=*A. perangusta*T) | Turkey | *Minneola tangelo* | KP124332 | KP124484 | KP124954 | KP125108 | KP124800 | KP124187 | KP123881 |
| CBS 102603 (=*A. interrupta*T) | Israel | *Minneola tangelo* | KP124333 | KP124485 | KP124955 | KP125109 | KP124801 | KP124188 | KP123882 |
| CBS 102604 (=*A. dumosa*T) | Israel | *Minneola tangelo* | KP124334 | KP124486 | KP124956 | KP125110 | KP124802 | AY562410 | AY563305 |
| CBS 106.24 (=*A. mali*T) | USA | *Malus sylvestris* | KP124298 | KP124449 | KP124919 | KP125073 | KP124766 | KP124155 | KP123847 |
| CBS 106.34 (=*A. lini*T) | Unknown | *Linum usitatissimum* | Y17071 | KP124454 | KP124924 | KP125078 | KP124771 | JQ646308 | KP123853 |
| CBS 112252 (=*A. tenuissima*) | Unknown | Unknown | KP124340 | KP124492 | KP124962 | KP125116 | KP124808 | KP124194 | KP123888 |
| CBS 113013 (=*A. tenuissima*) | South Africa | *Malus domestica* | KP124341 | KP124493 | KP124963 | KP125117 | KP124809 | KP124195 | KP123889 |
| CBS 113014 (=*A. tenuissima*) | South Africa | *Malus domestica* | KP124342 | KP124494 | KP124964 | KP125118 | KP124810 | KP124196 | KP123890 |
| CBS 113015 (=*A. tenuissima*) | South Africa | *Malus domestica* | KP124343 | KP124495 | KP124965 | KP125119 | KP124811 | KP124197 | KP123891 |
| CBS 113024 | South Africa | *Minneola tangelo* | KP124344 | KP124496 | KP124966 | KP125120 | KP124812 | KP124198 | KP123892 |
| CBS 113025 | South Africa | *Citrus clementina* | KP124345 | KP124497 | KP124967 | KP125121 | KP124813 | KP124199 | KP123893 |
| CBS 113054 (=*A. tenuissima*) | South Africa | *Malus domestica* | KP124346 | KP124498 | KP124968 | KP125122 | KP124814 | KP124200 | KP123894 |
| CBS 115069 (=*A. tenuissima*) | South Africa | *Malus domestica* | KP124347 | KP124499 | KP124969 | KP125123 | KP124815 | KP124201 | KP123895 |
| CBS 115199 | South Africa | *Minneola tangelo* | KP124351 | KP124503 | KP124973 | KP125127 | KP124819 | KP124205 | KP123899 |
| CBS 115200 | South Africa | *Minneola tangelo* | KP124352 | KP124504 | KP124974 | KP125128 | KP124820 | KP124206 | KP123900 |
| CBS 116749 | Netherlands | Unknown | KP124353 | KP124505 | KP124975 | KP125129 | KP124821 | KP124207 | KP123901 |
| CBS 117.44 (=*A. godetiae*T) | Denmark | *Godetia* sp. | KP124303 | KP124455 | KP124925 | KP125079 | KP124772 | KP124160 | KP123854 |
| CBS 117130 | Italy | *Arbutus unedo* | KP124354 | KP124506 | KP124976 | KP125130 | KP124822 | KP124208 | KP123902 |
| CBS 117143 | Italy | *Capsicum annuum* | KP124355 | KP124507 | KP124977 | KP125131 | KP124823 | KP124209 | KP123903 |
| CBS 119115 | Greece | *Prunus* sp. | KP124360 | KP124512 | KP124982 | KP125136 | KP124828 | KP124214 | KP123909 |
| CBS 119399 (=*A. postmessia*T) | USA | *Minneola tangelo* | KP124361 | KP124513 | KP124983 | KP125137 | KP124829 | JQ646328 | KP123910 |
| CBS 119543 (=*A. citricancri*T) | USA | *Citrus paradisi* | KP124363 | KP124515 | KP124985 | KP125139 | KP124831 | KP124215 | KP123911 |
| CBS 119778 (=*A. eichhorniae*) | India | *Eichhornia crassipes* | KC146356 | KP124579 | KP125049 | KP125204 | KP124895 | KP124276 | KP123973 |
| CBS 120829 | Greece | *Punica granatum* | KP124364 | KP124516 | KP124986 | KP125140 | KP124832 | KP124216 | KP123912 |
| CBS 121344 (=*A. turkisafria*R) | Israel | *Minneola tangelo* | KP124365 | KP124518 | KP124988 | KP125142 | KP124834 | KP124217 | KP123913 |
| CBS 121346 (=*A. turkisafria*R) | South Africa | *Minneola tangelo* | KP124366 | KP124519 | KP124989 | KP125143 | KP124835 | KP124218 | KP123914 |
| CBS 121455  (=*A. broussonetiae*T) | China | *Broussonetia papyrifera* | KP124368 | KP124522 | KP124992 | KP125146 | KP124838 | KP124220 | KP123916 |
| CBS 121492  (=*Ulocladium cucumisis*) | China | *Cucumis melo* | KP124370 | KP124524 | KP124994 | KP125148 | KP124840 | KP124222 | KP123918 |
| CBS 121544 (=*A. caudata*R) | USA | *Cucumis sativus* | KP124371 | KP124525 | KP124995 | KP125149 | KP124841 | KP124223 | KP123919 |
| CBS 121547  (=*A. yali-inﬁciens*T) | China | *Pyrus bretschneideri* | KP124372 | KP124526 | KP124996 | KP125150 | KP124842 | KP124224 | KP123920 |
| CBS 124277 (=*A. tenuissima*) | Denmark | *Prunus* sp. | KP124373 | KP124527 | KP124997 | KP125151 | KP124843 | KP124225 | KP123921 |
| CBS 124278 (=*A. tenuissima*) | Denmark | *Prunus* sp. | KP124374 | KP124528 | KP124998 | KP125152 | KP124844 | KP124226 | KP123922 |
| CBS 125606 | India | Human | KP124375 | KP124529 | KP124999 | KP125153 | KP124845 | KP124227 | KP123923 |
| CBS 126071 (=*A. tenuissima*) | Namibia | Soil | KP124376 | KP124530 | KP125000 | KP125154 | KP124846 | KP124228 | KP123924 |
| CBS 126910 (=*A. tenuis*) | USA | Soil | KP124379 | KP124533 | KP125003 | KP125157 | KP124849 | KP124231 | KP123927 |
| CBS 127334 | USA | Soil | KP124380 | KP124534 | KP125004 | KP125158 | KP124850 | KP124232 | KP123928 |
| CBS 127671 (=*A. seleniiphila*T) | USA | *Stanleya pinnata* | KP124381 | KP124535 | KP125005 | KP125159 | KP124851 | KP124233 | KP123929 |
| CBS 127672 (=*A. astragali*T) | USA | *Astragalus bisulcatus* | KP124382 | KP124536 | KP125006 | KP125160 | KP124852 | KP124234 | KP123930 |
| CBS 130254 | India | Human sputum | KP124383 | KP124537 | KP125007 | KP125161 | KP124853 | KP124235 | KP123931 |
| CBS 130255 | India | Human sputum | KP124384 | KP124538 | KP125008 | KP125162 | KP124854 | KP124236 | KP123932 |
| CBS 130258 | India | Human sputum | KP124385 | KP124539 | KP125009 | KP125163 | KP124855 | KP124237 | KP123933 |
| CBS 130259 | India | Human sputum | KP124386 | KP124540 | KP125010 | KP125164 | KP124856 | KP124238 | KP123934 |
| CBS 130260 | India | Human sputum | KP124387 | KP124541 | KP125011 | KP125165 | KP124857 | KP124239 | KP123935 |
| CBS 130261 | India | Human sputum | KP124388 | KP124542 | KP125012 | KP125166 | KP124858 | KP124240 | KP123936 |
| CBS 130262 | India | Human sputum | KP124389 | KP124543 | KP125013 | KP125167 | KP124859 | KP124241 | KP123937 |
| CBS 130263 | India | Human sputum | KP124390 | KP124544 | KP125014 | KP125168 | KP124860 | KP124242 | KP123938 |
| CBS 130265 | India | Human sputum | KP124391 | KP124545 | KP125015 | KP125169 | KP124861 | KP124243 | KP123939 |
| CBS 195.86  (=*A. angustiovoidea*T) | Canada | *Euphorbia esula* | KP124317 | KP124469 | KP124939 | KP125093 | KP124785 | KP124173 | JQ646398 |
| CBS 267.77 (=*A. citri*) | USA | *Citrus paradisi* | KP124311 | KP124463 | KP124933 | KP125087 | KP124779 | KP124168 | KP123864 |
| CBS 447.86 (=*A. malvae*) | Marocco | *Malva* sp. | KP124318 | KP124470 | KP124940 | KP125094 | KP124786 | JQ646314 | JQ646397 |
| CBS 479.90 (=*A. pellucida*T) | Japan | *Citrus unshiu* | KP124319 | KP124471 | KP124941 | KP125095 | KP124787 | KP124174 | KP123870 |
| CBS 489.92 (=*A. eichhorniae*T) | Indonesia | *Eichhornia crassipes* | KP124426 | KP124580 | KP125050 | KP125205 | KP124896 | KP124277 | - |
| CBS 603.78 | USA | Air | KP124312 | KP124464 | KP124934 | KP125088 | KP124780 | KP124169 | KP123865 |
| CBS 686.68 (=*A. tenuissima*) | Sahara | Desert sand | KP124306 | KP124458 | KP124928 | KP125082 | KP124775 | KP124163 | KP123859 |
| CBS 795.72 | USA | *Plantago aristida* | KP124309 | KP124461 | KP124931 | KP125085 | KP124778 | KP124166 | KP123862 |
| CBS 806.96 | Papua New Guinea | Cyperaceae | KP124325 | KP124477 | KP124947 | KP125101 | KP124793 | KP124180 | KP123874 |
| CBS 877.95 (=*A. tenuissima*) | India | Human, sinusitis | KP124321 | KP124473 | KP124943 | KP125097 | KP124789 | KP124176 | KP123871 |
| CBS 880.95 (=*A. tenuissima*) | Belgium | *Fragaria vesca* | KP124322 | KP124474 | KP124944 | KP125098 | KP124790 | KP124177 | - |
| CBS 911.97 (=*A. tenuissima*) | India | *Artemisia brevifolia* | KP124326 | KP124478 | KP124948 | KP125102 | KP124794 | KP124181 | KP123875 |
| CBS 916.96T | India | *Arachis hypogaea* | AF347031 | DQ678082 | KC584507 | KC584634 | KC584375 | AY278808 | AY563301 |
| CBS 965.95 (=*A. tenuissima*) | India | *Triticum* sp. | KP124323 | KP124475 | KP124945 | KP125099 | KP124791 | KP124178 | KP123872 |
| CBS 966.95 (=*A. tenuissima*) | India | *Solanum lycopersicum* | KP124324 | KP124476 | KP124946 | KP125100 | KP124792 | KP124179 | KP123873 |
| CBS104.26 | Unknown | Unknown | KP124299 | KP124450 | KP124920 | KP125074 | KP124767 | KP124156 | KP123848 |
| DMS15 | Thailand | Grass | MZ960799 | MZ960848 | MZ961496 | MZ960896 | MZ961541 | MZ961405 | MZ961451 |
| H-49 | China | *Capsicum annuum* | MZ960789 | MZ960838 | MZ961486 | MZ960886 | MZ961531 | MZ961396 | MZ961441 |
| H-71 | Thailand | *Coffea arabica* | MZ960801 | MZ960850 | MZ961498 | MZ960898 | MZ961543 | MZ961408 | MZ961453 |
| HAM-02 | China | Grass | MZ960795 | MZ960844 | MZ961492 | MZ960892 | MZ961537 | MZ961402 | MZ961447 |
| HAM-03 | China | *Capsicum annuum* | MZ960796 | MZ960845 | MZ961493 | MZ960893 | MZ961538 | MZ961403 | MZ961448 |
| HKM-1 | China | *Raphanus sativus* | MZ960792 | MZ960841 | MZ961489 | MZ960889 | MZ961534 | MZ961399 | MZ961444 |
| HMRC-51 | Thailand | Dead leaves | MZ960798 | MZ960847 | MZ961495 | MZ960895 | MZ961540 | MZ961405 | MZ961450 |
| HSH-01 | Thailand | Bamboo | MZ960797 | MZ960846 | MZ961494 | MZ960894 | MZ961539 | MZ961404 | MZ961449 |
| HTWD-01 | Thailand | Palm | MZ960800 | MZ960849 | MZ961497 | MZ960897 | MZ961542 | MZ961407 | MZ961452 |
| HWP 01 | Thailand | *Bidens pilosa* | MZ960802 | MZ960851 | MZ961499 | MZ960899 | MZ961544 | MZ961409 | MZ961454 |
| HXB-08 | China | *Dimocarpus longan* | MZ960794 | MZ960843 | MZ961491 | MZ960891 | MZ961536 | MZ961401 | MZ961446 |
| KIB-H2 | China | Bamboo | MZ960791 | MZ960840 | MZ961488 | MZ960888 | MZ961533 | MZ961398 | MZ961443 |
| PB 12 | China | *Zea mays* | MZ960793 | MZ960842 | MZ981490 | MZ960890 | MZ961535 | MZ961400 | MZ961445 |

Abbreviations: **AFTOL-ID**:Assembling the Fungal Tree of Life; **ANM**: A.N. Miller; **ATCC**:American Type Culture Collection, Virginia, U.S.A; **BBH**: BIOTEC Bangkok Herbarium, Thailand; **BCC**: BIOTEC Culture Collection, Bangkok, Thailand; **CABI**: International Mycological Institute, CABI-Bioscience, Egham, Bakeham Lane, U.K.;**CBS**: Westerdijk Fungal Biodiversity Institute, Centraalbureau voor Schimmelcultures, Utrecht, The Netherlands; **CPC**: Culture Collection of Pedro Crous, Netherlands; **Ertz**: D. Ertz; **GKM**: G.K. Mugambi; **GUFCC**: Goa University Fungal Culture Collection, Goa, India; MTCC Microbial Type Culture Collection and Gene Bank, Chandigarh, India; **GZCC**: Guizhou Culture Collection, Guizhou Academy of Agricultural Sciences, Guiyang, China; **IFRD**: International Fungal Research and Development Centre, Chinese Academy of Forestry, Kunming, China; **IT**: Collection of E. Camporesi from Italy. **JK**: J. Kohlmeyer; **KT**: K. Tanaka; **KUMCC**: Kunming Institute of Botany Culture Collection, Chinese Science Academy, Kunming, China; **MAFF**: Ministry of Agriculture, Forestry and Fisheries, Japan; **MFLUCC**: Mae Fah Luang University Culture Collection, Chiang Rai, Thailand; **NN**: NovoNordisk culture collection (now Novozymes, Bagsvaerd, Denmark); **SQUCC**: Sultan Qaboos University Culture Collection, Sultan Qaboos University, Al-Khod 123, Oman; **SMH**: S.M. Huhndorf; **Tehler**:A. T