**Table S1.** Isolates used for the phylogenetic analyses.

| Species | Strain1 | Origin | GenBank accession numbers | References |
| --- | --- | --- | --- | --- |
| **LSU** | **ITS** |
| *Neosetophoma aseptata* | CBS 145363T | *Viburnum opulus*, Germany | MK540024 | MK539953 | Marin-Felix et al. (2019) |
| *Neosetophoma buxi* | CBS 146845T | Endophyte from inner wood of *Buxus sempervirens*, Czech Republic | MW620993 | MW621494 | Crous et al. (2021) |
| *Neosetophoma camporesii* | MFLUCC 15-0682T | Dead spines of *Rosa canina*, Italy | KU302778 | KU302779 | Hyde et al. (2020) |
| *Neosetophoma cerealis* | CBS 232.77 | Agricultural soil, The Netherlands | MH872823 | MH861054 | Crous et al. (2020b) |
| *Neosetophoma clematidis* | MFLUCC 13–0734T | Dead branch of *Clematis vitalba*, Italy | KP684153 | KP744450 | Liu et al. (2015) |
| *Neosetophoma endophyticum* | RCEF20009T | Root of *Polygonatum cyrtonema*, China | OR985064 | OR985037 | Zhang et al. (2024) |
| *Neosetophoma fici* | IRAN 4234CT | Infected leaves of *Ficus elastic*, Iran | OP805934 | OP806395 | Crous et al. (2023) |
| *Neosetophoma garethjonesii* | MFLUCC 14-0528T | Dead stem of unknown plant, UK | KY496738 | KY496758 | Tibpromma et al. (2017) |
| *Neosetophoma guiyangensis* | GZCC 18-0111T | Dead branch of undetermined host, China | MH018132 | MH018134 | Hyde et al. (2018) |
| *Neosetophoma hnaniceana* | CBS 146548T | *Buxus sempervirens*, Czech Republic | MT119767 | MT119769 | Crous et al. (2020a) |
| *Neosetophoma iranianum* | IBRC-M 30176T | Soil, Iran | MF684866 | MF684861 | Karunarathna et al. (2017) |
| *Neosetophoma iranianum* | IRAN 5290C | Dead branches of *Lonicera caprifolium*, Iran | PQ732320 | PQ732319 | This study |
| *Neosetophoma italica* | MFLUCC 13–0388T | Dead leaf of *Iris germanica*, Italy | KP711361 | KP711356 | Liu et al. (2015) |
| *Neosetophoma lonicerae* | KUMCC 18-0155T | Dead hanging branches of *Lonicera maackii*, China | MK356349 | MK356375 | Phookamsak et al. (2019) |
| *Neosetophoma lunariae* | CBS 141409T | Seeds of *Lunaria annua*, Germany | KX306789 | KX306763 | Hernández-Restrepo et al. (2016) |
| *Neosetophoma miscanthi* | MFLU18–2675T | *Miscanthus* × *gigantius*, Taiwan | MK503826 | MK503820 | Hyde et al. (2019) |
| *Neosetophoma phragmitis* | CBS 145364T | Leaf sheath of *Phragmites australis*, Germany | MK540025 | MK539954 | Marin-Felix et al. (2019) |
| *Neosetophoma poaceicola* | MFLUCC 16–0886T | Grass litter, Thailand | KY550382 | KY568986 | Thambugala et al. (2017) |
| *Neosetophoma polygonatum* | RCEF20007T | Root of *Polygonatum cyrtonema*, China | OR985062 | OR985035 | Zhang et al. (2024) |
| *Neosetophoma qimenensis* | RCEF20013T | Root of *Polygonatum cyrtonema*, China | OR985068 | OR985041 | Zhang et al. (2024) |
| *Neosetophoma rosae* | MFLUCC 15-1073T | Dead spines of *Rosa canina*, Italy | MG829034 | MG828925 | Wanasinghe et al. (2018) |
| *Neosetophoma rosarum* | MFLUCC 17-0308T | Dead aerial spines of *Rosa canina,* Italy | MG829036 | MG828927 | Wanasinghe et al. (2018) |
| *Neosetophoma rosigena* | MFLUCC 17-0768T | *Rosa canina*, UK | MG829037 | MG828928 | Wanasinghe et al. (2018) |
| *Neosetophoma salicis* | MFLU17–0118T | Twigs and branches of *Salix* sp., Uzbikestan | MK608026 | MK608025 | Hyde et al. (2019) |
| *Neosetophoma samarorum* | CBS 138.96 | *Fraxinus excelsior*, France | KF251664 | MH862569 | Quaedvlieg et al. (2013), Vu et al. 2019 |
| *Neosetophoma sambuci* | CBS 145365T | Twig of *Sambucus nigra*, Germany | MK540026 | MK539955 | Marin-Felix et al. (2019) |
| *Neosetophoma shoemakeri* | MFLUCC 17-2510T | Dead stem of *Cirsium arvense*, Russia | MG602199 | MG602203 | Hyde et al. (2018) |
| *Neosetophoma trachycarpi* | SNC36AT | Decaying rachides of *Trachycarpus fortunei*, China | PP621068 | PP592444 | Zhang et al. (2024) |
| *Neosetophoma ulmi**(nom. inval.)* | IRAN 4192CT | Wood of *Ulmus minor*, Iran | MW432172 | MW432173 | Ahmadi et al. (2021) |
| *Neosetophoma xingrensis* | GZCC 18–0110T | Decaying wood, China | MH018133 | MH018135 | Hyde et al. (2018) |
| *Poaceicola arundinis* | MFLU 16–0158 | Dead aerial stems of *Poa* sp., Italy | MG829057 | MG828947 | Wanasinghe et al. (2018) |
| *Poaceicola bromi* | MFLUCC 13–0739 | Unrecorded source, Italy | KU058727 | KU058717 | Li et al. (2015) |

**1** CBS: Westerdijk Fungal Biodiversity Institute - KNAW, Utrecht, the Netherlands; IBRC: Iranian Biological Resources Center, Academic Center for Education Culture and Research (ACECR), Tehran, Iran; IRAN: Iranian Fungal Culture Collection, Iranian Research Institute of Plant Protection, Tehran, Iran; KMMCC: Korea Marine Microalgae Culture Center, Pukyong National University, Busan, Korea; MFLUCC: Mae Fah Luang University Culture Collection, Center of Excellence in Fungal Research, Mae Fah Luang University, Mueang Chiang Rai, Thailand; RCEF: Research Center on Entomogenous Fungi, Anhui Agricultural University, Hefei Anhui, China. T: ex-type strain.