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Diversity and Distribution of Calonectria Species in Soils from Eucalyptus urophylla \times E. grandis, Pinus massoniana, and Cunninghamia lanceolata Plantations in Four Provinces in Southern China

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Abstract: The species of Calonectria include many notorious plant pathogens and are widely distributed around the world. Leaf blight caused by Calonectria species is considered one of the most prominent diseases in Eucalyptus plantations in China. Some Calonectria species isolated from soils in Eucalyptus plantations are highly pathogenic to inoculated Eucalyptus genotypes. In southern China, the plantation trees Cunninghamia lanceolata, Eucalyptus spp., and Pinus massoniana are always adjacently planted, especially in FuJian, GuangDong, GuangXi, and YunNan Provinces. The aim of this study was to understand the diversity and distribution of Calonectria in soils from plantations of different tree species in different geographic regions. Soil samples were collected from 12 sampling sites in Eucalyptus urophylla \times E. grandis, P. massoniana, and C. lanceolata plantations in FuJian, GuangDong, GuangXi, and YunNan Provinces. Approximately 250 soil samples were collected from each sampling site, and a total of 2991 soil samples were obtained. A total of 1270 Calonectria isolates were obtained from 1270 soil samples. The 1270 isolates were identified based on DNA sequence comparisons of the partial gene regions of act, cmdA, his3, rpb2, tef1, and tub2. These isolates were identified as 11 Calonectria species: Calonectria aconidialis (69.50%), C. kyotensis (13.10%), C. hongkongensis (10.80%), *C. ilicicola* (2.50%), *C. asiatica* (2.36%), *C. curvispora* (0.31%), *C. chinensis* (0.24%), *C. pacifica* (0.24%), C. yunnanensis (0.16%), and C. canadiana (0.08%) in the C. kyotensis species complex and C. eucalypti (0.71%) in the C. colhounii species complex. The three dominant species, C. aconidialis, C. kyotensis, and C. hongkongensis, were widely distributed. The richness of Calonectria (percentage of soil samples that yielded Calonectria) in soils in the eastern regions (relatively humid regions) was higher than that in the western regions. The Calonectria richness of E. urophylla \times E. grandis, P. massoniana, and C. lanceolata plantations decreased gradually. For each of the three dominant species, its richness in the eastern regions was generally higher than that in the western regions; the species richness was highest in E. urophylla × E. grandis plantations for C. aconidialis, while for each of C. kyotensis and C. hongkongensis, its species richness was highest in P. massoniana plantations. The genetic variation in C. aconidialis, C. kyotensis, and C. hongkongensis was more greatly affected by geographic region than by plantation tree species. This study expanded our understanding of the richness, species diversity, and distribution characteristics of Calonectria in soils from the plantations of different tree species in different geographic regions in southern China. Results in this study enhanced our understanding of the influencing characteristics of geographic region and tree species on the species and genetic diversity of soilborne fungi.

Keywords: forest pathogen; fungal biodiversity; fungal ecology; phylogeny; plantation tree species; soilborne fungi



Citation: Liu, Y.; Chen, S. Diversity and Distribution of *Calonectria* Species in Soils from *Eucalyptus urophylla* × *E. grandis*, *Pinus massoniana*, and *Cunninghamia lanceolata* Plantations in Four Provinces in Southern China. *J. Fungi* **2023**, *9*, 198. https://doi.org/ 10.3390/jof9020198

Academic Editor: Lei Cai

Received: 1 December 2022 Revised: 26 January 2023 Accepted: 28 January 2023 Published: 3 February 2023



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1. Introduction

The genus *Calonectria* includes a range of important plant pathogens that are widely distributed in tropical, subtropical, and temperate regions throughout the world [1–3]. These aggressive pathogens can infect approximately 335 plant species residing in 100 plant families, including important agricultural, horticultural, and forestry crops [1–4]. Leaf blight caused by *Calonectria* species is considered one of the most prominent diseases of *Eucalyptus* plantations in China, Brazil, Colombia, Vietnam, and other countries [5–12]. *Calonectria* species also produce other disease symptoms, including stem and root rot, branch canker, and shoot blight on *Eucalyptus* [1,3,10,12]. Besides *Eucalyptus*, *Calonectria* also causes disease in other plantation tree species, such as *Acacia* spp. and *Pinus* spp. [1,5,13].

Calonectria leaf blight (CLB) has become a major threat to *Eucalyptus* plantations in China and has caused significant economic losses [10,12,14,15]. In the past decade, eleven *Calonectria* species, namely *Calonectria* aciculata, *C. aconidialis*, *C. cerciana*, *C. crousiana*, *C. eucalypti*, *C. fujianensis*, *C. hawksworthii*, *C. pauciramosa*, *C. pseudoretedudii C. queenslandica*, and *C. reteaudii*, have been associated with leaf blight of *Eucalyptus* in plantations in China [10,12,15–19]. CLB has been found on a number of *Eucalyptus* species and hybrids, including several *E. urophylla* × *E. grandis* and *E. urophylla* × *E. tereticornis* genotypes, which are widely planted in southern China [10,12,15–19].

In China, plantation forestry has grown rapidly due to the increasing demand for wood and pulp [20,21]. China's domestic wood is mainly produced by plantations in southern regions. The main plantation tree species include *Cunninghamia lanceolata, Eucalyptus* spp., and *Pinus massoniana* [20,22,23]. The plantation areas of *C. lanceolata, Eucalyptus* spp., and *Pinus massoniana* cover 9.9, 5.4, and 2.5 million hectares, respectively [24–27]. *Cunninghamia lanceolata* is the most planted species. *Cunninghamia lanceolata* plantations account for almost 12.4% of the country's total plantation area [25]. *Eucalyptus* plantations account for about 6.5% of the country's total plantation area and provide more than one-third of the total annual domestic timber output [24,27]. Plantations of *C. lanceolata, Eucalyptus* spp., and *P. massoniana* are always adjacently planted in southern China, especially in FuJian, GuangDong, GuangXi, and YunNan Provinces. These plantations provide many timber resources and bring great ecological benefits to China [20,23].

To date, 34 *Calonectria* species have been identified and described in China based on DNA sequence comparisons and morphological characteristics [12,15,16,18,19,28–33]. Previous research results have indicated that *Calonectria* species are frequently isolated from *Eucalyptus* plantations. Eleven and sixteen *Calonectria* species were isolated from diseased tissues and soils, respectively, in *Eucalyptus* plantations. *Calonectria pseudoreteaudii*, *C. reteaudii*, *C. aconidialis*, and *C. cerciana* have been isolated from both diseased *Eucalyptus* tissues and soils in *Eucalyptus* plantations [10,12,18,19,30–32,34].

Previous research results have shown that *Calonectria* species isolated from diseased *Eucalyptus* tissues in China are pathogenic to tested *Eucalyptus* genotypes [10,12,16,19]. Research results in our previous research work indicated that *C. aconidialis*, *C. auriculiformis*, *C. chinensis*, *C. hongkongensis*, *C. ilicicola*, *C. kyotensis*, *C. orientalis*, *C. pseudoreteaudii*, and *C. reteaudii* isolated from soils under *Eucalyptus* plantations are pathogenic to tested *Eucalyptus* genotypes [19,35]. All of these species cause leaf spot, leaf blight, and seedling rot to the tested *Eucalyptus* plants within three days after inoculation [19,35]. Research results in our recent studies further showed that *Calonectria* species are found in soils associated with *C. lanceolata* and *P. massoniana* in southern China [32].

Currently, several studies have been conducted to understand *Calonectria* species diversity in the soils of *Eucalyptus* plantations, while little information is known about the species diversity of *Calonectria* in the soil of plantations other than *Eucalyptus* [19,32]. The aims of this study were to (i) understand the richness and species diversity of *Calonectria* in the soil of adjacent plantations of *Eucalyptus urophylla* \times *E. grandis*, *C. lanceolata* and *P. massoniana* in southern China; and (ii) understand the diversity and distribution characteristics of *Calonectria* species affected by plantation tree species and geographical regions.

2. Materials and Methods

2.1. Study Site, Soil Sample Collection, and Calonectria Isolation

Soil samples were collected from plantations regions where *E. urophylla* × *E. grandis*, *P. massoniana*, and *C. lanceolata*, were adjacently planted (Figure 1). We tried to select the regions in which the three plantations were connected, to ensure the soil types of the three plantation (sites) in each region were similar. These samples were collected from four plantation regions in each of FuJian, GuangDong, GuangXi, and YunNan Provinces (Figure 2a, Table 1). The latitudes of the four sampled regions were similar. The distances between adjacent regions were 300–500 km (Figure 2a). The areas of each plantation of *E. urophylla* × *E. grandis*, *P. massoniana*, and *C. lanceolata* in each region were around 50 hectares. For each of the four selected regions, *E. urophylla* × *E. grandis*, *P. massoniana*, and *C. lanceolata* trees were planted for more than 10 years, although the *E. urophylla* × *E. grandis* stumps, it is clear that *E. urophylla* × *E. grandis* trees had been planted in the relative regions for at least one more rotation period (5–6 years) before our soil sampling. We estimated that the period of *E. urophylla* × *E. grandis* trees were 15–20 and 10–20 years old, respectively (Table 1).

Soil samples were collected from each of 12 sampling sites (4 regions \times 3 sites /region) (Table 1). In each of the 12 sites, approximately 250 soil samples were collected. We adopted a "Z"-shaped random sampling pattern, collecting soil every 10 m at each of the 12 sites (plantations). The plantations typically had thick layers of leaf litter, which were removed before soil sample collection. Soil samples were collected from the upper 0–20 cm of the humid soil profile. Each soil sample was placed in a resealable plastic bag and transferred to the laboratory for isolation and further molecular analyses. Soil samples were collected from May to July 2021.

To obtain Calonectria isolates, each soil sample was thoroughly mixed and transferred to a plastic cylinder sampling cup (diameter = 4.5 cm, height = 5 cm, and volume = 80 mL) (Chengdu Rich Science Industry Co., Ltd., Chengdu, China). The soil sample took up half to two-thirds of the whole sampling cup volume. The soil sample was moistened by spraying it with sterile water, and it was mixed well with a sterilized bamboo stick. After a superficial sterilization (soaked 30 s in 75% ethanol and washed several times with sterile water), thirty to fifty Medicago sativa (alfalfa) seeds were scattered onto the soil surface in each sampling cup. Treated sampling cups with soil and alfalfa seeds were placed in an alternating environment of 12 h of daylight and 12 h of darkness and incubated at 25 °C for six to seven days until white masses of conidiophores with typical morphological characteristics of Calonectria species [1] were observed on infected alfalfa tissue. Using a dissecting microscope (AxioCam Stemi 2000C, Carl Zeiss, Ltd., Jena, Germany), every single one conidial mass was selected and scattered onto 2% malt extract agar (MEA) (20 g malt extract powder and 20 g agar powder per liter of water: malt extract powder was obtained from Beijing Shuangxuan microbial culture medium products factory, Beijing, China; the agar powder was obtained from Beijing Solarbio Science and Technology Co., Ltd., Beijing, China) using a sterile needle. After incubation at 25 °C for three to four hours, germinated conidia were individually transferred onto fresh MEA under a dissecting microscope and incubated at 25 °C for one week to obtain single-conidium cultures. One single-conidium culture was obtained from each soil sample with white masses of conidiophores. All obtained single conidium cultures were deposited in the culture collection (CSF) at the Research Institute of Fast-growing Trees (RIFT) of the Chinese Academy of Forestry (CAF) in ZhanJiang, GuangDong Province, China.

Site Number	Region Code	Province	Tree Species	Years of Trees Planted	Number of Soil Samples	Location Details	GPS Information	Collector	Collecting Date
1	Region A	FuJian	Eucalyptus urophylla × E. grandis	>10	250	ShaJian Town, HuaAn County, ZhangZhou Region, FuJian Province	Near site 24°46′2.6364″ N, 117°37′0.264″ E	S.F. Chen, Y. Liu, J.L. Han and L.L. Liu	26–27 May 2021
2	Region A	FuJian	Pinus massoniana	15	248	ShaJian Town, HuaAn County, ZhangZhou Region, FuJian Province	Near site 24°46′35.2524″ N, 117°36′2.8368″ E	S.F. Chen, Y. Liu, J.L. Han and L.L. Liu	24 May 2021
3	Region A	FuJian	Cunninghamia lanceolata	12	250	ShaJian Town, HuaAn County, ZhangZhou Region, FuJian Province	Near site 24°46′33.6936″ N, 117°37′5.4876″ E	S.F. Chen, Y. Liu, J.L. Han and L.L. Liu	25 May 2021
4	Region B	GuangDong	E. urophylla \times E. grandis	>10	250	HeerKou Town, FengKai County, ZhaoQing Region, GuangDong Province	Near site 23°30′11.3688″ N, 111°50′43.5156″ E	S.F. Chen, Y. Liu, J.L. Han and W.X. Wu	7 June 2021
5	Region B	GuangDong	P. massoniana	15	250	HeerKou Town, FengKai County, ZhaoQing Region, GuangDong Province	Near site 23°30′8.5716″ N, 111°50′56.9616″ E	S.F. Chen, Y. Liu, J.L. Han and W.X. Wu	6 June 2021
6	Region B	GuangDong	C. lanceolata	10	244	HeerKou Town, FengKai County, ZhaoQing Region, GuangDong Province	Near site 23°27′48.6864″ N, 115°55′46.7472″ E	S.F. Chen, Y. Liu, J.L. Han and W.X. Wu	9 June 2021
7	Region C	GuangXi	E. urophylla \times E. grandis	>10	250	XiaAo Town, DuAn County, HeChi Region, GuangXi Autonomous Region	Near site 24°19′20.1″ N, 107°56′29.3″ E	S.F. Chen	21–24 June 2021
8	Region C	GuangXi	P. massoniana	20	249	XiaAo Town, DuAn County, HeChi Region, GuangXi Autonomous Region	Near site 24°19′24.3″ N, 107°56′20″ E	S.F. Chen	21–22 June 2021
9	Region C	GuangXi	C. lanceolata	12	250	XiaAo Town, DuAn County, HeChi Region, GuangXi Autonomous Region	Near site 24°19'13″ N, 107°56'18″ E	S.F. Chen	21–23 June 2021
10	Region D	YunNan	E. urophylla \times E. grandis	>11	250	YongPing Town, JingGu County, PuEr Region, YunNan Province	Near site 23°25′40.026″ N, 100°18′24.678″ E	S.F. Chen, Y. Liu, X.Y. Liang, L.Q. Lu and B.Y. Chen	8 July 2021
11	Region D	YunNan	P. massoniana	15	250	YongPing Town, JingGu County, PuEr Region, YunNan Province	Near site 23°24′54.666″ N, 100°17′45.0384″ E	S.F. Chen, Y. Liu, X.Y. Liang, L.Q. Lu and B.Y. Chen	9 July 2021
12	Region D	YunNan	C. lanceolata	15	250	YongPing Town, JingGu County, PuEr Region, YunNan Province	Near site 23°22′58.1916″ N, 100°9′5.436″ E	S.F. Chen, Y. Liu, X.Y. Liang, L.Q. Lu and B.Y. Chen	7 July 2021

Table 1. Plantation tree species, location details, and collection information of soil samples collected from plantations of three tree species in four provinces.

C



Figure 1. Plantations of *Eucalyptus urophylla* × *E. grandis, Pinus massoniana*, and *Cunninghamia lanceolata* in Fujian, Guangdong, Guangxi, and Yunnan Provinces in southern China. (**a**,**b**). The adjacently planted *E. urophylla* × *E. grandis* (indicated by number "1"), *P. massoniana* (number "2"), and *C. lanceolata* (number "3") in Guangxi; **c**–**e**. *Cunninghamia lanceolata* plantations in Guangdong (**c**), Guangxi (**d**), and Yunnan (**e**); (**f**,**g**). *Eucalyptus urophylla* × *E. grandis* plantations in Fujian (**f**) and Guangdong (**g**); (**h**,**i**). *Pinus massoniana* plantations in Fujian (**h**) and Guangxi (**i**); (**j**,**k**). *Cunninghamia lanceolata* plantations in Fujian (**j**) and Guangxi (**k**); (**l**). Soil in *P. massoniana* plantation in Guangxi; (**m**). Soil in *C. lanceolata* plantation in Fujian.



Figure 2. *Calonectria* species collected from soils in plantations of three tree species in four regions (provinces). (a). Map of China indicating the four regions in four provinces where soils were sampled; (**b**–**m**). Percentage of each *Calonectria* species in each plantation of *Eucalyptus urophylla* × *E. grandis, Pinus massoniana,* and *Cunninghamia lanceolata* in each of the four regions (FuJian, GuangDong, GuangXi, and YunNan Provinces). Different *Calonectria* species are indicated by numbers with different colors.

2.2. DNA Extraction, PCR Amplifications, and Sequencing

All *Calonectria* morphological-like isolates obtained in this study were used for total genomic DNA extraction and sequence comparisons. Mycelia were scraped from 7-day-old cultures using a sterilized scalpel and transferred into 2 mL Eppendorf tubes. Total genomic DNA was extracted using the cetyltrimethylammonium bromide (CTAB) protocol described by Van Burik and co-authors [36]. The extracted DNA was dissolved by adding 30 μ L TE buffer (1 M Tris-HCl and 0.5 M EDTA, pH 8.0), and 2.5 μ L RNase (10 mg/mL) was added to degrade the RNA. The mixture was incubated at 37 °C for 1 h. The DNA concentration was quantified using a NanoDrop 2000 spectrometer (Thermo Fisher Scientific, Waltham, MA, USA). All DNA samples were diluted to approximately 100 ng/uL with DNase/RNasefree ddH₂O (Sangon Biotech Co., Ltd., Shanghai, China) and stored at -20 °C for further use.

Based on previous research results, partial gene regions of actin (*act*), calmodulin (*cmdA*), histone H3 (*his3*), the DNA-directed RNA polymerase II second largest subunit (*rpb2*), translation elongation factor 1-alpha (*tef1*), and β-tubulin (*tub2*) served as reliable DNA barcodes to clearly distinguish species in *Calonectria* [19,30,31]. The primer pairs ACT-512F/ACT-783R, CAL-228F/CAL-2Rd, CYLH3F/CYLH3R, fRpb2-5F/fRpb2-7cR, EF1-728F/EF2, and T1/CYLTUB1R were used to amplify the fragments of *act*, *cmdA*, *his3*, *rpb2*, *tef1*, and *tub2* genes, respectively [30]. The PCR reactions were conducted as described by Liu and co-authors [30].

To ensure the accuracy and integrity of all sequences, all PCR products were sequenced in both the forward and reverse directions using the same primers used for PCR amplification. Sequence reactions were performed by the Beijing Genomics Institute, Guangzhou, China. All obtained sequences were edited and assembled using MEGA v. 7.0 software [37] and deposited in GenBank (https://www.ncbi.nlm.nih.gov; accessed date: 24 January 2023).

For all the *Calonectria* morphological-like isolates, the *tef1* gene regions were sequenced, and a standard nucleotide BLAST search was conducted using the *tef1* sequences to preliminarily identify these fungi. For all isolates preliminarily identified as *Calonectria*, the *tub2* gene regions were then sequenced. All obtained *Calonectria* isolates were genotyped by the *tef1* and *tub2* sequences. Based on the genotypes generated by *tef1* and *tub2* sequences, isolates for each *tef1-tub2* genotype obtained from different regions and plantation tree species were selected for sequencing the *act*, *cmdA*, *his3*, and *rpb2* gene regions.

2.3. Multi-Gene Phylogenetic Analyses and Species Identification

All sequences of the six gene regions (*act*, *cmdA*, *his3*, *rpb2*, *tef1*, and *tub2*) generated in this study were compared with the sequences of type specimen strains of published *Calonectria* species. Sequences of all published species in the relevant species complexes were used for sequence comparisons and phylogenetic analyses. The datasets of Liu and co-authors [30] were used as templates, and the sequences of other recently described *Calonectria* species in the relevant species complexes were all used for sequence comparisons.

Sequences of each of the *act*, *cmdA*, *his3*, *rpb2*, *tef1*, and *tub2* gene regions, as well as the combination of these six gene regions, were aligned using the online version of MAFFT v. 7 (http://mafft.cbrc.jp/alignment/server; accessed date: 10 August 2022) with the alignment strategy FFT-NS-i (Slow; interactive refinement method). The alignments were manually edited using MEGA v. 7.0 software [37] when necessary. All alignments used for phylogenetic analyses were submitted to TreeBASE (http://treebase.org; accessed date: 15 August 2022).

The Maximum likelihood (ML) and Bayesian inference (BI) approaches were used for phylogenetic analyses of the sequence datasets of each of the six genes and the combined dataset of all six gene regions. ML analyses were conducted using RaxML v. 8.2.4 [38] on the CIPRES Science Gateway v. 3.3. BI analyses were conducted using MrBayes v. 3.2.6 [39] on the CIPRES Science Gateway v. 3.3. ML analyses were performed with a default GTR substitution matrix and 1000 bootstrap replicates. For BI analyses, four Markov chain Monte Carlo (MCMC) chains were run from a random starting tree for five million generations, and trees were sampled every 100th generation. The first 25% of the trees

sampled were discarded as burn-in, and the remaining trees were used to determine the posterior probabilities. Two isolates of *Curvicladiella cignea* (CBS 109167 and CBS 109168) were used as outgroup taxa [30]. Phylogenetic trees generated by ML and BI analyses were viewed using MEGA v. 7.0. [37] and Fig Tree v. 1.4.3 (http://tree.bio.ed.ac.uk/software/figtree/; accessed date: 2 September 2022), respectively.

2.4. Calonectria Richness in Soils from Four Provinces and Plantations of Three Tree Species

The *Calonectria* isolates obtained in this study were identified. The numbers of *Calonectria* isolates obtained at each of the 12 sampling sites were counted. Furthermore, the percentage of soil samples that yielded *Calonectria* (*Calonectria* richness) at each sampling site was computed. The distribution characteristics of *Calonectria* in four regions (provinces) and plantations of three tree species were recorded, including the influencing characteristics of *Calonectria* richness by geographic region (provinces) and plantation tree species.

2.5. Calonectria Species Diversity in Four Provinces and Plantations of Three Tree Species

According to the species identification results of all isolates, the number of isolates of each *Calonectria* species obtained at each of the 12 sampling sites was counted. The percentage of soil samples that yielded each *Calonectria* species at each sampling site was also computed. The distribution characteristics of each *Calonectria* species in four provinces and plantations of three tree species were recorded, including the influencing characteristics of *Calonectria* species number and each species richness by geographic region (provinces) and plantation tree species.

2.6. Genotyping of Isolates within each Calonectria Species

The genotypes of the isolates within each identified *Calonectria* species were determined based on the *tef1* and *tub2* sequences. The number of genotypes of each species and the number of isolates belonging to each genotype were recorded. Furthermore, the number of genotypes of each *Calonectria* species in each of the 12 plantations (12 sampling sites) of three tree species in four provinces was counted.

2.7. Genotype Diversity of Calonectria Species in Four Provinces and Plantations of Three Tree Species

For each dominant *Calonectria* species, to preliminarily understand whether its genetic variation (based on shared genotype) was affected by geographical regions and plantation tree species, the numbers of shared genotypes among isolates at 12 sampling sites were counted. We further compared the number of shared genotypes for each dominant species to evaluate the influencing characteristics of geographical regions (provinces) and plantation tree species on the genetic variations of each dominant species.

3. Results

3.1. Soil Sample Collection and Calonectria Isolation

A total of 2991 soil samples were collected, with 244–250 soil samples from each of the 12 sampling sites (Table 1). After the soil samples were incubated with alfalfa seeds, a singleconidium culture was obtained from each soil sample with white masses of conidiophores with typical morphological characteristics of *Calonectria* species. In total, 1308 *Calonectria* morphological-like isolates were obtained.

3.2. Sequencing

For all 1308 *Calonectria* morphological-like isolates obtained from soil samples, the *tef1* gene sequences were amplified and used to conduct a standard nucleotide BLAST search to preliminarily identify the species. Ultimately, 1270 isolates were identified as *Calonectria* species (Appendix A Table A1). The majority of the remaining 38 isolates were grouped into the genus *Cylindrocladiella*. The *tub2* gene region was also amplified and sequenced for the 1270 *Calonectria* isolates (Appendix A Table A1). Ninety-seven *tef1-tub2* genotypes were

generated based on the *tef1* and *tub2* gene sequences (Table 2). Subsequently, 207 isolates were selected to amplify the *act*, *cmdA*, *his3*, and *rpb2* gene regions. These 207 isolates presented all three tree species in all four sampling regions (provinces), and presented all 97 genotypes based on *tef1* and *tub2* gene sequences (Table 3). One to ten isolates of each genotype revealed by the *tef1* and *tub2* sequences were selected (Tables 2 and 3). Amplicons generated for the *act*, *cmdA*, *his3*, *rpb2*, *tef1*, and *tub2* gene regions were approximately 235, 680, 430, 1030, 500, and 620 bp, respectively.

Calonectria Species	Genotype Determined by <i>tef1</i> Gene Sequences ^a	Number of Isolates Based on <i>tef1</i> Genotype	Genotype Determined by <i>tub</i> 2 Gene Sequences ^a	Number of Isolates Based on <i>tub2</i> Genotype	Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences a	Number of Isolates Based on <i>tef1</i> and <i>tub2</i> Genotype	Number of Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences of Each Species
C. aconidialis	A B C D E F G	832 1 36 1 3 1 9	A B C D E F G H I J K L M N O P Q R S T U	$\begin{array}{c} 689\\ 3\\ 3\\ 5\\ 1\\ 8\\ 1\\ 2\\ 29\\ 1\\ 26\\ 10\\ 5\\ 1\\ 4\\ 1\\ 1\\ 5\\ 2\\ 56\\ 30\end{array}$	AA AB AC AD AE AF AG AH AI AJ AK AI AM AN AO AP AQ AR AQ AR AQ AR AQ AR AQ AR AD AD AD AC AD AC AD AC AD AC AC AC AC AC AC AC AC AC AC AC AC AC	$\begin{array}{c} 641\\ 3\\ 3\\ 5\\ 1\\ 8\\ 1\\ 2\\ 29\\ 1\\ 26\\ 10\\ 5\\ 1\\ 1\\ 1\\ 1\\ 5\\ 2\\ 56\\ 30\\ 1\\ 36\\ 1\\ 36\\ 1\\ 3\\ 6\\ 2\end{array}$	28
C. kyotensis	A B C D E	46 1 39 77 3	A B C D E F G H I J K L M N O P Q R S T U V	$\begin{array}{c} 21 \\ 1 \\ 1 \\ 10 \\ 3 \\ 26 \\ 1 \\ 1 \\ 12 \\ 10 \\ 11 \\ 2 \\ 22 \\ 1 \\ 1 \\ 9 \\ 2 \\ 1 \\ 2 \\ 1 \\ 2 \\ 1 \\ 1 \end{array}$	GO AA AD AF AI AK AL AO AP AR BR CA CB CC CC CC CC CC CC CC CC CC CC CC CC	$ \begin{array}{r} 3 \\ 5 \\ 4 \\ 9 \\ 13 \\ 2 \\ 4 \\ 6 \\ 1 \\ 2 \\ 4 \\ 1 \\ 2 \\ 4 \\ 1 \\ 2 \\ 9 \\ 4 \\ 2 \\ 9 \\ 4 \\ 2 \\ 9 \\ 1 \\ 2 \\ 9 \\ 1 \\ 2 \\ 9 \\ 1 \\ 2 \\ 9 \\ 1 \\ 1 \\ 13 \\ 10 \\ 5 \\ 7 \\ 6 \\ 1 \\ 2 \\ 1 \\ 13 \\ 10 \\ 5 \\ 7 \\ 6 \\ 1 \\$	41

Table 2. Isolate numbers of each genotype of each Calonectria species.

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Calonectria Species	Genotype Determined by <i>tef1</i> Gene Sequences ^a	Number of Isolates Based on <i>tef1</i> Genotype	Genotype Determined by <i>tub2</i> Gene Sequences ^a	Number of Isolates Based on <i>tub2</i> Genotype	Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences a	Number of Isolates Based on <i>tef1</i> and <i>tub2</i> Genotype	Number of Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences of Each Species
C. hongkongensis	A B	136 1	A B C D E F G H I	92 8 3 6 3 19 3 2 1	AA AB AC AD AE AF AG AH AI	92 8 3 6 3 18 3 2 1	10
C. ilicicola	A B C	24 3 5	А	32	BF AA BA	1 24 3 5	3
C. asiatica	A	30	A	21	AA AB	21	2
C. eucalypti	A B C D	4 2 1 2	A	9	AA BA CA DA	4 2 1 2	4
C. curvispora C. chinensis	A A B	4 2	A A	4 3	AA AA BA	4 2	1 2
C. pacifica	A B	2 1	A B C	1 1 1	AA AC BB	1 1 1	3
C. yunnanensis	А	2	A B	1 1 1	AA AB	1 1 1	2
C. canadiana	А	1	Ă	ī	AA	ī	1

Table 2. Cont.

^a Different letters indicate different genotypes.

Species Complex	Species	Genotype ^a	Site and Tree Species Code ^b	Isolate No. ^c	Sample and Isolate Information ^d	late GenBank Accession No. e					
						tef1	tub2	cmdA	his3	rpb2	act
C. kyotensis	C. aconidialis	AAABAA	3. FuJian-Cun.	CSF22498	20210525-1-(4)	OQ188649	OQ260624	OQ261463	OQ302898	OQ303105	OQ303311
C. kyotensis	C. aconidialis	ABAAAA	GuangDong-Euc.	CSF23317	20210607-1-(154)	OQ188839	OQ260814	OQ261464	OQ302899	OQ303106	OQ303312
C. kyotensis	C. aconidialis	ABAAAA	GuangDong-Pin.	CSF22562	20210606-1-(17)	OQ189007	OQ260982	OQ261465	OQ302900	OQ303107	OQ303313
C. kyotensis	C. aconidialis	ACAAAA	GuangXi-Euc.	CSF23671	20210624-1-(25)	OQ189296	OQ261271	OQ261466	OQ302901	OQ303108	OQ303314
C. kyotensis	C. aconidialis	ACAAAA	GuangXi-Euc.	CSF23740	20210624-1-(128)	OQ189297	OQ261272	OQ261467	OQ302902	OQ303109	OQ303315
C. kyotensis	C. aconidialis	ADAAAA	 FuJian-Euc. 	CSF22962	20210526-1-(73)	OQ188313	OQ260288	OQ261468	OQ302903	OQ303110	OQ303316
C. kyotensis	C. aconidialis	ADDAAA	FuJian-Cun.	CSF22991	20210525-1-(74)	OQ188650	OQ260625	OQ261469	OQ302904	OQ303111	OQ303317
C. kyotensis	C. aconidialis	AEAAAA	GuangDong-Euc.	CSF23379	20210607-1-(231)	OQ188840	OQ260815	OQ261470	OQ302905	OQ303112	OQ303318
C. kyotensis	C. aconidialis	AFAAAA	FuJian-Cun.	CSF23011	20210525-1-(141)	OQ188651	OQ260626	OQ261471	OQ302906	OQ303113	OQ303319
C. kyotensis	C. aconidialis	AFEAAA	GuangDong-Pin.	CSF23623	20210606-1-(238)	OQ189014	OQ260989	OQ261472	OQ302907	OQ303114	OQ303320
C. kyotensis	C. aconidialis	AGAAAA	 FuJian-Euc. 	CSF22495	20210527-1-(24)	OQ188314	OQ260289	OQ261473	OQ302908	OQ303115	OQ303321
C. kyotensis	C. aconidialis	AHAAAA	GuangDong-Pin.	CSF23621	20210606-1-(236)	OQ189015	OQ260990	OQ261474	OQ302909	OQ303116	OQ303322
C. kyotensis	C. aconidialis	AHAAAA	GuangDong-Cun.	CSF23409	20210609-1-(92)	OQ189151	OQ261126	OQ261475	OQ302910	OQ303117	OQ303323
C. kyotensis	C. aconidialis	AIAAAA	2. FuJian-Pin.	CSF23113	20210524-1-(135)	OQ188476	OQ260451	OQ261476	OQ302911	OQ303118	OQ303324
C. kyotensis	C. aconidialis	AIAAAA	FuJian-Cun.	CSF23008	20210525-1-(137)	OQ188656	OQ260631	OQ261477	OQ302912	OQ303119	OQ303325
C. kyotensis	C. aconidialis	AJAAAA	GuangDong-Pin.	CSF23585	20210606-1-(198)	OQ189016	OQ260991	OQ261478	OQ302913	OQ303120	OQ303326
C. kyotensis	C. aconidialis	AKAAAB	YunNan-Euc.	CSF22709	20210708-1-(11)	OQ189438	OQ261413	OQ261479	OQ302914	OQ303121	OQ303327
C. kyotensis	C. aconidialis	AKAAAB	YunNan-Euc.	CSF23815	20210708-1-(133)	OQ189439	OQ261414	OQ261480	OQ302915	OQ303122	OQ303328
C. kyotensis	C. aconidialis	ALCAAA	GuangXi-Euc.	CSF22578	20210621-1-(5)	OQ189306	OQ261281	OQ261481	OQ302916	OQ303123	OQ303329
C. kyotensis	C. aconidialis	ALCAAA	GuangXi-Euc.	CSF23747	20210624-1-(144)	OQ189307	OQ261282	OQ261482	OQ302917	OQ303124	OQ303330
C. kyotensis	C. aconidialis	AMCAAA	GuangDong-Cun.	CSF22542	20210609-1-(3)	OQ189152	OQ261127	OQ261483	OQ302918	OQ303125	OQ303331
C. kyotensis	C. aconidialis	AMCDAA	GuangXi-Euc.	CSF22599	20210621-1-(15)	OQ189308	OQ261283	OQ261484	OQ302919	OQ303126	OQ303332
C. kyotensis	C. aconidialis	ANAAAA	YunNan-Euc.	CSF23811	20210708-1-(103)	OQ189440	OQ261415	OQ261485	OQ302920	OQ303127	OQ303333
C. kyotensis	C. aconidialis	AOCAAA	GuangDong-Euc.	CSF23284	20210607-1-(112)	OQ188844	OQ260819	OQ261486	OQ302921	OQ303128	OQ303334
C. kyotensis	C. aconidialis	APAAAA	FuJian-Pin.	CSF23133	20210524-1-(158)	OQ188477	OQ260452	OQ261487	OQ302922	OQ303129	OQ303335
C. kyotensis	C. aconidialis	AQAAAA	FuJian-Cun.	CSF22503	20210525-1-(12)	OQ188657	OQ260632	OQ261488	OQ302923	OQ303130	OQ303336
C. kyotensis	C. aconidialis	ARAAAA	GuangDong-Euc.	CSF23251	20210607-1-(79)	OQ188848	OQ260823	OQ261489	OQ302924	OQ303131	OQ303337
C. kyotensis	C. aconidialis	ARAAAA	GuangDong-Pin.	CSF23444	20210606-1-(35)	OQ189017	OQ260992	OQ261490	OQ302925	OQ303132	OQ303338
C. kyotensis	C. aconidialis	ASAAAA	GuangDong-Pin.	CSF23497	20210606-1-(96)	OQ189018	OQ260993	OQ261491	OQ302926	OQ303133	OQ303339
C. kyotensis	C. aconidialis	ASACAA	GuangDong-Euc.	CSF22524	20210607-1-(1)	OQ188849	OQ260824	OQ261492	OQ302927	OQ303134	OQ303340
C. kyotensis	C. aconidialis	ATAAAA	GuangDong-Cun.	CSF23429	20210609-1-(213)	OQ189154	OQ261129	OQ261493	OQ302928	OQ303135	OQ303341
C. kyotensis	C. aconidialis	ATAAAA	GuangXi-Euc.	CSF22596	20210621-1-(14)	OQ189314	OQ261289	OQ261494	OQ302929	OQ303136	OQ303342
C. kyotensis	C. aconidialis	AUAAAA	 FuJian-Euc. 	CSF22813	20210527-1-(70)	OQ188349	OQ260324	OQ261495	OQ302930	OQ303137	OQ303343
C. kyotensis	C. aconidialis	AUAAAA	FuJian-Cun.	CSF23021	20210525-1-(185)	OQ188664	OQ260639	OQ261496	OQ302931	OQ303138	OQ303344
C. kyotensis	C. aconidialis	BAAAAA	GuangXi-Euc.	CSF23761	20210624-1-(162)	OQ189315	OQ261290	OQ261497	OQ302932	OQ303139	OQ303345
C. kyotensis	C. aconidialis	CAAAAA	 FuJian-Euc. 	CSF22912	20210526-1-(17)	OQ188363	OQ260338	OQ261498	OQ302933	OQ303140	OQ303346
C. kyotensis	C. aconidialis	CAAAAA	 FuJian-Euc. 	CSF22951	20210526-1-(60)	OQ188364	OQ260339	OQ261499	OQ302934	OQ303141	OQ303347
C. kyotensis	C. aconidialis	CAAAAA	 FuJian-Euc. 	CSF22802	20210527-1-(59)	OQ188362	OQ260337	OQ261500	OQ302935	OQ303142	OQ303348
C. kyotensis	C. aconidialis	CAAAAA	FuJian-Cun.	CSF23049	20210525-1-(250)	OQ188676	OQ260651	OQ261501	OQ302936	OQ303143	OQ303349
C. kyotensis	C. aconidialis	CABAAA	FuJian-Pin.	CSF23196	20210524-1-(243)	OQ188490	OQ260465	OQ261502	OQ302937	OQ303144	OQ303350
C. kyotensis	C. aconidialis	CADAAA	 FuJian-Euc. 	CSF22483	20210527-1-(12)	OQ188365	OQ260340	OQ261503	OQ302938	OQ303145	OQ303351
C. kyotensis	C. aconidialis	CADAAA	2. FuJian-Pin.	CSF23147	20210524-1-(177)	OQ188491	OQ260466	OQ261504	OQ302939	OQ303146	OQ303352
C. kyotensis	C. aconidialis	CADAAA	FuJian-Cun.	CSF23002	20210525-1-(110)	OQ188677	OQ260652	OQ261505	OQ302940	OQ303147	OQ303353
C. kyotensis	C. aconidialis	DADAAA	1. FuJian-Euc.	CSF22948	20210526-1-(57)	OQ188366	OQ260341	OQ261506	OQ302941	OQ303148	OQ303354
C. kyotensis	C. aconidialis	EAAAAA	GuangXi-Euc.	CSF23741	20210624-1-(132)	OQ189317	OQ261292	OQ261507	OQ302942	OQ303149	OQ303355
C. kyotensis	C. aconidialis	EAAAAA	7. GuangXi-Euc.	CSF23779	20210624-2-(9)	OQ189318	OQ261293	OQ261508	OQ302943	OQ303150	OQ303356
C. kyotensis	C. aconidialis	FAAAAA	6. GuangDong-Cun.	CSF23401	20210609-1-(52)	OQ189155	OQ261130	OQ261509	OQ302944	OQ303151	OQ303357

Table 3. Isolates sequenced and used for phylogenetic analyses in this study.

Table 3. Cont.

Species Complex	Species	Genotype ^a	Site and Tree Species Code ^b	Isolate No. ^c	Sample and Isolate Information ^d			GenBank Acces	ssion No. ^e		
					-	tef1	tub2	cmdA	his3	rpb2	act
C. kyotensis	C. aconidialis	GAAAAA	4. GuangDong-Euc.	CSF23306	20210607-1-(141)	OQ188883	OQ260858	OQ261510	OQ302945	OQ303152	OQ303358
C. kyotensis	C. aconidialis	GAAAAA	GuangDong-Pin.	CSF23563	20210606-1-(173)	OQ189036	OQ261011	OQ261511	OQ302946	OQ303153	OQ303359
C. kyotensis	C. aconidialis	GOCAAA	GuangDong-Euc.	CSF23221	20210607-1-(46)	OQ188885	OQ260860	OQ261512	OQ302947	OQ303154	OQ303360
C. kyotensis	C. aconidialis	GOCAAA	GuangDong-Pin.	CSF23547	20210606-1-(156)	OQ189037	OQ261012	OQ261513	OQ302948	OQ303155	OQ303361
C. kyotensis	C. asiatica	AAAAAA	10. YunNan-Éuc.	CSF22708	20210708-1-(9)	OQ189460	OQ261435	OQ261514	OQ302949	OQ303156	OQ303362
C. kyotensis	C. asiatica	AAAAAA	YunNan-Euc.	CSF23833	20210708-1-(201)	OQ189461	OQ261436	OQ261515	OQ302950	OQ303157	OQ303363
C. kyotensis	C. asiatica	ABAAAA	10. YunNan-Euc.	CSF23796	20210708-1-(28)	OQ189469	OQ261444	OQ261516	OQ302951	OQ303158	OQ303364
C. kyotensis	C. asiatica	ABAAAB	10. YunNan-Euc.	CSF23830	20210708-1-(180)	OQ189470	OQ261445	OQ261517	OQ302952	OQ303159	OQ303365
C. kyotensis	C. canadiana	AAAAAA	12. YunNan-Cun.	CSF22750	20210707-1-(141)	OQ189487	OQ261462	OQ261518	OQ302953	OQ303160	OQ303366
C. kyotensis	C. chinensis	AAAAAA	1. FuJian-Euc.	CSF22960	20210526-1-(70)	OQ188367	OQ260342	OQ261519	OQ302954	OQ303161	OQ303367
C. kyotensis	C. chinensis	AAAAAA	FuJian-Cun.	CSF22980	20210525-1-(41)	OQ188678	OQ260653	OQ261520	OQ302955	OQ303162	OQ303368
C. kyotensis	C. chinensis	BAAAAA	3. FuJian-Cun.	CSF22981	20210525-1-(43)	OQ188679	OQ260654	OQ261521	OQ302956	OQ303163	OQ303369
C. kyotensis	C. curvispora	AAAAAA	5. GuangDong-Pin.	CSF22555	20210606-1-(9)	OQ189040	OQ261015	OQ261522	OQ302957	OQ303164	OQ303370
C. kyotensis	C. curvispora	AAAAAA	5. GuangDong-Pin.	CSF23447	20210606-1-(38)	OQ189041	OQ261016	OQ261523	OQ302958	OQ303165	OQ303371
C. kyotensis	C. hongkongensis	AAAAAA	I. FuJian-Euc.	CSF22931	20210526-1-(38)	OQ188388	OQ260363	OQ261524	OQ302959	OQ303166	OQ303372
C. kyotensis	C. hongkongensis	AAAAAA	5. GuangDong-Pin.	CSF22552	20210606-1-(6)	OQ189076	OQ261051	OQ261525	OQ302960	OQ303167	OQ303373
C. kyotensis	C. nongkongensis	ABAAAA	I. Fujian-Euc.	CSF22895	20210526-2-(43)	OQ188389	00260364	OQ261526	00302961	00303168	00303374
C. kyotensis	C. hongkongensis	ABBAAA	5. GuangDong-Pin.	CSF23580	20210606-1-(191)	OQ189079	OQ261054	00261527	00302962	OQ303169	00303375
C. kyotensis	C. nongkongensis	ACAAAA	4. GuangDong-Euc.	CSF23258	20210607-1-(86)	00188895	00260870	00261528	00302963	00303170	00303376
C. kyotensis	C. hongkongensis		5. GuangDong-Pin.	C5F23470 C6F23E01	20210606-1-(73)	00189080	00261055	00261529	00302964	00202171	00303377
C. kyotensis	C. hongkongensis		5. Fujian-Cun.	CSF22501 CSF22471	20210525-1-(10)	00100004	00260659	00261530	00302965	00202172	00303378
C. kyotensis	C. nongkongensis		5. GuangDong-Pin.	C5F234/1 C5F2312(20210606 - 1 - (64)	00189085	00261056	00261551	00302966	00203173	00303379
C. kyotensis	C. hongkongensis	AEDAAA	2. Fujian-Fin.	CSF23130	20210524 - 1 - (101) 20210606 - 1 - (24)	00180085	00260496	00261552	00302967	00202174	00202281
C. Ryotensis	C. hongkongensis		1 Fulian Fue	CSF23443	20210000-1-(34) 20210526 - 1 - (14)	00188300	00261060	00261555	00302968	00303175	00303382
C. Kyolensis	C. hongkongensis		1. Fulian Euc.	CSE22909	20210526 - 1 - (14) 20210526 - 1 - (58)	00188301	00260366	00261535	00302909	00303170	00303383
C. Kyotensis	C. hongkongensis	ΔΕΔΔΔΔ	2 Fulian-Pin	CSF22949	20210524-1-(58)	00188527	00260500	00261535	00302970	00303177	00303384
C. kyotensis	C hongkongensis	ΔΕΔΔΔΔ	5 GuangDong-Pin	CSF23470	20210524-1-(57)	00189089	00261064	00261537	00302971	00303170	00303385
C. Kyotensis	C hongkongensis	ΔΕΔΔΔΔ	7 GuangXi-Fuc	CSF23718	20210600-1-(05)	00189319	00261294	00261538	00302973	00303180	00303386
C kyotensis	C hongkongensis	AFABAA	4 GuangDong-Fuc	CSF23366	20210024 1 (00) 20210607-1-(214)	00188897	00260872	00261539	00302974	00303181	00303387
C kyotensis	C hongkongensis	AFBAAA	1 Fulian-Euc	CSF22810	20210527-1-(67)	00188392	00260367	OO261540	00302975	00303182	00303388
C. kyotensis	C. honokongensis	AFBAAA	2. Fulian-Pin	CSF23142	20210524-1-(168)	00188528	00260503	00261541	00302976	00303183	00303389
C. kyotensis	C. honokongensis	AFBAAA	5. GuangDong-Pin	CSF23602	20210606-1-(217)	00189090	00261065	00261542	00302977	00303184	00303390
C. kvotensis	C. hongkongensis	AFCAAA	3. Fulian-Cun.	CSF23000	20210525-1-(98)	OÕ188685	00260660	00261543	00302978	00303185	00303391
C. kvotensis	C. hongkongensis	AGBAAA	2. Fulian-Pin.	CSF23137	20210524-1-(162)	OÕ188529	OÕ260504	OÕ261544	OÕ302979	OÕ303186	OÕ303392
C. kvotensis	C. hongkongensis	AGBAAA	2. Fulian-Pin.	CSF23166	20210524-1-(200)	OÕ188530	OÕ260505	OÕ261545	OÕ302980	OÕ303187	OÕ303393
C. kyotensis	C. hongkongensis	AGBAAA	8. GuangXi-Pin.	CSF22662	20210622-1-(21)	OÕ189381	OÕ261356	OÕ261546	OÕ302981	OÕ303188	OÕ303394
C. kyotensis	C. hongkongensis	AHAAAA	1. FuJian-Euc.	CSF22921	20210526-1-(26)	OÕ188393	OÕ260368	OÕ261547	OÕ302982	OÕ303189	OÕ303395
C. kyotensis	C. hongkongensis	AHAAAA	5. GuangDong-Pin.	CSF23506	20210606-1-(108)	OQ189091	OQ261066	OQ261548	OQ302983	OQ303190	OQ303396
C. kyotensis	C. hongkongensis	AIAAAA	1. Fulian-Euc.	CSF22954	20210526-1-(64)	OQ188394	OQ260369	OQ261549	OQ302984	OQ303191	OQ303397
C. kyotensis	C. hongkongensis	BFBAAA	7. GuangXi-Euc.	CSF23782	20210624-2-(13)	OQ189320	OQ261295	OQ261550	OQ302985	OQ303192	OQ303398
C. kyotensis	C. ilicicola	AAAAAA	GuangXi-Pin.	CSF22680	20210622-1-(55)	OQ189384	OQ261359	OQ261551	OQ302986	OQ303193	OQ303399
C. kyotensis	C. ilicicola	AAAA-A	GuangXi-Cun.	CSF22632	20210623-1-(96)	OQ189413	OQ261388	OQ261552	OQ302987	_ f	OQ303400
C. kvotensis	C. ilicicola	AABAAA	2. Fulian-Pin.	CSF23189	20210524-1-(231)	OO188534	OO260509	OO261553	OO302988	OO303194	OO303401
C. kyotensis	C. ilicicola	BAAAAA	4. GuangDong-Euc.	CSF23220	20210607-1-(45)	OQ188898	OQ260873	OQ261554	OQ302989	OQ303195	OQ303402
C. kyotensis	C. ilicicola	BAAAAA	5. GuangDong-Pin.	CSF23489	20210606-1-(88)	OQ189093	OQ261068	OQ261555	OQ302990	OQ303196	OQ303403
C. kyotensis	C. ilicicola	CAAABB	10. YunNan-Euc.	CSF23806	20210708-1-(59)	OQ189474	OQ261449	OQ261556	OQ302991	OQ303197	OQ303404
C. kyotensis	C. ilicicola	CAAABB	10. YunNan-Euc.	CSF23829	20210708-1-(178)	OQ189475	OQ261450	OQ261557	OQ302992	OQ303198	OQ303405
C. kyotensis	C. kyotensis	AAAAAA	1. FuJian-Euc.	CSF22937	20210526-1-(44)	OQ188399	OQ260374	OQ261558	OQ302993	OQ303199	OQ303406

Table 3. Cont.

Species Complex	Species	Genotype ^a	Site and Tree Species Code ^b	Isolate No. ^c	Sample and Isolate Information ^d	d GenBank Accession No. ^e					
					-	tef1	tub2	cmdA	his3	rpb2	act
C. kyotensis	C. kyotensis	AAAAAA	2. FuJian-Pin.	CSF23086	20210524-1-(93)	OQ188536	OQ260511	OQ261559	OQ302994	OQ303200	OQ303407
C. kyotensis	C. kyotensis	ADAAAA	 FuJian-Euc. 	CSF22894	20210526-2-(42)	OQ188400	OQ260375	OQ261560	OQ302995	OQ303201	OQ303408
C. kyotensis	C. kyotensis	ADAAAA	FuJian-Pin.	CSF23115	20210524-1-(137)	OQ188537	OQ260512	OQ261561	OQ302996	OQ303202	OQ303409
C. kyotensis	C. kyotensis	ADAAAA	FuJian-Pin.	CSF23120	20210524-1-(142)	OQ188538	OQ260513	OQ261562	OQ302997	OQ303203	OQ303410
C. kyotensis	C. kyotensis	ADAAAA	5. GuangDong-Pin.	CSF23614	20210606-1-(229)	OQ189095	OQ261070	OQ261563	OQ302998	OQ303204	OQ303411
C. kyotensis	C. kyotensis	AFAAAA	 FuJian-Euc. 	CSF22869	20210526-2-(7)	OQ188405	OQ260380	OQ261564	OQ302999	OQ303205	OQ303412
C. kyotensis	C. kyotensis	AFAAAA	2. FuJian-Pin.	CSF23163	20210524-1-(197)	OQ188542	OQ260517	OQ261565	OQ303000	OQ303206	OQ303413
C. kyotensis	C. kyotensis	AIAAAA	1. FuJian-Euc.	CSF22904	20210526-1-(8)	OQ188407	OQ260382	OQ261566	OQ303001	OQ303207	OQ303414
C. kyotensis	C. kyotensis	AIAAAA	1. FuJian-Euc.	CSF22866	20210526-2-(3)	OQ188408	OQ260383	OQ261567	OQ303002	OQ303208	OQ303415
C. kyotensis	C. kyotensis	AIDAAA	4. GuangDong-Euc.	CSF23316	20210607-1-(153)	OQ188899	OQ260874	OQ261568	OQ303003	OQ303209	OQ303416
C. kyotensis	C. kyotensis	AIDAAA	5. GuangDong-Pin.	CSF23480	20210606-1-(79)	OQ189096	OQ261071	OQ261569	OQ303004	OQ303210	OQ303417
C. kyotensis	C. kyotensis	AIDAAA	5. GuangDong-Pin.	CSF23555	20210606-1-(164)	OQ189097	OQ261072	OQ261570	00303005	00303211	00303418
C. kyotensis	C. kyotensis	AIDABA	2. FuJian-Pin.	CSF23104	20210524-1-(123)	00188548	00260523	OQ261571	00303006	00303212	00303419
C. kyotensis	C. kyotensis	AIFAAA	2. FuJian-Pin.	CSF23181	20210524-1-(222)	OQ188549	00260524	OQ261572	00303007	00303213	00303420
C. kyotensis	C. kyotensis	AKAAAA	2. Fujian-Pin.	CSF23070	20210524-1-(68)	00188550	00260525	OQ261573	00303008	00303214	00303421
C. kyotensis	C. kyotensis		2. Fujian-Fin.	CSF23090	$20210524 \cdot 1 \cdot (106)$ $20210524 \cdot 1 \cdot (112)$	00188554	00260526	OQ261574	00303009	00202215	00303422
C. Kyölensis	C. Ryolensis	ALADAA	2. Fujian Pin	CSF23090	$20210524 \cdot 1 \cdot (112)$	00100004	00260529	00261575	00303010	00202210	00202425
C. Kyolensis	C. kyolensis		2. Fujian-Fill.	CSF22010	20210524 - 1 - (14) 20210524 - 1 - (104)	00188556	00260530	00261576	00303011	00303217	00303424
C. kyotensis	C. kyotensis		5 GuangDong-Pin	CSF23468	20210524-1-(104) 20210606 1 (60)	00189098	002600001	00261578	00303012	00303218	00303425
C. Kyotensis	C. kyolensis		5 GuangDong-Pin	CSF23481	20210606-1-(00)	00189099	00261073	OO261579	00303014	00303220	00303420
C. kyotensis	C. kyotensis		5 GuangDong-Pin	CSF23572	20210000-1-(00)	00189100	OO261074	OO261580	00303015	00303220	00303428
C kyotensis	C kyotensis		5 GuangDong-Pin	CSF23455	20210606-1-(47)	00189101	OO261076	OO261581	00303016	00303222	00303429
C kyotensis	C kyotensis	AODAAA	5 GuangDong-Pin	CSF23584	20210000 + (47) 20210606-1-(196)	00189102	OO261077	00261582	00303017	00303223	00303430
C kyotensis	C kyotensis	APAAAA	5. GuangDong-Pin	CSF23505	20210606-1-(107)	00189103	00261078	00261583	00303018	00303224	00303431
C. kyotensis	C. kyotensis	ARAAAA	1. Fulian-Euc	CSF22950	20210526-1-(59)	00188409	00260384	00261584	00303019	00303225	00303432
C. kvotensis	C. kvotensis	ARAAAA	5. GuangDong-Pin.	CSF23437	20210606-1-(27)	OÕ189104	OÕ261079	OO261585	OÕ303020	OÕ303226	OO303433
C. kvotensis	C. kvotensis	BRAAAA	1. Fulian-Euc.	CSF22889	20210526-2-(35)	OÕ188410	OO260385	OO261586	OO303021	OO303227	OO303434
C. kyotensis	C. kyotensis	CAABAA	7. GuangXi-Euc.	CSF22586	20210621-1-(9)	OÕ189324	OÕ261299	OÕ261587	OÕ303022	OÕ303228	OÕ303435
C. kyotensis	C. kyotensis	CADAAA	7. GuangXi-Euc.	CSF23738	20210624-1-(121)	OQ189325	OQ261300	OQ261588	OQ303023	OQ303229	OQ303436
C. kyotensis	C. kyotensis	CADAAA	7. GuangXi-Euc.	CSF23784	20210624-2-(15)	OQ189326	OQ261301	OQ261589	OQ303024	OQ303230	OQ303437
C. kyotensis	C. kyotensis	CADBAA	7. GuangXi-Euc.	CSF23716	20210624-1-(81)	OQ189327	OQ261302	OQ261590	OQ303025	OQ303231	OQ303438
C. kyotensis	C. kyotensis	CADDAA	7. GuangXi-Euc.	CSF23644	20210621-1-(37)	OQ189328	OQ261303	OQ261591	OQ303026	OQ303232	OQ303439
C. kyotensis	C. kyotensis	CADDAA	8. GuangXi-Pin.	CSF22683	20210622-1-(58)	OQ189385	OQ261360	OQ261592	OQ303027	OQ303233	OQ303440
C. kyotensis	C. kyotensis	CBAAAA	2. FuJian-Pin.	CSF23110	20210524-1-(132)	OQ188557	OQ260532	OQ261593	OQ303028	OQ303234	OQ303441
C. kyotensis	C. kyotensis	CEADAA	GuangXi-Euc.	CSF23660	20210624-1-(3)	OQ189329	OQ261304	OQ261594	OQ303029	OQ303235	OQ303442
C. kyotensis	C. kyotensis	CEDDAA	GuangXi-Euc.	CSF23711	20210624-1-(76)	OQ189330	OQ261305	OQ261595	OQ303030	OQ303236	OQ303443
C. kyotensis	C. kyotensis	CFAAAA	 FuJian-Euc. 	CSF22907	20210526-1-(12)	OQ188412	OQ260387	OQ261596	OQ303031	OQ303237	OQ303444
C. kyotensis	C. kyotensis	CFAAAA	2. FuJian-Pin.	CSF23114	20210524-1-(136)	OQ188559	OQ260534	OQ261597	OQ303032	OQ303238	OQ303445
C. kyotensis	C. kyotensis	CHDBAA	7. GuangXi-Euc.	CSF23697	20210624-1-(53)	OQ189331	OQ261306	OQ261598	OQ303033	OQ303239	OQ303446
C. kyotensis	C. kyotensis	CIAAAA	2. FuJian-Pin.	CSF23176	20210524-1-(214)	OQ188560	OQ260535	OQ261599	OQ303034	OQ303240	OQ303447
C. kyotensis	C. kyotensis	CMAAAA	1. FuJian-Euc.	CSF22778	20210527-1-(29)	OQ188413	OQ260388	OQ261600	OQ303035	OQ303241	OQ303448
C. kyotensis	C. kyotensis	CMDBAA	7. GuangXi-Euc.	CSF23765	20210624-1-(166)	OQ189332	OQ261307	OQ261601	OQ303036	OQ303242	OQ303449
C. kyotensis	C. kyotensis	CMDBAA	7. GuangXi-Euc.	CSF23769	20210624-1-(170)	OQ189333	00261308	OQ261602	00303037	00303243	00303450
C. kyotensis	C. Kyotensis	CNIDRAA	7. GuangXi-Euc.	C5F23715	20210624-1-(80)	00189334	00261309	00261603	00303038	00303244	00303451
C. Kyotensis	C. Kyotensis	CNDBAA	7. GuangAl-Euc.	CSF22594	20210621-1-(13)	00189335	00261310	00261604	00303039	00303245	00303452
C. Kyötensis	C. kyotensis	COAAAA	o. GuangAl-Pin.	C5F22646	20210621-3-(21)	00189386	00261361	00261605	00203040	00303246	00303453
C. kyotensis C. kyotensis	C. kyotensis C. kyotensis	COABAA	7. GuangXi-Euc. 7. GuangXi-Euc.	CSF23708 CSF23675	20210624-1-(70) 20210624-1-(30)	OQ189336 OQ189337	OQ261311 OQ261312	OQ261606 OQ261607	OQ303041 OQ303042	OQ303247 OQ303248	OQ303454 OQ303455

Table 3. Cont.

Species Complex	Species	Genotype ^a	Site and Tree Species Code ^b	Isolate No. ^c	Sample and Isolate Information ^d	late GenBank Accession No. ^e					
					-	tef1	tub2	cmdA	his3	rpb2	act
C. kyotensis	C. kyotensis	COABAA	7. GuangXi-Euc.	CSF23754	20210624-1-(154)	OQ189338	OQ261313	OQ261608	OQ303043	OQ303249	OQ303456
C. kyotensis	C. kyotensis	COABAA	GuangXi-Euc.	CSF23758	20210624-1-(158)	OQ189339	OQ261314	OQ261609	OQ303044	OQ303250	OQ303457
C. kyotensis	C. kyotensis	COABAA	GuangXi-Euc.	CSF23763	20210624-1-(164)	OQ189340	OQ261315	OQ261610	OQ303045	OQ303251	OQ303458
C. kyotensis	C. kyotensis	CODAAB	2. FuJian-Pin.	CSF23124	20210524-1-(146)	OQ188561	OQ260536	OQ261611	OQ303046	OQ303252	OQ303459
C. kyotensis	C. kyotensis	CODBAA	GuangXi-Pin.	CSF22665	20210622-1-(24)	OQ189387	OQ261362	OQ261612	OQ303047	OQ303253	OQ303460
C. kyotensis	C. kyotensis	CODDAA	GuangXi-Euc.	CSF23703	20210624-1-(64)	OQ189341	OQ261316	OQ261613	OQ303048	OQ303254	OQ303461
C. kyotensis	C. kyotensis	CODDAA	8. GuangXi-Pin.	CSF22698	20210622-1-(129)	OQ189388	OQ261363	OQ261614	OQ303049	OQ303255	OQ303462
C. kyotensis	C. kyotensis	CRAACA	GuangDong-Cun.	CSF23408	20210609-1-(84)	OQ189159	OQ261134	OQ261615	OQ303050	OQ303256	OQ303463
C. kyotensis	C. kyotensis	CRABDA	GuangXi-Euc.	CSF23696	20210624-1-(52)	OQ189342	OQ261317	OQ261616	OQ303051	OQ303257	OQ303464
C. kyotensis	C. kyotensis	CRABDA	GuangXi-Euc.	CSF23707	20210624-1-(69)	OQ189343	OQ261318	OQ261617	OQ303052	OQ303258	OQ303465
C. kyotensis	C. kyotensis	CRABDA	GuangXi-Euc.	CSF23722	20210624-1-(89)	OQ189344	OQ261319	OQ261618	OQ303053	OQ303259	OQ303466
C. kyotensis	C. kyotensis	CSDBAA	8. GuangXi-Pin.	CSF22688	20210622-1-(66)	OQ189389	OQ261364	OQ261619	OQ303054	OQ303260	OQ303467
C. kyotensis	C. kyotensis	CSDBAA	8. GuangXi-Pin.	CSF22696	20210622-1-(106)	OQ189390	OQ261365	OQ261620	OQ303055	OQ303261	OQ303468
C. kyotensis	C. kyotensis	CIDBAA	8. GuangXi-Pin.	CSF22669	20210622-1-(38)	OQ189391	OQ261366	OQ261621	OQ303056	OQ303262	OQ303469
C. kyotensis	C. kyotensis	CUDAAA	7. GuangXi-Euc.	CSF23/44	20210624-1-(139)	OQ189345	OQ261320	OQ261622	OQ303057	OQ303263	OQ303470
C. kyotensis	C. kyotensis	CUDAAA	8. GuangXi-Pin.	CSF22667	20210622-1-(34)	OQ189392	OQ261367	OQ261623	OQ303058	OQ303264	OQ303471
C. kyotensis	C. kyotensis	DAAAAA	2. FuJian-Pin.	CSF23143	20210524-1-(169)	OQ188566	OQ260541	OQ261624	OQ303059	OQ303265	OQ303472
C. kyotensis	C. kyotensis	DADAAA	6. GuangDong-Cun.	CSF23418	20210609-1-(141)	OQ189161	OQ261136	OQ261625	OQ303060	OQ303266	OQ303473
C. kyotensis	C. kyotensis	DCABAA	5. GuangDong-Pin.	CSF23581	20210606-1-(193)	OQ189107	00261082	OQ261626	00303061	00303267	00303474
C. kyotensis	C. kyotensis	DDAABA	2. FuJian-Pin.	CSF23118	20210524-1-(140)	OQ188569	OQ260544	OQ261627	00303062	OQ303268	00303475
C. kyotensis	C. kyotensis	DDABAA	6. GuangDong-Cun.	CSF22546	20210609-1-(17)	OQ189162	00261137	OQ261628	00303063	OQ303269	00303476
C. kyotensis	C. kyotensis	DDDAAA	2. FuJian-Pin.	CSF23145	20210524-1-(175)	OQ188570	OQ260545	OQ261629	00303064	OQ303270	00303477
C. kyotensis	C. kyotensis		4. GuangDong-Euc.	CSF23382	20210607-1-(234)	OQ188900	OQ260875	OQ261630	00303065	00303271	00303478
C. kyotensis	C. kyotensis	DEAAAA	7. GuangAl-Euc.	CSF23645	20210621-1-(38)	OQ189346	00261321	00261631	00303066	00303272	00303479
C. Kyotensis	C. Kyötensis	DERAAA	1. Fujian-Euc.	C5F22926 C5F22174	20210526-1-(33)	OQ166419	00260394	00261652	00303067	00303273	00202480
C. kyotensis	C. kyotensis		2. Fujian-Fin.	CSF23174 CSF22404	20210524-1-(211) 20210606(1)(02)	001005/7	00260552	00261633	00303068	00303274	00202481
C. Kyötensis	C. Kyötensis	DGDAAA	5. GuangDong-Pin.	C5F23494	20210606-1-(93)	00109106	00261065	00261634	00303069	00303275	00303482
C. kyotensis	C. kyotensis	DIAAAA	2. Fujian-Fin.	C5F23052	20210524 - 1 - (28)	00100000	00260560	00261635	00303070	00303276	00202485
C. Kyölensis	C. Kyolensis	DIBAAA	4. GuangDong-Euc.	CSF233054	20210607 - 1 - (242)	00188586	00260561	00261630	00303071	00303277	00303485
C. Kyolensis	C. Kyolensis		1 Eulian Euc	CSE22018	20210524-1-(51)	00188428	00260403	00261638	00303072	00303278	00303485
C. Kyotensis	C. kyolensis		1. Fulian-Euc.	CSF22790	20210520-1-(25) 20210527-1-(43)	00188427	00260403	00261639	00303073	00303279	00303487
C. kyotensis	C. kyotensis	DKAAAA	2 Fulian-Pin	CSF23109	20210524 - 1 - (45)	00188588	00260563	OO261640	00303075	00303281	00303488
C. kyotensis	C kyotensis	DKAAAA	2. Fulian-Pin	CSF23165	20210524-1-(101) 20210524-1-(199)	00188589	00260564	00261641	00303076	00303282	00303489
C kyotensis	C kyotensis	DKDAAA	1 Fulian-Euc	CSF22890	20210524 1 (199)	00188429	00260404	00261642	00303077	00303283	00303490
C kyotensis	C kyotensis	DLAAAA	5 GuangDong-Pin	CSF23507	20210520 2 (50)	00189110	00261085	00261643	00303078	00303284	00303491
C. kyotensis	C. kyotensis	DLCAAA	1. Fulian-Euc	CSF22831	20210527-1-(90)	00188430	00260405	00261644	00303079	00303285	00303492
C. kyotensis	C kyotensis	DMAAAA	1. Fulian-Euc	CSF22864	20210526-2-(1)	00188433	00260408	00261645	00303080	00303286	00303493
C. kyotensis	C. kvotensis	DMAAAA	2. Fulian-Pin.	CSF23193	20210524-1-(239)	00188595	00260570	00261646	00303081	00303287	00303494
C. kvotensis	C. kvotensis	DOAAAA	2. Fulian-Pin.	CSF22519	20210524-1-(18)	OÕ188597	OÕ260572	OÕ261647	OÕ303082	OÕ303288	OÕ303495
C. kvotensis	C. kvotensis	DOAAAA	2. Fulian-Pin.	CSF23087	20210524-1-(94)	OÕ188598	OÕ260573	OÕ261648	OO303083	OÕ303289	OO303496
C. kyotensis	C. kyotensis	DOAAAA	5. GuangDong-Pin.	CSF23452	20210606-1-(43)	OÕ189112	OÕ261087	OÕ261649	OÕ303084	OÕ303290	OÕ303497
C. kyotensis	C. kyotensis	DODBAA	5. GuangDong-Pin.	CSF23582	20210606-1-(194)	OQ189113	OQ261088	OQ261650	OQ303085	OQ303291	OQ303498
C. kyotensis	C. kyotensis	DQAABA	1. FuJian-Euc.	CSF22492	20210527-1-(21)	OQ188434	OQ260409	OQ261651	OQ303086	OQ303292	OQ303499
C. kyotensis	C. kyotensis	DRDAAA	5. GuangDong-Pin.	CSF23475	20210606-1-(71)	OQ189114	OQ261089	OQ261652	OQ303087	OQ303293	OQ303500
C. kyotensis	C. kyotensis	DRDAAA	5. GuangDong-Pin.	CSF23534	20210606-1-(143)	OQ189115	OQ261090	OQ261653	OQ303088	OQ303294	OQ303501
C. kyotensis	C. kyotensis	DVACAA	GuanğDonğ-Euc.	CSF23370	20210607-1-(219)	OQ188902	OQ260877	OQ261654	OQ303089	OQ303295	OQ303502
C. kyotensis	C. kyotensis	EADAAA	5. GuangDong-Pin.	CSF23512	20210606-1-(116)	OQ189116	OQ261091	OQ261655	OQ303090	OQ303296	OQ303503
C. kyotensis	C. kyotensis	ELAAAA	5. GuanğDonğ-Pin.	CSF23499	20210606-1-(98)	OQ189117	OQ261092	OQ261656	OQ303091	OQ303297	OQ303504

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Species Complex	Species	Genotype ^a	Site and Tree Species Code ^b	Isolate No. ^c	Sample and Isolate Information ^d	e GenBank Accession No. ^e					
						tef1	tub2	cmdA	his3	rpb2	act
C. kyotensis	C. kyotensis	EOAAAA	5. GuangDong-Pin.	CSF23474	20210606-1-(70)	OQ189118	OQ261093	OQ261657	OQ303092	OQ303298	OQ303505
C. kyotensis	C. pacifica	AAAAAA	GuangDong-Pin.	CSF23543	20210606-1-(151)	OQ189119	OQ261094	OQ261658	OQ303093	OQ303299	OQ303506
C. kyotensis	C. pacifica	ACAAAA	GuangDong-Cun.	CSF22544	20210609-1-(11)	OQ189164	OQ261139	OQ261659	OQ303094	OQ303300	OQ303507
C. kyotensis	C. pacifica	BBBAAA	GuangDong-Pin.	CSF23608	20210606-1-(223)	OQ189120	OQ261095	OQ261660	OQ303095	OQ303301	OQ303508
C. kyotensis	C. yunnanensis	AAAAAA	10. YunNan-Éuc.	CSF23797	20210708-1-(31)	OQ189476	OQ261451	OQ261661	OQ303096	OQ303302	OQ303509
C. kyotensis	C. yunnanensis	ABAAAA	YunNan-Euc.	CSF23805	20210708-1-(47)	OQ189477	OQ261452	OQ261662	OQ303097	OQ303303	OQ303510
C. colhounii	Č. eucalypti	AAAAAA	10. YunNan-Euc.	CSF23802	20210708-1-(41)	OQ189480	OQ261455	OQ261663	OQ303098	OQ303304	OQ303511
C. colhounii	C. eucalypti	AAAAAA	10. YunNan-Euc.	CSF23828	20210708-1-(162)	OQ189481	OQ261456	OQ261664	OQ303099	OQ303305	OQ303512
C. colhounii	C. eucalypti	BAAAAA	YunNan-Euc.	CSF23809	20210708-1-(88)	OQ189482	OQ261457	OQ261665	OQ303100	OQ303306	OQ303513
C. colhounii	C. eucalypti	BAAAAA	YunNan-Euc.	CSF23832	20210708-1-(197)	OQ189483	OQ261458	OQ261666	OQ303101	OQ303307	OQ303514
C. colhounii	C. eucalypti	CAAAAA	10. YunNan-Euc.	CSF23800	20210708-1-(37)	OO189484	OO261459	OO261667	OO303102	OO303308	OO303515
C. colhounii	C. eucalypti	DAAAAA	YunNan-Euc.	CSF23810	20210708-1-(99)	OO189485	OO261460	OO261668	OO303103	OO303309	OO303516
C. colhounii	C. eucalypti	DAAAAA	11. YunNan-Pin.	CSF23854	20210709-1-(224)	OQ189486	OQ261461	OQ261669	OQ303104	OQ303310	OQ303517

^a Genotype within each *Calonectria* species, determined by sequences of the *tef1*, *tub2*, *cmdA*, *his3*, *rpb2* and *act* regions; "-" means not available. ^b Code of 12 sampling sites connecting to "Site and Tree species code" in Table 1. ^c CSF: Culture Collection located at Research Institute of Fasting-growing Trees (RIFT), Chinese Academy of Forestry, ZhanJiang, GuangDong Province, China. ^d Information associated with sample point and isolate, for example, "20210525-1-(4)" indicates sample number "20210525-1-(4)" and isolate from this sample. ^e *tef1* = translation elongation factor 1-alpha; *tub2* = β -tubulin; *cmdA* = calmodulin; *his3* = histone H3; *rpb2* = the DNA-directed RNA polymerase II second largest subunit; *act* = actin. ^f "-" represents the relative locus that was not successfully amplified in this study.

3.3. Multi-Gene Phylogenetic Analyses and Species Identification

The standard nucleotide BLAST search results conducted using the *act*, *cmdA*, *his3*, *rpb2*, *tef1*, and *tub2* gene sequences showed that the isolates obtained in the current study belonged to two species complexes of *Calonectria*, the *C. kyotensis* species complex and the *C. colhounii* species complex. The 207 *Calonectria* isolates with six sequenced gene regions were used for phylogenetic analyses (Table 3). Based on the published results in Liu and co-authors [30] and several recent publications [29,32,33,40–42], sequences of *act*, *cmdA*, *his3*, *rpb2*, *tef1*, and *tub2* of 44 published species in the *C. kyotensis* species complex and *C. colhounii* species complex were downloaded from GenBank and used for sequence comparisons and phylogenetic analyses (Table 4).

Table 4. Isolates from other studies used in phylogenetic analyses in this study.	

Species Code ^a	Species	Isolate No. ^{b,c}	Other Collection Number ^c	Hosts	Area of Occurrence	Collector	GenBank Accession Numbers ^d				References or Source of Data		
							act	cmdA	his3	rpb2	tef1	tub2	
				Sp	ecies in Calonectria kyoter	<i>isis</i> species complex							
B4	C. aconidialis	CMW 35174 ^T	CBS 136086; CERC 1850	Soil (Eucalyptus	HaiNan, China	X. Mou and S.F. Chen	MT334938	MT335165	MT335404	MT412479	MT412695	N/A ^e	[18,30]
		CMW 35384	CBS 136091; CERC 1886	Soil (<i>Eucalyptus</i> plantation)	HaiNan, China	X. Mou and S.F. Chen	MT334939	MT335166	MT335405	N/A	MT412696	N/A	[18,30]
В5	C. aeknauliensis	CMW 48253 ^T	CBS 143559	Soil (<i>Eucalyptus</i> plantation)	Aek Nauli, North Sumatra, Indonesia	M.J. Wingfield	MT334953	MT335180	MT335419	MT412486	MT412710	N/A	[9,30]
		CMW 48254	CBS 143560	Soil (<i>Eucalyptus</i> plantation)	Aek Nauli, North Sumatra, Indonesia	M.J. Wingfield	MT334954	MT335181	MT335420	MT412487	MT412711	N/A	[9,30]
B8	C. asiatica	CBS 114073 ^T	CMW 23782; CPC 3900	Debris (leaf litter)	Prathet Thai, Thailand	M.J. Wingfield	GQ280428	AY725741	AY725658	N/A	AY725705	AY725616	[43,44]
B17	C. brassicicola	CBS 112841 ^T	CMW 51206; CPC 4552	Soil (Brassica sp.)	Indonesia	M.J. Wingfield	N/A	KX784561	N/A	N/A	KX784689	KX784619	[45]
B19	C. bumicola	CMW 48257 ^T	CBS 143575	Soil (<i>Eucalyptus</i> plantation)	Aek Nauli, North Sumatra, Indonesia	M.J. Wingfield	MT334975	MT335205	MT335445	MT412509	MT412736	N/A	[9,30]
B20	C. canadiana	CMW 23673 ^T	CBS 110817; STF-U 499	Picea sp.	Canada	S. Greifenhagen	MT334976	MT335206	MT335446	MT412510	MT412737	MT412958	[1,30,46,47]
		CERC 8952	-	Soil	HeNan, China	S.F. Chen	MT335058	MT335290	MT335530	MT412587	MT412821	MT413035	[28,30]
B23	C. chinensis	CMW 23674 ^T	CBS 114827; CPC 4101	Soil	Hong Kong, China	E.C.Y. Liew	MT334990	MT335220	MT335460	MT412524	MT412751	MT412972	[30,43,44]
		CMW 30986	CBS 112744; CPC 4104	Soil	Hong Kong, China	E.C.Y. Liew	MT334991	MT335221	MT335461	MT412525	MT412752	MT412973	[30,43,44]
B26	C. cochinchinensis	CMW 49915 ^T	CBS 143567	Soil (<i>Hevea</i> brasiliensis plantation)	Duong Minh Chau, Tay Ninh, Vietnam	N.Q. Pham, Q.N. Dang and T.Q. Pham	MT334995	MT335225	MT335465	MT412529	MT412756	MT412977	[9,30]
		CMW 47186	CBS 143568	Soil (A. auriculiformis plantation)	Song May, Dong Nai, Vietnam	N.Q. Pham and T.Q. Pham	MT334996	MT335226	MT335466	MT412530	MT412757	MT412978	[9,30]
B29	C. colombiensis	CMW 23676 ^T	CBS 112220; CPC 723	Soil (E. grandis trees)	La Selva, Colombia	M.J. Wingfield	MT334998	MT335228	MT335468	MT412532	MT412759	MT412980	[30,43]
		CMW 30985	CBS 112221; CPC 724	Soil (E. grandis trees)	La Selva, Colombia	M.J. Wingfield	MT334999	MT335229	MT335469	MT412533	MT412760	MT412981	[30,43]
B31	C. curvispora	CMW 23693 ^T	CBS 116159; CPC 765	Soil	Tamatave, Madagascar	P.W. Crous	MT335002	MT335232	MT335472	MT412536	MT412763	N/A	[1,18,30,44,48]
		CMW 48245	CBS 143565	Soil (Eucalyptus plantation)	Aek Nauli, North Sumatra, Indonesia	M.J. Wingfield	MT335003	MT335233	MT335473	MT412537	MT412764	N/A	[9,30]
B46	C. heveicola	CMW 49913 ^T	CBS 143570	Soil (<i>Hevea</i> brasiliensis plantation)	Bau Bang, Binh Duong, Vietnam	N.Q. Pham, Q.N. Dang and T.Q. Pham	MT335025	MT335255	MT335495	N/A	MT412786	MT413004	[9,30]
		CMW 49928	CBS 143571	Soil	Bu Gia Map National Park, Binh Phuoc, Vietnam	N.Q. Pham, Q.N. Dang and T.Q. Pham	MT335048	MT335280	MT335520	MT412577	MT412811	MT413025	[9,30]
B48	C. hongkongensis	CBS 114828 ^T	CMW 51217; CPC 4670	Soil	Hong Kong, China	M.J. Wingfield	MT335028	MT335258	MT335498	MT412559	MT412789	MT413007	[30,43]
		CERC 3570	CMW 47271	Soil (Eucalyptus plantation)	BeiHai, GuangXi, China	S.F. Chen, J.Q. Li and G.Q. Li	MT335030	MT335260	MT335500	MT412561	MT412791	MT413009	[15,30]
B51	C. ilicicola	CMW 30998 ^T	CBS 190.50; IMI 299389; STE-U 2482	Solanum tuberosum	Bogor, Java, Indonesia	K.B. Boedijn and J. Reitsma	MT335036	MT335266	MT335506	MT412564	MT412797	N/A	[1,30,44,49]
B52	C. indonesiae	CMW 23683 ^T	CBS 112823; CPC 4508	Syzygium aromaticum	Warambunga, Indonesia	M.J. Wingfield	MT335037	MT335267	MT335507	MT412565	MT412798	MT413015	[30,43]

Table 4. Cont.

Species Code ^a	Species	Isolate No. ^{b,c}	Other Collection Number ^c	Hosts	Area of Occurrence	Collector	GenBank Accession Numbers ^d			References or Source of Data			
							act	cmdA	his3	rpb2	tef1	tub2	
		CBS 112840	CMW 51205; CPC 4554	S. aromaticum	Warambunga, Indonesia	M.J. Wingfield	MT335038	MT335268	MT335508	MT412566	MT412799	MT413016	[30,43]
B55	C. kyotensis	CBS 114525 ^T	ATCC 18834; CMW 51824; CPC 2367	Robinia pseudoacacia	Japan	T. Terashita	MT335039	MT335271	MT335511	MT412569	MT412802	MT413019	[1,30,45,50]
		CBS 114550	CMW 51825; CPC 2351	Soil	China	M.J. Wingfield	MT335016	MT335246	MT335486	MT412548	MT412777	MT412995	[30,45]
B57	C. lantauensis	CERC 3302 ^T	CBS 142888; CMW 47252	Soil	LiDao, Hong Kong, China	M.J. Wingfield and S.F. Chen	MT335040	MT335272	MT335512	MT412570	MT412803	N/A	[15,30]
		CERC 3301	CBS 142887; CMW 47251	Soil	LiDao, Hong Kong, China	M.J. Wingfield and S.F. Chen	MT335041	MT335273	MT335513	N/A	MT412804	N/A	[15,30]
B58	C. lateralis	CMW 31412 ^T	CBS 136629	Soil (<i>Eucalyptus</i> plantation)	GuangXi, China	X. Zhou, G. Zhao and F. Han	MT335042	MT335274	MT335514	MT412571	MT412805	MT413020	[18,30]
B66	C. malesiana	CMW 23687 ^T	CBS 112752; CPC 4223	Soil	Northern Sumatra, Indonesia	M.J. Wingfield	MT335054	MT335286	MT335526	MT412583	MT412817	MT413031	[30,43]
		CBS 112710	CMW 51199; CPC 3899	Leaf litter	Prathet, Thailand	N.L. Hywel-Jones	MT335055	MT335287	MT335527	MT412584	MT412818	MT413032	[30,43]
B80	C. pacifica	CMW 16726 ^T	A1568; CBS 109063; IMI 354528; STE-U 2524	Araucaria heterophylla	Hawaii, USA	M. Aragaki	MT335079	MT335311	MT335551	MT412604	MT412842	N/A	[1,30,43,46]
		CMW 30988	CBS 114038	Ipomoea aquatica	Auckland, New Zealand	C.F. Hill	MT335080	MT335312	MT335552	MT412605	MT412843	N/A	[1,30,43,44]
B86	C. penicilloides	CMW 23696 ^T	CBS 174. 55; STE-U 2388	Prunus sp.	Hatizyo Island, Japan	M. Ookubu	MT335106	MT335338	MT335578	MT412631	MT412869	MT413081	[1,30,51]
B112	C. sumatrensis	CMW 23698 ^T	CBS 112829; CPC 4518	Soil	Northern Sumatra, Indonesia	M.J. Wingfield	MT335145	MT335382	MT335622	MT412674	MT412913	N/A	[30,43]
		CMW 30987	CBS 112934; CPC 4516	Soil	Northern Sumatra, Indonesia	M.J. Wingfield	MT335146	MT335383	MT335623	MT412675	MT412914	N/A	[30,43]
B113	C. syzygiicola	CBS 112831 ^T	CMW 51204; CPC 4511	Syzygium aromaticum	Sumatra, Indonesia	M.J. Wingfield	N/A	N/A	N/A	N/A	KX784736	KX784663	[45]
B116	C. uniseptata	CBS 413.67 ^T	CMW 23678; CPC 2391; IMI 299577	Paphiopedilum callosum	Celle, Germany	W. Gerlach	GQ280451	GQ267379	GQ267248	N/A	GQ267307	GQ267208	[45]
B120	C. yunnanensis	CERC 5339 ^T	CBS 142897; CMW 47644	Soil (Eucalyptus plantation)	YunNan, China	S.F. Chen and I.O. Li	MT335157	MT335396	MT335636	MT412687	MT412927	MT413134	[15,30]
		CERC 5337	CBS 142895; CMW 47642	Soil (Eucalyptus plantation)	YunNan, China	S.F. Chen and J.Q. Li	MT335158	MT335397	MT335637	MT412688	MT412928	MT413135	[15,30]
B124	C. singaporensis	CBS 146715 ^T	MUCL 048320	leaf litter submerged in a small stream	Mac Ritchie Reservoir, Singapore	C. Decock	MW890022.1	MW890042.1	MW890055.1	N/A	MW890086.1	MW890124.1	[40]
		CBS 146713	MUCL 048171	leaf litter submerged in a small stream	Mac Ritchie Reservoir, Singapore	C. Decock	MW890020.1	MW890040.1	MW890053.1	N/A	MW890084.1	MW890123.1	[40]
B127	C. borneana	CMW 50782 ^T	CBS 144553	Soil (Eucalyptus	Brumas, Tawau, Sabah, Malaysia	M.R.B.A Rauf	OL635115	OL635067	OL635043	OL635091	OL635019	N/A	[42]
		CMW 50832	CBS 144551	Soil (Eucalyptus plantation)	Brumas, Tawau, Sabah, Malaysia.	M.R.B.A Rauf	OL635113	OL635065	OL635041	OL635089	OL635017	N/A	[42]
B128	C. ladang	CMW 50776 ^T	CBS 144550	Soil (Eucalyptus plantation)	Brumas, Tawau, Sabah, Malaysia.	M.R.B.A Rauf	OL635122	OL635075	OL635051	OL635099	OL635027	N/A	[42]
		CMW 50775	CBS 144549	Soil (<i>Eucalyptus</i> plantation)	Brumas, Tawau, Sabah, Malaysia.	M.R.B.A Rauf	OL635121	OL635074	OL635050	OL635098	OL635026	N/A	[42]
B129	C. pseudomalesiana	CMW 50821 ^T	CBS 144563	Soil (Eucalyptus plantation)	Brumas, Tawau, Sabah, Malaysia.	M.J. Wingfield	OL635123	OL635076	OL635052	OL635100	OL635028	OL635137	[42]

Table 4. Cont.

Species Code ^a	Species	Isolate No. ^{b,c}	Other Collection Number ^c	Hosts	Area of Occurrence	Collector	GenBank Accession Numbers ^d			References or Source of Data			
							act	cmdA	his3	rpb2	tef1	tub2	
		CMW 50779	CBS 144668	Soil (<i>Eucalyptus</i> plantation)	Brumas, Tawau, Sabah, Malaysia.	M.R.B.A Rauf	OL635124	OL635077	OL635053	OL635101	OL635029	OL635138	[42]
B130	C. tanah	CMW 50777 ^T	CBS 144562	Soil (Eucalyptus plantation)	Brumas, Tawau, Sabah, Malaysia.	M.R.B.A Rauf	OL635134	OL635088	OL635064	OL635112	OL635040	OL635146	[42]
		CMW 50771	CBS 144560	Soil (<i>Eucalyptus</i> plantation)	Brumas, Tawau, Sabah, Malaysia.	M.R.B.A Rauf	OL635132	OL635086	OL635062	OL635110	OL635038	OL635144	[42]
	C. cassiae	ZHKUCC21-0011 ^T	-	Cassia surattensi	GuangDong, China	Y.X. Zhang	N/A	ON260790	N/A	N/A	MZ516860	MZ516863	[33]
		ZHKUCC21-0012	-	Cassia surattensi	GuangZhou, GuangDong, China	Y.X. Zhang	N/A	ON260791	N/A	N/A	MZ516861	MZ516864	[33]
Species in Calonectria colhounii species complex													
B3	C. aciculata	CERC 5342 ^T	CBS 142883; CMW 47645	Eucalyptus urophylla × E. arandis	YunNan, China	S.F. Chen and J.Q. Li	MT334937	MT335164	MT335403	MT412478	MT412694	MT412934	[15,30]
B27	C. colhounii	CBS 293.79 ^T	CMW 30999	Camellia sinensis	Mauritius	A. Peerally	GQ280443	GQ267373	DQ190639	KY653376	GQ267301	DQ190564	[1,44,52,53]
B36	C. eucalypti	CMW 18444 ^T	CBS 125275	E. grandis	Sumatra Utara, Indonesia	M.J. Wingfield	MT335013	MT335243	MT335483	MT412545	MT412774	MT412992	[30,44]
		CMW 18445	CBS 125276	E. grandis	Aek Nauli, Sumatra Utara, Indonesia	M.J. Wingfield	MT335014	MT335244	MT335484	MT412546	MT412775	MT412993	[30,44]
B39	C. fujianensis	CMW 27257 ^T CMW 27254	CBS 127201 CBS 127200	E. grandis E. grandis	FuJian, China FuJian, China	M.J. Wingfield M.J. Wingfield	MT335019 MT335020	MT335249 MT335250	MT335489 MT335490	MT412551 MT412552	MT412780 MT412781	MT412998 MT41299	[16,30] [16,30]
B47	C. honghensis	CERC 5572 ^T	CBS 142885; CMW 47669	plantation)	HongHe, YunNan, China	S.F. Chen and J.Q. Li	MT335026	MT335256	MT335496	MT412557	MT412787	MT413005	[15,30]
		CERC 5571	CBS 142884; CMW 47668	Soil (Eucalyptus plantation)	HongHe, YunNan, China	S.F. Chen and J.Q. Li	MT335027	MT335257	MT335497	MT412558	MT412788	MT413006	[15,30]
B53	C. indusiata	CBS 144.36 ^T	CMW 23699 CMW 51213;	Camellia sinensis	Sri lanka	Unknown	GQ280536	GQ267453	GQ267262	KY653396	GQ267332	GQ267239	[1,44,45,54]
		CBS 114684	CPC 2446; UFV16	Rhododendron sp.	Florida, USA	N.E. El-Gholl	GQ280537	GQ267454	DQ190653	N/A	GQ267333	AF232862	[1,53,55]
B62	C. lichi	CERC 8866 ^T CERC 8850	- - -	Soil Soil	HeNan, China HeNan, China	S.F. Chen S.F. Chen	MT335046 MT335047	MT335278 MT335279	MT335518 MT335519	MT412575 MT412576	MT412809 MT412810	MT413023 MT413024	[28,30] [28,30]
B64	C. macroaconidialis	CBS 114880 ^T	CPC 307; PPRI 4000	E. grandis	Mpumalanga, South Africa	P. W. Crous	MT335050	MT335282	MT335522	MT412579	MT412813	MT413027	[1,30,44,56]
B65	C. madagascariensis	CMW 23686 ^T	CBS 114572; CPC 2252	Soil	Rona, Madagascar	J.E. Taylor	MT335052	MT335284	MT335524	MT412581	MT412815	MT413029	[1,30,44,53]
		CMW 30993	CBS 114571; CPC 2253	Soil	Rona, Madagascar	J.E. Taylor	MT335053	MT335285	MT335525	MT412582	MT412816	MT413030	[1,30,44,53]
B70	C. monticola	CBS 140645 ^T	CPC 28835	Soil	Chiang Mai, Thailand	P. W. Crous	N/A	KT964771	N/A	N/A	KT964773	KT964769	[57]
		CPC 28836	-	Soil	Chiang Mai, Thailand	P. W. Crous	N/A	KT964772	N/A	N/A	KT964774	KT964770	[57]
B81	C. paracolhounii	CBS 114679 ^T	CMW 51212; CPC 2445	N/A	USA	A.Y. Rossman	N/A	KX784582	N/A	KY653423	KX784714	KX784644	[45,54]
		CBS 114705	CMW 51215; CPC 2423	Fruit of Annona reticulata	Australia	D. Hutton	N/A	N/A	N/A	KY653424	KX784715	KX784645	[45,54]

Table 4. Cont.

Species Code ^a	Species	Isolate No. ^{b,c}	Other Collection Number ^c	Hosts	Area of Occurrence	Collector	GenBank Accession Numbers ^d			References or Source of Data			
							act	cmdA	his3	rpb2	tef1	tub2	
B123	C. xianrenensis	CSF12909 ^T	CGMCC3.19584	Soil (near <i>Eucalyptus</i> plantation)	Dacheng Town, Gaozhou County, Maoming Region, GuangDong, China	S.F. Chen, Q.C. Wang and W. Wang	N/A	MK962845	MK962857	N/A	MK962869	MK962833	[29]
		CSF12908	CGMCC3.19518	Soil (near <i>Eucalyptus</i> plantation)	Dacheng Town, Gaozhou County, Maoming Region, GuangDong, China	S.F. Chen, Q.C. Wang and W. Wang	N/A	MK962844	MK962856	N/A	MK962868	MK962832	[29]
	C. minensis	CSF9941 ^T	CGMCC3.18877	Soil (<i>Eucalyptus</i> plantation)	XinLuo, LongYan, ShaoGuan, FuJian, China	S.F. Chen, Q.L. Liu and F.F. Liu	OK253121	OK253259	OK253403	OK253477	OK253814	OK253967	[32]
		CSF9975	CGMCC3.18881	Soil (<i>Eucalyptus</i> plantation)	LianChen, LongYan, ShaoGuan, FuJian, China	S.F. Chen, Q.L. Liu and F.F. Liu	OK253123	OK253261	OK253405	OK253479	OK253816	OK253969	[32]
	C. shaoguanensis	ZHKUCC21-0036 ^T	-	Callistemon rigidus	ShaoGuan, GuangDong, China	Y.X. Zhang	N/A	MZ491112	N/A	N/A	MZ491134	MZ491156	[33]
		ZHKUCC21-0037	-	Callistemon rigidus	ShaoGuan, GuangDong, China	Y.X. Zhang	N/A	MZ491113	N/A	N/A	MZ491135	MZ491157	[33]
					Outgrou	ps							
	Curvicladiella cignea	CBS 109167 ^T	CPC 1595; MUCL 40269	Decaying leaf	French Guiana	C. Decock	KM231122	KM231287	KM231461	KM232311	KM231867	KM232002	[18,53,58]
		CBS 109168	CPC 1594; MUCL 40268	Decaying seed	French Guiana	C. Decock	KM231121	KM231286	KM231460	KM232312	KM231868	KM232003	[18,53,58]

^a Codes (B1 to B120) of the 120 accepted *Calonectria* species resulting from Liu and co-authors [30]. ^b T: ex-type isolates of the species. ^c ATCC: American Type Culture Collection, Virginia, USA; CBS: Westerdijk Fungal Biodiversity Institute, Utrecht, The Netherlands; CERC: China Eucalypt Research Centre, ZhanJiang, GuangDong Province, China; CGMCC: China General Microbiological Culture Collection Center, Beijing, China; CMW: Culture collection of the Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria, Pretoria, South Africa; CPC: Pedro Crous working collection housed at Westerdijk Fungal Biodiversity Institute; CSF: Culture Collection from Southern Forests (CSF), ZhanJiang, GuangDong Province, China; IMI: IMI: International Mycological Institute, CABI Bioscience, Egham, Bakeham Lane, UK; MUCL: Mycotheque, Laboratoire de Mycologie Systematique st Appliqee, I'Universite, Louvian-la-Neuve, Belgium; PPRI: Plant Protection Research Institute, Pretoria, South Africa; STE-U: Department of Plant Pathology, University of Stellenbosch, South Africa; UFV: Universidade Federal de Viçsa, Viçsa, Brazil; ZHKUCC: The culture collection of Zhongkai University of Agriculture and Engineering; -: no other collection. ^d *act*: actin; *cmdA*: calmodulin; *his3*: histone H3; *rpb2*: the second largest subunit of RNA polymerase; *tef1*: translation elongation factor 1-alpha; *tub2*: β-tubulin. ^e N/A: information not available.

Phylogenetic analyses based on the six individual gene regions and the combination dataset for those six gene regions were conducted using both ML and BI methods. The overall topologies generated from the BI analyses were essentially similar to those from the ML analyses for each dataset. Consequently, only the ML tree with bootstrap support values of ML and posterior probabilities of BI was presented. The ML tree generated based on a combination of six gene sequences is presented in Figure 3, and the ML trees generated based on each of the six gene sequences were presented in Appendix F Figures A1–A6. Phylogenetic analyses showed that the 207 *Calonectria* isolates were clustered in 11 groups (Groups A–K) based on combined *tef1/tub2/cmdA/his3/rpb2/act* gene sequence analyses (Figure 3). The analyses showed that isolates in Groups A–J belong to the *C. kyotensis* species complex and that isolates in Group K belong to the *C. colhounii* species complex (Figure 3, Appendix F Figures A1–A6).



tef1+tub2+cmdA+his3+rpb2+act

Figure 3. Cont.



tef1+tub2+cmdA+his3+rpb2+act

Figure 3. Phylogenetic tree of *Calonectria* species based on maximum likelihood (ML) analysis of the combined DNA dataset of *act, cmdA, his3, rpb2, tef1*, and *tub2* gene sequences. Bootstrap support values \geq 70% from ML analysis and posterior probabilities values \geq 0.95 obtained from Bayesian inference (BI) are indicated at the nodes as ML/BI. Bootstrap values < 70% or posterior probabilities values < 0.95 are marked with "*", and absent analysis values are marked with "-". "*/*", "*/-", "-/*", and "-/-" are not displayed. Isolates obtained in this study are highlighted in blue and bold. Ex-type isolates are indicated with "T". The "B" species codes are consistent with the recently published results of Liu and co-authors [30]. *Curvicladiella cignea* (CBS 109167 and CBS 109168) was used as the outgroup taxon.

3.3.1. Isolates in the Calonectria kyotensis Species Complex

Isolates in Groups A and B were clustered with *C. kyotensis* and *C. hongkongensis*, respectively, based on the *tef1*, *tub2*, *cmdA*, *his3*, *rpb2*, *act*, and combined *tef1*/*tub2*/*cmdA*/*his3*/*rpb2*/*act* trees (Figure 3, Appendix F Figures A1–A6). Therefore, isolates in Groups A and B were identified as *C. kyotensis* and *C. hongkongensis*, respectively.

Isolates in Group C were clustered with *C. chinensis* based on the *tef1*, *cmdA*, *his3*, and *rpb2* trees (Appendix F Figures A1 and A3–A5), closest to *C. chinensis* in the *tub2* tree (Appendix F Figure A2), and clustered with *C. chinensis* and *C. cochinchinensis* in the *act* tree (Appendix F Figure A6). These isolates were clustered with *C. chinensis* based on the combined *tef1/tub2/cmdA/his3/rpb2/act* tree (Figure 3). Isolates in Group C were identified as *C. chinensis*.

Isolates in Group D were clustered with *C. asiatica* in the *tef1* and *his3* trees (Appendix F Figures A1 and A4), clustered with or closest to *C. asiatica* in the *tub2* tree (Appendix F Figure A2), closest to *C. asiatica* in the *cmdA* tree (Appendix F Figure A3), and clustered with or closest to *C. asiatica* and *C. uniseptate* in the *act* tree (Appendix F Figure A6). These isolates formed one independent clade in the *rpb2* tree (the *rpb2* sequence of the *C. asiatica* ex-type strain was not available) (Appendix F Figure A5). These isolates were clustered closest to *C. asiatica* based on the combined *tef1/tub2/cmdA/his3/rpb2/act* tree (Figure 3). Isolates in Group D were identified as *C. asiatica*.

Isolates in Group E were clustered with *C. yunnanensis* in the *tef1*, *tub2*, *cmdA*, *his3*, and *rpb2* trees (Appendix F Figures A1–A5) and clustered with *C. yunnanensis*, *C. bumicola*, *C. pacifica*, and *C. tanah* in the *act* tree (Appendix F Figure A6). These isolates were clustered with *C. yunnanensis* based on the combined *tef1/tub2/cmdA/his3/rpb2/act* tree (Figure 3). The isolates in Group E were identified as *C. yunnanensis*.

Isolates in Group F were clustered with *C. aconidialis* in *tef1*, *cmdA*, *his3*, and *act* trees (Appendix F Figures A1, A3, A4 and A6). These isolates were clustered with or close to *C. aconidialis*, *C. asiatica*, and *C. uniseptate* in the *tub2* tree (Appendix F Figure A2) and clustered with *C. aconidialis* and *C. tanah* in the *rpb2* tree (Appendix F Figure A5). These isolates were clustered with *C. aconidialis* based on the combined *tef1/tub2/cmdA/his3/rpb2/act* tree (Figure 3). Isolates in Group F were identified as *C. aconidialis*.

Isolates in Group G were clustered with or close to *C. curvispora* and *C. pacifica* in the *tef1* tree (Appendix F Figure A1) and clustered with *C. pacifica* in the *tub2*, *his3*, and *rpb2* trees (Appendix F Figures A2, A4 and A5). These isolates were clustered with or close to *C. pacifica* and *C. cassia* in the *cmdA* tree (Appendix F Figure A3). These isolates were clustered with *C. curvispora* in the *act* tree (Appendix F Figure A6). The combined *tef1/tub2/cmdA/his3/rpb2/act* tree showed that these isolates clustered with *C. pacifica* (Figure 3). Isolates in Group G were identified as *C. pacifica*.

Isolates in Group H were clustered with *C. curvispora* in the *tef1*, *tub2*, *cmdA*, *his3*, and *act* trees (Appendix F Figures A1–A4 and A6) and clustered with *C. curvispora* and *C. aeknauliensis* in the *rpb2* tree (Appendix F Figure A5). These isolates were clustered with *C. curvispora* in the combined *tef1/tub2/cmdA/his3/rpb2/act* tree (Figure 3). Isolates in Group C were identified as *C. curvispora*.

Isolates in Group I were clustered with or close to *C. ilicicola and C. cassiae* in the *tef1* tree (Appendix F Figure A1). These isolates were clustered with *C. ilicicola* in the *tub2, cmdA, his3, rpb2, act,* and combined *tef1/tub2/cmdA/his3/rpb2/act* trees (Figure 3, Appendix F Figures A2–A6). Isolates in Group I were identified as *C. ilicicola*.

Isolates in Group J were clustered with *C. canadiana* in the *tef1*, *tub2*, *cmdA*, *his3*, and *rpb2* trees (Appendix F Figures A1–A5). These isolates were clustered with *C. canadiana* and *C. indonesiae* in the *act* tree (Appendix F Figure A6). These isolates were clustered with *C. canadiana* in the combined *tef1/tub2/cmdA/his3/rpb2/act* tree (Figure 3). Isolates in Group J were identified as *C. canadiana*.

3.3.2. Isolates in the Calonectria colhounii Species Complex

Isolates in Group K were clustered with or close to *C. eucalypti, C. shaoguanensis, C. aciculata,* and *C. honghensis* in the *tef1* tree (Appendix F Figure A1), clustered with *C. eucalypti* and *C. paracolhounii* in the *tub2* tree (Appendix F Figure A2), clustered with *C. eucalypti* and *C. shaoguanensis* in the *cmdA* tree (Appendix F Figure A3), clustered with *C. eucalypti* in the *his3* tree (Appendix F Figure A4), clustered with *C. eucalypti, C. honghensis*, and *C. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c. eucalypti*, *c. honghensis*, and *C. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c. honghensis*, and *c. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c. honghensis*, and *c. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c. honghensis*, and *c. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c. honghensis*, and *c. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c. honghensis*, and *c. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c. honghensis*, and *c. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c. honghensis*, and *c. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c. honghensis*, and *c. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c. honghensis*, and *c. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c. honghensis*, and *c. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c. honghensis*, and *c. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c. honghensis*, and *c. minesis* in the *rpb2* tree (Appendix F Figure A5), and clustered with *C. eucalypti*, *c.*

C. aciculata, and *C. minesis* in the *act* tree (Appendix F Figure A6). The isolates were clustered with or close to *C. eucalypti*, *C. shaoguanensis*, and *C. honghensis* in the combined *tef1/tub2/cmdA/his3/rpb2/act* tree (Figure 3). The isolates in Group K were consistently clustered with or close to *C. eucalypti* in all analyses (Figure 3, Appendix F Figures A1–A6). Isolates in Group F were identified as *C. eucalypti*.

3.4. Taxonomy

Based on the results of multi-gene phylogenetic analyses and consideration of the morphological characteristics, *C. shaoguanensis* recently described in Zhang and co-authors [33] is reduced to synonymy with existing taxon as follows:

Calonectria eucalypti L. Lombard, M.J. Wingf. and Crous, Studies in Mycology 66: 31–69. 2010. MycoBank MB 515530.

Synonym: *Calonectria shaoguanensis* Y. X. Zhang et al., Journal of Fungi 8: 719. 2022. Index Fungorum number: IF 555217.

In: Calonectria colhounii species complex.

Typus: PREM 60298 holotype.

Ex-type culture: CBS 125275 = CMW 18444.

Type locality: Indonesia, Sumatra Utara, Aek Nauli.

Type substrate: *Eucalyptus grandis*.

Barcodes: *act* = MT335013; *cmdA* = MT335243; *his3* = MT335483; *rpb2* = MT412545; *tef1* = MT412774; *tub2* = MT412992 (alternative markers: ITS = MT359704; LSU = MT359464).

Notes: *Calonectria shaoguanensis* was identified as a new species based on DNA sequence comparisons of the *tef1*, *tub2*, and *cmdA* gene regions and the morphological characteristics in Zhang and co-authors [33]. *Calonectria shaoguanensis* was treated as a synonym with *C. eucalypti* in this study. In comparison of DNA sequences for the *tef1*, *tub2*, and *cmdA* gene regions, there was only one base difference between the extype isolate of *C. shaoguanensis* (ZHKUCC 21-0036) and the ex-type isolate of *C. eucalypti* (CMW 18444 = CBS 125275) in the *tub2* sequences. Both of the species produce clavate vesicles with overlapping dimensions (C. *shaoguanensis*: 2–7 µm [33]; *C. eucalypti*: 4–6 µm [44]). The macroconidia of *C. shaoguanensis* (av. 65 × 6.5 µm) are shorter than those of *C. eucalypti* (av. 72 × 6 µm) [33,44], which were considered to represent intraspecific variation justifying this synonymy.

3.5. Calonectria Richness in Soils from Four Provinces and Plantations of Three Tree Species

A total of 1270 isolates of *Calonectria* were obtained from 2991 soil samples collected from 12 sampling sites of three plantations in four provinces (Table 5, Figure 4). *Calonectria* isolates were obtained from 42.5% of the soil samples (Table 5, Figure 4). When considering the 12 sampling sites, 0.4 to 87.2% of the soil samples yielded *Calonectria* (Figure 4); the highest percentage of soil samples that yielded *Calonectria* was *P. massoniana* in GuangDong (87.2%), followed by *E. urophylla* × *E. grandis* from FuJian (86.8%) and *E. urophylla* × *E. grandis* from GuangDong (85.2%); the lowest percentages of soil samples that yielded *Calonectria* were from *P. massoniana* (0.4%) and *C. lanceolata* (0.4%) in YunNan (Table 5, Figure 4).

Table 5. Number of soil samples collected and *Calonectria* isolates obtained from plantations of three tree species in four provinces.

Province	Eucalyptus urophylla × E. grandis		Pinus massoniana		Cunningham	ia lanceolata	All Three Tree Species		
	Number of Soil Sample	Number of Soil Sample Yielded Calonectria	Number of Soil Sample	Number of Soil Sample Yielded Calonectria	Number of Soil Sample	Number of Soil Sample Yielded Calonectria	Number of Soil Sample	Number of Soil Sample Yielded Calonectria	
FuJian	250	217	248	164	250	91	748	472	
GuangDong	250	213	250	218	244	44	744	475	
GuangXi	250	182	249	46	250	21	749	249	
YunNan	250	72	250	1	250	1	750	74	
All four provinces	1000	684	997	429	994	157	2991	1270	



Figure 4. Percentage of soil samples that yielded *Calonectria* in plantations of three tree species in four regions (provinces).

When considering the four sampled geographic regions, the percentage of soil samples that yielded *Calonectria* decreased from regions in the east to the west (Figures 2 and 4); a higher percentage of soil samples that yielded *Calonectria* was obtained in GuangDong (63.8%) and FuJian (63.1%), with less in GuangXi (33.2%), and the lowest percentage of soil samples that yielded *Calonectria* was in YunNan (9.9%) (Table 5, Figure 4). When considering the three tree species, the highest percentage of soil samples that yielded *Calonectria* were from *E. urophylla* × *E. grandis* plantations (68.4%), followed by *P. massoniana* plantations (43%) and *C. lanceolata* (15.8%) (Table 5, Figure 4).

3.6. Calonectria Species Diversity in Four Provinces and Plantations of Three Tree Species

Based on the sequence comparisons of *act*, *cmdA*, *his3*, *rpb2*, *tef1*, and *tub2* sequences, the 1270 *Calonectria* isolates were identified as 11 species. These species were *C. aconidialis* (883 isolates; 69.50%), *C. kyotensis* (166 isolates; 13.10%), *C. hongkongensis* (137 isolates; 10.80%), *C. ilicicola* (32 isolates; 2.50%), *C. asiatica* (30 isolates; 2.36%), *C. eucalypti* (9 isolates; 0.71%), *C. curvispora* (4 isolates; 0.31%), *C. chinensis* (3 isolates; 0.24%), *C. pacifica* (3 isolates; 0.24%), *C. yunnanensis* (2 isolates; 0.16%), and *C. canadiana* (1 isolate; 0.08%) (Table 6, Figure 5). *Calonectria aconidialis* was most dominant, followed by *C. kyotensis* and *C. hongkongensis*. Three species accounted for 93.4% of all *Calonectria* isolates obtained in this study (Figure 5). These three species were regarded as the dominant species (Table 6, Figure 5). A relatively small number of isolates were obtained for *C. ilicicola* and *C. asiatica*. Less than 10 isolates were obtained for each of the remaining six species (Table 6, Figure 5).

E. urophylla × E. grandis

FuJian			GuangDong			GuangXi			YunNan			
P. massoniana	C. lanceolata	E. urophylla × E. grandis	P. massoniana	C. lanceolata	E. urophylla × E. grandis	P. massoniana	C. lanceolata	E. urophylla × E. grandis	P. massoniana	C. lanceolata		
57	79	196	135	35	154	34	17	27	0	0		
64	0	4	25	5	23	8	0	0	0	0		
39	6	12	50	0	2	1	0	0	0	0		
4	4	1	2	3	3	3	4	5	0	0		
0	0	0	0	0	0	0	0	30	0	0		
0	0	0	0	0	0	0	0	8	1	0		
0	0	0	4	0	0	0	0	0	0	0		
0	2	0	0	0	0	0	0	0	0	0		
0	0	0	2	1	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	2	0	0		
0	0	0	0	0	0	0	0	0	0	1		
164	91	213	218	44	182	46	21	72	1	1		

	<u> </u>	1	1	
Table 6. Number of isolates of each (alonectria species	s obtained from i	plantations of three tr	Pe species in four provinces
fuble of fullioer of isofates of caeff.	content opecie	obtained mont		copecies in rour provinces.

							A L. grunnis					
C. aconidialis	149	57	79	196	135	35	154	34	17	27	0	0
C. kyotensis	37	64	0	4	25	5	23	8	0	0	0	0
C. hongkongensis	27	39	6	12	50	0	2	1	0	0	0	0
C. ilicicola	3	4	4	1	2	3	3	3	4	5	0	0
C. asiatica	0	0	0	0	0	0	0	0	0	30	0	0
C. eucalypti	0	0	0	0	0	0	0	0	0	8	1	0
C. curvispora	0	0	0	0	4	0	0	0	0	0	0	0
C. chinensis	1	0	2	0	0	0	0	0	0	0	0	0
C. pacifica	0	0	0	0	2	1	0	0	0	0	0	0
C. yunnanensis	0	0	0	0	0	0	0	0	0	2	0	0
Č. canadiana	0	0	0	0	0	0	0	0	0	0	0	1
All 11 Calonectria	217	164	01	213	218	44	182	16	21	72	1	1
species	217	104	91	215	210		102	40	21	12	1	1
		E. urophylla ×	E. grandis, P	e massoniana and C. la	nceolata		FuJia	n, GuangDong, GuangXi a	nd YunNan	All th	ree tree species in fo	our provinces
	FuJian	GuangD	ong	GuangXi		YunNan	E. urophylla × E. grandis	P. massoniana	C. lanceolata			I
C aconidialis	FuJian	GuangD	long	GuangXi		YunNan 27	E. urophylla × E. grandis	P. massoniana	C. lanceolata		883	r
C. aconidialis C. kuotensis	FuJian 285 101	GuangD 366 34	long	GuangXi 205 31		YunNan 27 0	E. urophylla × E. grandis 526 64	P. massoniana 226 97	C. lanceolata		883	r
C. aconidialis C. kyotensis C. honekoneensis	FuJian 285 101 72	GuangD 366 34 62	long	GuangXi 205 31 3		YunNan 27 0 0	E. urophylla × E. grandis 526 64 41	P. massoniana 226 97 90	<i>C. lanceolata</i> 131 5 6		883 166 137	
C. aconidialis C. kyotensis C. hongkongensis C. ilicicola	FuJian 285 101 72 11	GuangD 366 34 62 6	bong	GuangXi 205 31 3 10		YunNan 27 0 0 5	E. urophylla × E. grandis 526 64 41 12	P. massoniana 226 97 90 9	<i>C. lanceolata</i> 131 5 6 11		883 166 137 32	
C. aconidialis C. kyotensis C. hongkongensis C. ilicicola C. asiatica	FuJian 285 101 72 11 0	GuangD 366 34 62 6 0	bong	GuangXi 205 31 3 10 0		YunNan 27 0 0 5 30	E. urophylla × E. grandis 526 64 41 12 30	P. massoniana 226 97 90 9 0	<i>C. lanceolata</i> 131 5 6 11 0		883 166 137 32 30	
C. aconidialis C. kyotensis C. hongkongensis C. ilicicola C. asiatica C. eucalunti	FuJian 285 101 72 11 0 0	GuangD 366 34 62 6 0 0	long	GuangXi 205 31 3 10 0		YunNan 27 0 0 5 30 9	E. urophylla × E. grandis 526 64 41 12 30 8	P. massoniana 226 97 90 9 0 1	<i>C. lanceolata</i> 131 5 6 11 0 0		883 166 137 32 30 9	
C. aconidialis C. kyotensis C. hongkongensis C. licicola C. asiatica C. eucalypti C. curvispora	FuJian 285 101 72 11 0 0 0	GuangD 366 34 62 6 0 0 4	long	GuangXi 205 31 3 10 0 0 0		YunNan 27 0 5 30 9 0	E. urophylla × E. grandis 526 64 41 12 30 8 0	P. massoniana 226 97 90 9 0 1 4	<i>C. lanceolata</i> 131 5 6 11 0 0 0		883 166 137 32 30 9 4	
C. aconidialis C. kyotensis C. hongkongensis C. ilicicola C. asiatica C. eucalypti C. curvispora C. chinensis	FuJian 285 101 72 11 0 0 0 0 3	GuangD 366 34 62 6 0 0 4 0 0	long	GuangXi 205 31 3 10 0 0 0 0 0		YunNan 27 0 0 5 30 9 0 0 0	E. urophylla × E. grandis 526 64 41 12 30 8 0 1	P. massoniana 226 97 90 9 0 1 4 0	<i>C. lanceolata</i> 131 5 6 11 0 0 0 0 2		883 166 137 32 30 9 4 3	
C. aconidialis C. kyotensis C. hongkongensis C. ilicicola C. asiatica C. eucalypti C. curvispora C. chinensis C. pacifica	FuJian 285 101 72 11 0 0 0 3 0 0	GuangD 366 34 62 6 0 0 4 0 3	long	GuangXi 205 31 3 10 0 0 0 0 0 0 0 0		YunNan 27 0 5 30 9 0 0 0 0 0	E. urophylla × E. grandis 526 64 41 12 30 8 0 1 0	P. massoniana 226 97 90 9 0 1 4 0 2	<i>C. lanceolata</i> 131 5 6 11 0 0 0 2 1		883 166 137 32 30 9 4 3 3	
C. aconidialis C. kyotensis C. hongkongensis C. ilicicola C. asiatica C. eucalypti C. curvispora C. chinensis C. pacifica C. quadana	FuJian 285 101 72 11 0 0 0 3 0 0 3 0 0	GuangD 366 34 62 6 0 0 4 0 3 0 0 3 0	Pong	GuangXi 205 31 3 10 0 0 0 0 0 0 0 0 0 0 0 0 0		YunNan 27 0 5 30 9 0 0 0 0 2	E. urophylla × E. grandis 526 64 41 12 30 8 0 1 0 2	P. massoniana 226 97 90 9 0 1 4 0 2 0	<i>C. lanceolata</i> 131 5 6 11 0 0 0 2 1 0		883 166 137 32 30 9 4 3 3 3 2	
C. aconidialis C. kyotensis C. hongkongensis C. ilicicola C. asiatica C. asiatica C. eucalypti C. curvispora C. chinensis C. pacifica C. yunnanensis C. gundaina	FuJian 285 101 72 11 0 0 0 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0	GuangD 366 34 62 6 0 0 4 4 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0	long	GuangXi 205 31 3 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		YunNan 27 0 0 5 30 9 0 0 0 2 1	E. urophylla × E. grandis 526 64 41 12 30 8 0 1 0 2 0	P. massoniana 226 97 90 9 0 1 4 0 2 0 0 0	<i>C. lanceolata</i> 131 5 6 11 0 0 0 2 1 0 1		$ \begin{array}{c} 8883\\ 166\\ 137\\ 32\\ 30\\ 9\\ 4\\ 3\\ 3\\ 2\\ 1\\ \end{array} $	





When considering the 12 sampling sites, each of *C. aconidialis*, *C. kyotensis*, *C. hongkongensis* and *C. ilicicola* was isolated from more than half of all the 12 sampling sites. *Calonectria aconidialis* and *C. ilicicola* were distributed at all sampling sites in four provinces, with the exception of *P. massoniana* and *C. lanceolata* plantations in YunNan. *Calonectria kyotensis* was distributed at all sampling sites in FuJian, GuangDong, and GuangXi Provinces, with the exception of *C. lanceolata* plantations in FuJian and GuangXi. *Calonectria hongkongensis* was distributed at all sampling sites in FuJian, GuangDong, and GuangXi Provinces, with the exception of *C. lanceolata* plantations in GuangDong, and GuangXi. The remaining seven species were isolated only from the soils of one or two tree species plantations in a single province (Table 6, Figure 2b–m).

When considering the four sampled geographic regions, five, six, four, and six *Calonectria* species were isolated from soil samples in FuJian, GuangDong, GuangXi, and YunNan, respectively (Table 6). *Calonectria aconidialis* and *C. ilicicola* were found in all four provinces. *Calonectria kyotensis* and *C. hongkongensis* were found in three provinces, excluding YunNan. Each of the remaining seven species was found in only one province (Table 6, Figures 2 and 6). For *C. aconidialis*, the percentage of soil samples that yielded *Calonectria* decreased from the eastern to the western provinces, with the exception of GuangDong Province (Table 6, Figure 6). For each species of *C. kyotensis* and *C. hongkongensis*, the percentage of soil samples that yielded *Calonectria* decreased from regions in the eastern to the western provinces of *c. hongkongensis*, the percentage of soil samples that yielded *Calonectria* decreased from regions in the eastern to the western provinces (Table 6, Figure 6). The percentages of soil samples containing *C. ilicicola* in regions in the eastern and western provinces were similar (Table 6, Figure 6).



Figure 6. The percentage of soil samples that yielded each of the 12 *Calonectria* species in the four provinces. *"*"* means zero.

When considering the plantation tree species, eight, seven, and seven species were identified in *E. urophylla* × *E. grandis*, *P. massoniana*, and *C. lanceolata* plantations, respectively (Table 6). *Calonectria aconidialis*, *C. kyotensis*, *C. hongkongensis*, and *C. ilicicola* were isolated from soils in all three tree species. Each of the remaining seven species was isolated only from soils with one or two tree species (Table 6, Figures 2 and 7). For *C. aconidialis*, the highest percentage of soil samples that yielded *Calonectria* was in *E. urophylla* × *E. grandis* plantations, followed by *P. massoniana* plantations and *C. lanceolata* plantations (Table 6, Figure 7). For each species of *C. kyotensis* and *C. hongkongensis*, the percentage of soil samples that yielded *Calonectria* plantations, followed by *E. urophylla* × *E. grandis* plantations and *C. lanceolata* plantations, followed by *E. urophylla* × *E. grandis* plantations and *C. lanceolata* plantations, followed by *E. urophylla* × *E. grandis* plantations and *C. lanceolata* plantations, followed by *E. urophylla* × *E. grandis* plantations and *C. lanceolata* plantations, followed by *E. urophylla* × *E. grandis* plantations and *C. lanceolata* plantations (Table 6, Figure 7). For *C. ilicicola*, the percentage of soil samples that yielded *Calonectria* was similar among the plantations of three tree species (Table 6, Figure 7).



Figure 7. The percentage of soil samples that yielded each of the 12 *Calonectria* species from the plantations of the three tree species. *"*"* means zero.

3.7. Genotyping of Isolates within each Calonectria Species

The genotypes of 1270 *Calonectria* isolates obtained in this study were determined by *tef1* and *tub2* sequences. There were 28, 41, 10, 3, 2, 4, 1, 2, 3, 2, and 1 genotype(s) of *C. aconidialis, C. kyotensis, C. hongkongensis, C. ilicicola, C. asiatica, C. eucalypti, C. curvispora, C. chinensis, C. pacifica, C. yunnanensis,* and *C. canadiana,* respectively (Table 2). The three dominant *Calonectria* species, *C. aconidialis, C. kyotensis,* and *C. hongkongensis,* had more genotypes than the other species (Table 2). The ratio of genotype number to isolate number of *C. kyotensis* was highest within the three dominant species (Table 2).

The *tef1-tub2* genotypes of each *Calonectria* species in each of the 12 sampling sites are listed in Appendix B Tables 7 and A2. For the three dominant species, *C. aconidialis, C. kyotensis,* and *C. hongkongensis,* the overall data showed that the number of genotypes of each *Calonectria* species at each sampling site positively correlated with the number of isolates (Table 6, Table 7 and Appendix B Table A2). For each species of *C. aconidialis* and *C. hongkongensis,* the dominant genotype (genotype AA) existed in most of the sampling sites (Appendix B Table A2). For example, the dominant genotype AA accounted for 61.7 to 100% of the *C. aconidialis* isolates obtained from sampling sites 1–9 (Appendix B Table A2). There was no dominant genotype for *C. kyotensis* from the seven sampling sites that had *Calonectria* (Appendix B Table A2).

		FuJian			GuangDong			GuangXi		YunNan		
	E. urophylla × E. grandis	P. massoniana	C. lanceolata	E. urophylla × E. grandis	P. massoniana	C. lanceolata	E. urophylla × E. grandis	P. massoniana	C. lanceolata	E. urophylla × E. grandis	P. massoniana	C. lanceolata
C. aconidialis	7	5	7	10	10	5	7	2	1	2	0	0
C. kyotensis	14	20	0	4	16	4	9	6	0	0	0	0
C. hongkongensis	5	6	3	5	7	0	2	1	0	0	0	0
C. ilicicola	1	1	1	1	1	1	1	1	1	1	0	0
C. asiatica	0	0	0	0	0	0	0	0	0	2	0	0
C. eucalypti	0	0	0	0	0	0	0	0	0	4	1	0
C. curvispora	0	0	0	0	1	0	0	0	0	0	0	0
C. chinensis	1	0	2	0	0	0	0	0	0	0	0	0
C. pacifica	0	0	0	0	2	1	0	0	0	0	0	0
C. yunnanensis	0	0	0	0	0	0	0	0	0	2	0	0
C. canadiana	0	0	0	0	0	0	0	0	0	0	0	1
All 11 Calonectria	28	32	13	20	37	11	19	10	2	11	1	1
species									_		-	-
		E. urophylla	\times E. grandis, P. m	assoniana and C. l	anceolata		FuJian, O	GuangDong, GuangXi	All th	ree tree species in f	our provinces	
	FuJian	Guang	gDong	GuangXi	Yu	nNan E. uro × E. ş	phylla grandis	P. massoniana	C. lanceola	ıta		
C. aconidialis	10	1	4	7		2 2	22	14	11		28	
C. kyotensis	24	1	9	11		0 2	24	33	4		41	
C. hongkongensis	8	7	7	3		0	8	8	3		10	
C. ilicicola	1	2	2	1		1	3	2	1		3	
C. asiatica	0	()	0		2	2	0	0		2	
C. eucalypti	0	()	0		4	4	1	0		4	
C. curvispora	0]	l	0		0	0	1	0		1	
C. chinensis	2	()	0		0	1	0	2		2	
C. pacifica	0	3	3	0		0	0	2	1		3	
C. yunnanensis	0	()	0		2	2	0	0		2	
C. canadiana	0	()	0		1	0	0	1		1	
All 11 Calonectria species	45	4	6	22		12 6	56	61	23		97	

 Table 7. Number of genotypes of each Calonectria species obtained from plantations of three tree species in four provinces, as determined by tef1-tub2 gene sequences.

3.8. Genotype Diversity of Calonectria Species in Four Provinces and Plantations of Three Tree Species

Calonectria aconidialis, C. kyotensis, and C. hongkongensis were the dominant species in this study. The statistical results of the number of shared genotypes of *C. aconidialis* isolates indicated that the ratio of shared genotypes among the sites of "the same region but different plantation tree species" (30 shared genotypes/12 pairs of comparison sampling sites = 2.5) was much bigger than that of the sites of "different geographical region but the same plantation tree species" (12 shared genotypes/18 pairs of comparison sampling sites = 0.67) and also bigger than that of the sites of "different geographical region and different plantation tree species" (24 shared genotypes/36 pairs of comparison sampling sites = 0.67) (Appendix C Table A3). The statistical results of the number of shared genotypes of *C*. *kyotensis* isolates indicated that the ratio of shared genotypes among the sites of "the same region but different plantation tree species" (19 shared genotypes/12 pairs of comparison sampling sites = 1.58) was much bigger than that of the sites of "different geographical region but the same plantation tree species" (12 shared genotypes/18 pairs of comparison sampling sites = 0.67) and also bigger than that of the sites of "different geographical region and different plantation tree species" (15 shared genotypes/36 pairs of comparison sampling sites = 0.42) (Appendix D Table A4). The statistical results of the number of shared genotypes of C. hongkongensis isolates indicated that the ratio of shared genotypes among the sites of "the same region but different plantation tree species" (13 shared genotypes/12 pairs of comparison sampling sites = 1.08) was much bigger than that of the sites of "different geographical region but the same plantation tree species" (11 shared genotypes/18 pairs of comparison sampling sites = 0.61) and also bigger than that of the sites of "different geographical region and different plantation tree species" (17 shared genotypes/36 pairs of comparison sampling sites = 0.47) (Appendix E Table A5). These results suggest that the genetic variations of each species of *C. aconidialis*, *C. kyotensis*, and *C. hongkongensis* are likely to be more affected by geographical region than plantation tree species.

4. Discussion

In this study, a relatively large number of soil samples were collected from 12 plantations of *E. urophylla* \times *E. grandis*, *P. massoniana*, and *C. lanceolate* in FuJian, GuangDong, GuangXi, and YunNan Provinces in southern China. A total of 1270 *Calonectria* isolates were obtained. Based on multi-gene sequence phylogenetic analyses, these isolates were identified as 11 *Calonectria* species. Except for *C. eucalypti*, which resides in the *C. colhounii* species complex, the remaining 10 species belong to the *C. kyotensis* species complex. The most dominant species was *C. aconidialis*, followed by *C. kyotensis* and *C. hongkongensis*.

The richness of *Calonectria* in soils (percentage of soil samples that yielded *Calonectria*) among the four geographical regions, as well as among the three tree species, differed. *Calonectria* richness in the eastern regions was higher than that in the western regions. A possible reason for this phenomenon is that the annual rainfall in the eastern regions was greater than in the western regions, where the soil in plantations in the eastern regions was under continuous high humidity [59,60]. Previous research results have shown that *Calonectria* species are more likely to exist in soils with consistently high levels of moisture [61]. The richness of *Calonectria* in soils of *E. urophylla* × *E. grandis*, *P. massoniana*, and *C. lanceolata* plantations decreased gradually. The richness of *Calonectria* in soils is probably affected by the litter of different tree species [62–64].

This study indicated that *Calonectria* species are widely distributed in soils of *E. urophylla* \times *E. grandis*, *P. massoniana*, and *C. lanceolata* plantations. Previous research results have shown that *Calonectria* species, especially those in the *C. kyotensis* species complex, are widely distributed in the soils of *Eucalyptus* plantations in southern China [19,31]. Recent research results have indicated that *Calonectria* is also frequently isolated from soils in plantations of multiple tree species [32]. We suppose that *Calonectria* species are widely distributed in forest soils in southern China.

The distribution characteristics of the 11 *Calonectria* species at 12 sampling sites from 12 plantations of three tree species in four provinces differed. The three dominant species, *C. aconidialis, C. kyotensis,* and *C. hongkongensis,* as well as *C. ilicicola,* were distributed much more widely than the remaining seven species. This is consistent with recent research results [31,32]. Both *C. aconidialis* and *C. ilicicola* were isolated from 10 of the 12 sampling sites, while the richness of *C. aconidialis* at these sites was much higher than that of *C. ilicicola.* These results highlight the distribution differences in *Calonectria* species in soils. This study resulted in the first report of *C. curvispora* in China, and it was isolated only from soils in *P. massoniana* plantations in GuangDong Province. Our results suggest that *C. curvispora* may not be widely distributed in plantation soil in southern China.

The distribution of the three dominant species, *C. aconidialis*, *C. kyotensis*, and *C. hongkongensis*, was affected by geographic regions and plantation tree species, although their distribution patterns were not the same. The richness of these three species was generally higher in eastern regions than in western regions. However, the influencing characteristics of species richness, affected by plantation tree species, were not the same. Species richness was highest in *E. urophylla* × *E. grandis* plantations for *C. aconidialis*, while richness was highest in *P. massoniana* plantations for both *C. kyotensis* and *C. hongkongensis*. Species richness was lowest for these three species in the *C. lanceolate* plantations. Our research results suggest that the distribution patterns differ among *Calonectria* species associated with soils in angiosperm and gymnosperm plants [32].

Calonectria aconidialis is the most dominant species obtained from forest soils in this study. Since this species was first isolated and described from soils in *Eucalyptus* plantation in HaiNan Province in southern China [18], it has been frequently isolated from soils in *Eucalyptus* plantations in GuangXi, GuangDong and FuJian Provinces [15,19,31,32]. Besides *Eucalyptus, C. aconidialis* was also obtained from soils in *C. lanceolata, Phyllostachys heterocycle* and natural forests [32]. We speculate that *C. aconidialis* is widely distributed in soils in forests of multiple tree species in southern China and neighboring countries.

The distribution characteristics of *Calonectria* in YunNan differed from those in FuJian, GuangDong, and GuangXi. The percentages of soil samples that yielded Calonectria in plantations of E. urophylla \times E. grandis, P. massoniana, and C. lanceolata in YunNan were significantly lower than those in the other three provinces. A possible reason is that the climate in YunNan is relatively drier than that of the other three provinces [65]. Among the 11 species identified in this study, C. asiatica, C. yunnanensis, C. eucalypti, and C. canadiana were isolated only from YunNan Province. Based on several previous studies conducted on *Calonectria* in China, *C. asiatica* and *C. yunnanensis* have been collected only from soils in *Eucalyptus* plantations in YunNan [10,15,19,29–32]. *Calonectria eucalypti* has been isolated only from the leaves of *Eucalyptus* plantations in the FuJian and YunNan Provinces [15,16]. This study reported the first record of C. eucalypti isolated from soils. In China, C. canadiana has only been isolated from soil in northern regions, including HeNan, HeiLongJiang, and HeBei Provinces [28,66,67]. Calonectria canadiana is considered a temperate climatedistributed species. In this study, it was isolated from YunNan Province in southern China. For the region in YunNan Province where *C. canadiana* was obtained, the climate was similar to these regions in northern China, since the region in YunNan in this study is located in the Yunnan-Guizhou Plateau, and the average annual temperature in this region is relatively low. A possible reason for the differences in *Calonectria* richness and species diversity between YunNan and the other provinces is the special climate in YunNan compared with the other three provinces [68].

The distribution patterns of *Calonectria* fungi in forest soils in different continents and countries are not consistent. In South America, the majority of *Calonectria* fungi isolated from forest soils resided in the *C. brassicae* and *C. candelabrum* species complexes [30,41]. In Asia, *Calonectria* species in the *C. kyotensis*, *C. reteaudii*, *C. colhounii*, *C. cylindrospora* and *C. brassicae* species complexes were isolated from forest soils in China and southeastern Asian countries; most of these obtained species resided in the *C. kyotensis* species complex [9,15,19,31,32,42]. In this study, ten of eleven obtained *Calonectria* species resided in *C. kyotensis* species complex.

All the three, eight of eleven, and six of eight *Calonectria* species isolated from soils resided in *C. kyotensis* species complex in Indonesia, Vietnam and Malaysia, respectively [9,42]. The dominant species in the *C. kyotensis* species complex among different Asian countries were not the same. For example, *C. aconidialis* is the most dominant species isolated from forest soils in China, while this species has never been isolated from other Asian countries [9,15,19,30–32,42].

This study explored the richness, species diversity, and distribution characteristics of *Calonectria* from soils in the plantations of three tree species in four provinces in southern China. Our research results indicate that *Calonectria* richness is affected by geographic regions and plantation tree species. For the dominant species, their distribution patterns affected by geographic regions and plantation tree species are not the same, and their genetic variations may be more greatly affected by geographic region than by plantation tree species. For the dominant species, additional studies need to be conducted to clarify the genetic diversity and population differences among isolates from soils in different geographic regions and plantations of different tree species, which will help us to understand the influencing characteristics of geographic regions and plantation tree species on their genetic variations.

Author Contributions: Conceptualization, S.C.; methodology, S.C.; investigation, Y.L. and S.C.; resources, Y.L. and S.C.; writing, Y.L. and S.C.; review and editing, S.C.; project administration, S.C.; funding acquisition, S.C. All authors have read and agreed to the published version of the manuscript.

Funding: This study was initiated through the bilateral agreement between the Governments of South Africa and China and supported by The National Key R and D Program of China (China-South Africa Forestry Joint Research Centre Project; project No. 2018YFE0120900), the National Ten-thousand Talents Program (Project No. W03070115) and the GuangDong Top Young Talents Program (Project No. 20171172).

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Data are contained within the article.

Acknowledgments: We thank JiaLong Han, WenXia Wu, LingLing Liu, XueYing Liang and LinQin Lu and BingYin Chen for their assistance in collecting soil samples. We thank LinQin Lu and BingYin Chen for their assistance in dealing with the soil samples. We thank WenXia Wu for her assistance in laboratory work.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A. All 1270 Calonectria Isolates Obtained and Sequenced in This Study

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	pe ^b Isolate No. ^c Sample and Isolate Information ^d		GenBank Accession No. ^e					
						tef1	tub2	cmdA	his3	rpb2	act
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF22474	20210527-1-(1)	OO188218	OO260193	_ f	_	_	_
1. Fulian-Euc	C kuotensis	C aconidialis	A A	CSF22475	20210527-1-(2)	00188219	00260194	_	_	_	_
1 Fulian-Euc	C kyotensis	C aconidialis	A A	CSF22477	20210527-1-(6)	00188220	00260195	_	_	_	_
1 Fulian-Euc	C kyotensis	C aconidialis	A A	CSF22479	20210527-1-(8)	00188221	00260196	_	_	_	_
1 Fulian-Euc	C kyotensis	C aconidialis	A A	CSF22484	20210527-1-(13)	00188222	OO260197	_	_	_	_
1. Fulian-Euc	C. kyotensis	C. aconidialis	AA—-	CSF22486	20210527-1-(15)	00188223	00260198	_	_	_	_
1. Fulian-Euc	C kyotensis	C aconidialis	AA—-	CSF22487	20210527-1-(16)	00188224	00260199	_	_	_	_
1. Fulian-Euc	C. kyotensis	C. aconidialis	AA—-	CSF22490	20210527-1-(19)	00188225	00260200	_	_	_	_
1. Fulian-Euc	C. kyotensis	C. aconidialis	AA—-	CSF22496	20210527-1-(25)	00188226	00260201	_	_	_	_
1 Fulian-Euc	C kyotensis	C aconidialis	A A	CSF22776	20210527-1-(27)	00188227	00260202	_	_	_	_
1. Fulian-Euc	C. kyotensis	C. aconidialis	AA—-	CSF22780	20210527-1-(31)	00188228	00260203	_	_	_	_
1. Fulian-Euc	C kyotensis	C aconidialis	AA—-	CSF22783	20210527-1-(35)	00188229	00260204	_	_	_	_
1 Fulian-Euc	C kyotensis	C aconidialis	A A	CSF22787	20210527-1-(40)	00188230	00260205	_	_	_	_
1 Fulian-Euc	C kyotensis	C aconidialis	A A	CSF22789	20210527 - 1 - (42)	00188231	00260206	_	_	_	_
1 Fulian-Euc	C kyotensis	C aconidialis	A A	CSF22792	20210527-1-(47)	00188232	00260207	_	_	_	_
1 Fulian-Euc	C kyotensis	C aconidialis	A A	CSF22794	20210527-1-(50)	00188233	00260208	_	_	_	_
1 Fulian-Euc	C kyotensis	C aconidialis	A A	CSF22795	20210527-1-(51)	00188234	00260209	_	_	_	_
1 Fulian-Fuc	C kyotensis	C aconidialis	A A	CSF22797	20210527-1-(51)	00188235	OO260210	_	_	_	_
1 Fulian-Fuc	C kyotensis	C aconidialis	A A	CSE22798	20210527-1-(55)	00188236	OO260210	_	_	_	_
1 Fulian-Fuc	C kyotensis	C aconidialie	ΔΔ	CSE22800	20210527-1-(57)	00188237	00260212	_	_	_	_
1 Fulian-Euc	C. kyotensis	C. aconidialis	A A	CSF22801	20210527-1-(57)	00188238	00260212	_	_	_	_
1 Fulian-Fuc	C kyotensis	C aconidialie	A A	CSF22805	20210527-1-(62)	00188239	00260214	_	_	_	_
1 Fulian-Fuc	C. kyotensis	C. aconidialie	ΔΔ	CSE22811	20210527-1-(02)	00188240	00260214	_	_	_	_
1 Fulian-Fuc	C kyotensis	C aconidialis	A A	CSF22815	20210527-1-(72)	00188241	00260216	_	_	_	_
1 Fulian-Fuc	C kyotensis	C aconidialie	ΔΔ	CSE22816	20210527-1-(72)	00188242	00260217	_	_	_	_
1 Fulian-Euc	C. kyotensis	C. aconidialis	A A	CSF22817	20210527-1-(73)	00188243	00260218	_	_	_	_
1 Fulian-Euc	C. kyotensis	C. aconidialis	A A	CSF22818	20210527 - 1 - (74) 20210527 - 1 - (75)	00188244	OO260210	_	_	_	_
1 Fulian-Fuc	C. kyotensis	C. aconidialie	ΔΔ	CSE22810	20210527-1-(73)	00188245	00260220	_	_	_	_
1 Fulian-Euc	C. kyotensis	C. aconidialie	ΔΔ	CSE22820	20210527-1-(77)	00188246	OO260220				
1 Fulian-Fuc	C kyotensis	C aconidialie	ΔΔ	CSE22821	20210527-1-(70)	00188247	00260222	_	_	_	_
1 Fulian-Euc	C. kyotensis	C. aconidialis	A A	CSF22822	20210527-1-(77)	00188248	00260223	_	_	_	_
1 Fulian-Fuc	C kyotensis	C aconidialie	A A	CSF22823	20210527-1-(81)	00188249	00260224	_	_	_	_
1 Fulian-Fuc	C. kyotensis	C. aconidialie	ΔΔ	CSE22825	20210527-1-(01)	00188250	00260224	_	_	_	_
1 Fulian-Euc	C. kyotensis	C. aconidialie	ΔΔ	CSE22826	20210527-1-(05)	00188251	00260226				
1 Fulian Fuc	C. kyotensis	C. aconidialic	ΔA	CSE22827	20210527 1 (85)	00188252	00260220	_	_	_	_
1. Fulian Euc.	C. Ryotensis	C. aconidialis	AA	CSE22828	20210527-1-(05)	00188252	00260227	-	-	-	-
1. Fulian Euc.	C. Ryotensis	C. acomidialis	AA	CSE22820	20210527 - 1 - (07)	00188254	00260228	-	-	-	-
1. Fulian Euc.	C. Kyolensis	C. aconidialis	AA	CSE22830	20210527 - 1 - (09) 20210527 - 1 - (09)	00188255	00260229	-	-	-	-
1. Fulian-Euc.	C. Kyolensis	C. aconidialis	ΔΔ	CSF22033	20210527-1-(92)	00188254	00260230	_	_	_	_
1. Fujian-Euc.	C. Kyolensis	C. uconiumits	A A	CSF22033	20210527-1-(94)	00188257	00260231	-	-	-	-
1. Fujian-Euc.	C. Kyolensis	C. aconidialic	AA	CSF22030	20210527-1-(97)	00188259	00260232	-	-	-	-
1. Fujian-Euc.	C. Kyolensis	C. uconiuuiis	AA	CSF22039 CSF22841	20210527 - 1 - (50)	00188250	00260233	-	-	-	-
1. Fujian-Euc.	C. kyotensis	C. uconiuiuiis	AA	CSF22041	20210527-1-(100)	00100209	OQ200234	-	-	-	-
1. Fujian-Euc.	C. kyotensis	C. uconiuiuiis	AA	CSF22044 CSF22845	20210527-1-(102)	00188260	00260255	-	-	-	-
1. Fujian-Euc.	C. Kyötensis	C. acontatutis	AA—-	C5F22043	20210527-1-(103)	UQ100201	00200200	-	-	-	-

Table A1. All 1270 Calonectria isolates obtained and sequenced in this study.

Table A1. Cont.

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d	GenBank Accession No. ^e					
						tef1	tub2	cmdA	his3	rpb2	act
1. FuJian-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22846	20210527-1-(105)	OQ188262	OQ260237	-	_	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22848	20210527-1-(107)	OQ188263	OQ260238	-	-	-	-
 Fulian-Euc. 	C. kvotensis	C. aconidialis	AA—-	CSF22849	20210527-1-(108)	OÕ188264	OÕ260239	-	_	_	-
 Fulian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22852	20210527-1-(111)	OO188265	OO260240	-	_	_	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22854	20210527-1-(113)	OQ188266	OQ260241	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22855	20210527-1-(114)	OQ188267	OQ260242	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22858	20210527-1-(117)	OQ188268	OQ260243	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22863	20210527-1-(122)	OQ188269	OQ260244	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22903	20210526-1-(7)	OQ188270	OQ260245	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22905	20210526-1-(10)	OQ188271	OQ260246	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22906	20210526-1-(11)	OQ188272	OQ260247	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22908	20210526-1-(13)	OQ188273	OQ260248	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22916	20210526-1-(21)	OQ188274	OQ260249	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22917	20210526-1-(22)	OQ188275	OQ260250	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22919	20210526-1-(24)	OQ188276	OQ260251	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22920	20210526-1-(25)	OQ188277	OQ260252	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22922	20210526-1-(27)	OQ188278	OQ260253	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22923	20210526-1-(28)	OQ188279	OQ260254	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22924	20210526-1-(29)	OQ188280	OQ260255	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22927	20210526-1-(32)	OQ188281	OQ260256	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22930	20210526-1-(36)	OQ188282	OQ260257	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22933	20210526-1-(40)	OQ188283	OQ260258	-	-	-	-
 Fulian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22935	20210526-1-(42)	OO188284	OO260259	-	_	_	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22940	20210526-1-(47)	OQ188285	OQ260260	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22943	20210526-1-(50)	OQ188286	OQ260261	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22944	20210526-1-(51)	OQ188287	OQ260262	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22945	20210526-1-(53)	OQ188288	OQ260263	-	-	-	-
 Fulian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22947	20210526-1-(56)	OO188289	OO260264	-	_	_	-
 Fulian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22956	20210526-1-(66)	OÕ188290	OÕ260265	-	_	_	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22957	20210526-1-(67)	OQ188291	OQ260266	-	-	-	-
 Fulian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22961	20210526-1-(72)	OO188292	OO260267	-	_	_	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22964	20210526-1-(77)	OQ188293	OQ260268	-	-	-	-
 Fulian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22966	20210526-1-(79)	OO188294	OO260269	-	_	_	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22968	20210526-1-(82)	OQ188295	OQ260270	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22865	20210526-2-(2)	OQ188296	OQ260271	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22867	20210526-2-(5)	OQ188297	OQ260272	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22868	20210526-2-(6)	OQ188298	OQ260273	-	-	-	-
 Fulian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22872	20210526-2-(10)	OO188299	OO260274	-	_	_	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22873	20210526-2-(12)	OQ188300	OQ260275	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22876	20210526-2-(17)	OQ188301	OQ260276	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22878	20210526-2-(21)	OQ188302	OQ260277	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22882	20210526-2-(25)	OQ188303	OQ260278	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22883	20210526-2-(26)	OQ188304	OQ260279	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22884	20210526-2-(27)	OQ188305	OQ260280	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22886	20210526-2-(30)	OQ188306	OQ260281	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22888	20210526-2-(34)	OQ188307	OQ260282	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22891	20210526-2-(37)	OQ188308	OQ260283	-	_	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AA—-	CSF22892	20210526-2-(38)	OQ188309	OQ260284	-	-	-	-

Table A1. Cont.

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d	GenBank Accession No. ^e					
						tef1	tub2	cmdA	his3	rpb2	act
1. FuJian-Euc.	C. kyotensis	C. aconidialis	AD	CSF22476	20210527-1-(3)	OQ188310	OQ260285	_	_	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AD—-	CSF22478	20210527-1-(7)	OQ188311	OQ260286	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AD	CSF22842	20210527-1-(101)	OQ188312	OQ260287	-	-	-	-
 Fulian-Euc. 	C. kyotensis	C. aconidialis	ADAAAA	CSF22962	20210526-1-(73)	OO188313	OO260288	OO261468	OO302903	OO303110	OO303316
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AGAAAA	CSF22495	20210527-1-(24)	OQ188314	OQ260289	OQ261473	OQ302908	OQ303115	OQ303321
 Fulian-Euc. 	C. kyotensis	C. aconidialis	AI—-	CSF22485	20210527-1-(14)	OO188315	OO260290	-	_	-	-
 Fulian-Euc. 	C. kyotensis	C. aconidialis	AI—-	CSF22489	20210527-1-(18)	OÕ188316	OÕ260291	_	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	AI—-	CSF22491	20210527-1-(20)	OQ188317	OQ260292	-	-	-	-
 Fulian-Euc. 	C. kyotensis	C. aconidialis	AI—-	CSF22493	20210527-1-(22)	OO188318	OO260293	_	-	-	-
 Fulian-Euc. 	C. kvotensis	C. aconidialis	AI—-	CSF22775	20210527-1-(26)	OÕ188319	OÕ260294	_	-	-	-
1. FuJian-Euc.	C. kyotensis	C. aconidialis	AI—-	CSF22777	20210527-1-(28)	OÕ188320	OÕ260295	_	-	-	-
 Fulian-Euc. 	C. kyotensis	C. aconidialis	AI—-	CSF22784	20210527-1-(37)	OÕ188321	OÕ260296	_	-	-	-
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AI—-	CSF22803	20210527-1-(60)	OÕ188322	OÕ260297	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AI—-	CSF22809	20210527-1-(66)	OÕ188323	OÕ260298	_	_	_	_
1. FuJian-Euc.	C. kvotensis	C. aconidialis	AI—-	CSF22812	20210527-1-(69)	OÕ188324	OÕ260299	_	-	-	-
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AI—-	CSF22814	20210527-1-(71)	OÕ188325	OÕ260300	_	_	_	-
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AI—-	CSF22851	20210527-1-(110)	OÕ188326	OÕ260301	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AI—-	CSF22857	20210527-1-(116)	00188327	00260302	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AI—-	CSF22862	20210527-1-(121)	00188328	00260303	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AI—-	CSF22900	20210526-1-(4)	OÕ188329	OÕ260304	_	_	_	-
1. Fulian-Euc.	C. kyotensis	C. aconidialis	AI—-	CSF22955	20210526-1-(65)	00188330	00260305	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AI—-	CSF22959	20210526-1-(69)	00188331	00260306	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AI—-	CSF22967	20210526-1-(80)	00188332	00260307	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AI—-	CSF22874	20210526-2-(13)	OÕ188333	OÕ260308	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22480	20210527-1-(9)	OÕ188334	OÕ260309	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22494	20210527-1-(23)	OÕ188335	OÕ260310	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22785	20210527-1-(38)	OÕ188336	OÕ260311	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22786	20210527-1-(39)	00188337	00260312	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22793	20210527-1-(49)	OÕ188338	OÕ260313	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22806	20210527-1-(63)	OÕ188339	OÕ260314	_	_	_	_
1. Fulian-Euc.	C. kyotensis	C. aconidialis	AU—-	CSF22834	20210527-1-(93)	00188340	00260315	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22853	20210527-1-(112)	OÕ188341	OÕ260316	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22861	20210527-1-(120)	00188342	00260317	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22946	20210526-1-(55)	OÕ188343	OÕ260318	_	_	_	_
1. FuJian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22963	20210526-1-(74)	OÕ188344	OÕ260319	_	-	-	-
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22965	20210526-1-(78)	OÕ188345	OÕ260320	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22870	20210526-2-(8)	OÕ188346	OÕ260321	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22885	20210526-2-(29)	00188347	00260322	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AU—-	CSF22893	20210526-2-(40)	00188348	00260323	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	AUAAAA	CSF22813	20210527-1-(70)	OÕ188349	OÕ260324	OO261495	OO302930	OO303137	OO303343
1. Fulian-Euc.	C. kvotensis	C. aconidialis	CA	CSF22781	20210527-1-(32)	OÕ188350	00260325	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	CA—-	CSF22788	20210527-1-(41)	OÕ188351	OÕ260326	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	CA	CSF22796	20210527-1-(52)	OÕ188352	00260327	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	CA	CSF22824	20210527-1-(82)	00188353	00260328	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	ČA—-	CSF22832	20210527-1-(91)	OÕ188354	OÕ260329	_	_	_	_
1. Fulian-Euc	C. kvotensis	C. aconidialis	CA	CSF22836	20210527-1-(95)	00188355	00260330	_	_	_	_
1. Fulian-Euc.	C. kvotensis	C. aconidialis	ČĂ—-	CSF22847	20210527-1-(106)	OÕ188356	OÕ260331	_	_	_	_
1. Fulian-Euc	C. kvotensis	C. aconidialis	CA—-	CSF22856	20210527-1-(115)	00188357	00260332	_	_	_	_
1. FuJian-Euc.	C. kyotensis	C. aconidialis	ČA—-	CSF22860	20210527-1-(119)	OQ188358	OQ260333	-	-	-	-
Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d			GenBank Acce	ssion No. ^e		
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						tef1	tub2	cmdA	his3	rpb2	act
1. FuJian-Euc.	C. kyotensis	C. aconidialis	CA—-	CSF22910	20210526-1-(15)	OQ188359	OQ260334	-	_	_	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	CA—-	CSF22941	20210526-1-(48)	OQ188360	OQ260335	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	CA—-	CSF22887	20210526-2-(32)	OQ188361	OQ260336	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. aconidialis	CAAAAA	CSF22802	20210527-1-(59)	OQ188362	OQ260337	OQ261500	OQ302935	OQ303142	OQ303348
 FuJian-Euc. 	C. kyotensis	C. aconidialis	CAAAAA	CSF22912	20210526-1-(17)	OQ188363	OQ260338	OQ261498	OQ302933	OQ303140	OQ303346
 FuJian-Euc. 	C. kyotensis	C. aconidialis	CAAAAA	CSF22951	20210526-1-(60)	OQ188364	OQ260339	OQ261499	OQ302934	OQ303141	OQ303347
 FuJian-Euc. 	C. kyotensis	C. aconidialis	CADAAA	CSF22483	20210527-1-(12)	OQ188365	OQ260340	OQ261503	OQ302938	OQ303145	OQ303351
 FuJian-Euc. 	C. kyotensis	C. aconidialis	DADAAA	CSF22948	20210526-1-(57)	OQ188366	OQ260341	OQ261506	OQ302941	OQ303148	OQ303354
 FuJian-Euc. 	C. kyotensis	C. chinensis	AAAAAA	CSF22960	20210526-1-(70)	OQ188367	OQ260342	OQ261519	OQ302954	OQ303161	OQ303367
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22779	20210527-1-(30)	OQ188368	OQ260343	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22782	20210527-1-(33)	OQ188369	OQ260344	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22807	20210527-1-(64)	OQ188370	OQ260345	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22829	20210527-1-(88)	OQ188371	OQ260346	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22837	20210527-1-(96)	OQ188372	OQ260347	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22840	20210527-1-(99)	OQ188373	OQ260348	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22859	20210527-1-(118)	OQ188374	OQ260349	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22902	20210526-1-(6)	OQ188375	OQ260350	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22925	20210526-1-(30)	OQ188376	OQ260351	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22926	20210526-1-(31)	OQ188377	OQ260352	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22929	20210526-1-(34)	OQ188378	OQ260353	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22932	20210526-1-(39)	OQ188379	OQ260354	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22939	20210526-1-(46)	OQ188380	OQ260355	-	-	-	-
 FuJian-Euc. 	C. kyotensis	C. hongkongensis	AA—-	CSF22952	20210526-1-(62)	OQ188381	OQ260356	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. hongkongensis	AA—-	CSF22953	20210526-1-(63)	OQ188382	OQ260357	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. hongkongensis	AA—-	CSF22958	20210526-1-(68)	OQ188383	OQ260358	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. hongkongensis	AA—-	CSF22875	20210526-2-(15)	OQ188384	OQ260359	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. hongkongensis	AA—-	CSF22879	20210526-2-(22)	OQ188385	OQ260360	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. hongkongensis	AA—-	CSF22881	20210526-2-(24)	OQ188386	OQ260361	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. nongkongensis	AA—-	CSF22896	20210526-2-(45)	OQ18838/	OQ260362	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. hongkongensis	AAAAAA	CSF22931	20210526-1-(38)	OQ188388	OQ260363	OQ261524	00302959	OQ303166	00303372
1. FuJian-Euc.	C. kyotensis	C. hongkongensis	ABAAAA	CSF22895	20210526-2-(43)	OQ188389	OQ260364	OQ261526	00302961	OQ303168	00303374
1. Fujian-Euc.	C. kyotensis	C. nongkongensis	AFAAAA	CSF22909	20210526-1-(14)	OQ188390	00260365	00261534	00302969	00303176	00303382
1. Fujian-Euc.	C. Kyötensis	C. hongkongensis	AFAAAA	CSF22949	20210526-1-(58)	00188391	00260366	00261535	00302970	00303177	00303383
1. Fujian-Euc.	C. Kyötensis	C. hongkongensis		CSF22010 CSF22021	20210527 - 1 - (67)	00188392	00260367	00261540	00302975	00303182	00303366
1. Fujian-Euc.	C. Kyotensis	C. hongkongensis		CSF22921 CSF220E4	20210526-1-(26)	00100393	00200300	00201347	00202962	00303109	00303393
1. Fujian-Euc.	C. Kyötensis	C. nongkongensis	AIAAAA	CSF22934 CSF22934	20210526-1-(04)	00188205	00260369	OQ261549	0Q302984	OQ303191	0Q303397
1. Fulian Euc.	C. Ryotensis	C. ilicicola	AA	CSF22402	20210527 - 1 - (11)	00188393	00260370	-	-	-	-
1. Fulian Euc.	C. Kyolensis	C. ilicicola	AA	CSF22004 CSF22850	20210527 - 1 - (01) 20210527 - 1 - (109)	00188397	00260371	-	—	-	-
1. Fulian-Euc.	C. Ryotensis	C. huotancia	AA	CSF22800	20210527 - 1 - (109) 20210526 - 1 - (1)	00188398	00260372	_	_	_	_
1. Fulian Euc.	C. Kyolensis	C. kyotensis		CSE22097	20210526 - 1 - (1) 20210526 - 1 - (44)	00188390	00260373	00261558	00302003	00303100	00303406
1 Fulian-Euc	C kyotensis	C. kyotensis		CSF22894	20210526-1-(44) 20210526-2-(42)	00188400	00260375	OO261560	00302995	00303201	00303408
1 Fulian-Euc	C. kyotensis	C. kyotensis	AE	CSF22799	20210520-2-(42) 20210527-1-(56)	00188401	00260376	00201000			
1 Fulian-Euc	C. kyotensis	C. kyotensis	AF	CSF22808	20210527-1-(55)	00188402	OO260377	_		_	_
1 Fulian-Fuc	C kyotensis	C kyotensis	AF—-	CSF22898	20210526-1-(2)	00188403	00260378	_	_	_	_
1 Fulian-Fuc	C. kyotensis	C. kyotensis	AE	CSF22913	20210526-1-(2)	00188404	00260379	_	_	_	_
1 Fulian-Fuc	C kyotensis	C kyotensis	AFAAAA	CSF22869	20210526-2-(7)	00188405	00260380	00261564	00302999	00303205	00303412
1. Fulian-Euc	C. kyotensis	C. kyotensis	AI—-	CSF22914	20210526-1-(19)	00188406	00260381	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	AIAAAA	CSF22904	20210526-1-(8)	OQ188407	OQ260382	OQ261566	OQ303001	OQ303207	OQ303414

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d			GenBank Acce	ssion No. ^e		
						tef1	tub2	cmdA	his3	rpb2	act
1. FuJian-Euc.	C. kyotensis	C. kyotensis	AIAAAA	CSF22866	20210526-2-(3)	OQ188408	OQ260383	OQ261567	OQ303002	OQ303208	OQ303415
 FuJian-Euc. 	C. kyotensis	C. kyotensis	ARAAAA	CSF22950	20210526-1-(59)	OQ188409	OQ260384	OQ261584	OQ303019	OQ303225	OQ303432
 FuJian-Euc. 	C. kyotensis	C. kyotensis	BRAAAA	CSF22889	20210526-2-(35)	OQ188410	OQ260385	OQ261586	OQ303021	OQ303227	OQ303434
 FuJian-Euc. 	C. kyotensis	C. kyotensis	CF—-	CSF22901	20210526-1-(5)	OQ188411	OQ260386	-		-	-
 FuJian-Euc. 	C. kyotensis	C. kyotensis	CFAAAA	CSF22907	20210526-1-(12)	OQ188412	OQ260387	OQ261596	OQ303031	OQ303237	OQ303444
 FuJian-Euc. 	C. kyotensis	C. kyotensis	CMAAAA	CSF22778	20210527-1-(29)	OQ188413	OQ260388	OQ261600	OQ303035	OQ303241	OQ303448
 FuJian-Euc. 	C. kyotensis	C. kyotensis	DF	CSF22481	20210527-1-(10)	OQ188414	OQ260389	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DF	CSF22488	20210527-1-(17)	OQ188415	OQ260390	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DF—-	CSF22911	20210526-1-(16)	OQ188416	OQ260391	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DF—-	CSF22915	20210526-1-(20)	OQ188417	OQ260392	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DF—-	CSF22934	20210526-1-(41)	OQ188418	OQ260393	-	-	-	_
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DFAAAA	CSF22928	20210526-1-(33)	OQ188419	OQ260394	OQ261632	OQ303067	OQ303273	OQ303480
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DI—-	CSF22936	20210526-1-(43)	OQ188420	OQ260395	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DI—-	CSF22942	20210526-1-(49)	OQ188421	OQ260396	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DI—-	CSF22969	20210526-1-(83)	OQ188422	OQ260397	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DK—-	CSF22899	20210526-1-(3)	OQ188423	OQ260398	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DK—-	CSF22938	20210526-1-(45)	OQ188424	OQ260399	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DK—-	CSF22871	20210526-2-(9)	OQ188425	OQ260400	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DK—-	CSF22877	20210526-2-(20)	OQ188426	OQ260401	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DKAAAA	CSF22790	20210527-1-(43)	OQ188427	OQ260402	OQ261639	OQ303074	OQ303280	OQ303487
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DKAAAA	CSF22918	20210526-1-(23)	OQ188428	OQ260403	OQ261638	OQ303073	OQ303279	OQ303486
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DKDAAA	CSF22890	20210526-2-(36)	OQ188429	OQ260404	OQ261642	OQ303077	OQ303283	OQ303490
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DLCAAA	CSF22831	20210527-1-(90)	OQ188430	OQ260405	OQ261644	OQ303079	OQ303285	OQ303492
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DM—-	CSF22791	20210527-1-(44)	OQ188431	OQ260406	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DM—-	CSF22880	20210526-2-(23)	OQ188432	OQ260407	-	-	-	-
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DMAAAA	CSF22864	20210526-2-(1)	OQ188433	OQ260408	OQ261645	OQ303080	OQ303286	OQ303493
1. FuJian-Euc.	C. kyotensis	C. kyotensis	DQAABA	CSF22492	20210527-1-(21)	OQ188434	OQ260409	OQ261651	OQ303086	OQ303292	OQ303499
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22510	20210524-1-(1)	OQ188435	OQ260410	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22512	20210524-1-(3)	OQ188436	OQ260411	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22517	20210524-1-(15)	OQ188437	OQ260412	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22518	20210524-1-(17)	OQ188438	OQ260413	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF22522	20210524-1-(22)	OQ188439	00260414	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23059	20210524-1-(40)	OQ188440	OQ260415	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23064	20210524-1-(52)	OQ188441	00260416	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23067	20210524-1-(58)	OQ188442	OQ260417	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23069	20210524-1-(63)	OQ188443	00260418	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23074	20210524-1-(74)	OQ188444	OQ260419	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23075	20210524-1-(75)	OQ188445	00260420	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23078	20210524-1-(79)	OQ188446	OQ260421	-	-	-	-
2. Fujian-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23082	20210524-1-(84)	0018844/	00260422	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23088	20210524-1-(96)	OQ188448	OQ260423	-	-	-	-
2. Fujian-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23089	20210524-1-(97)	00188449	00260424	-	-	-	-
2. FuJian-Pin.	C. Kyotensis	C. aconiaialis	AA—-	CSF23091	20210524-1-(101)	00188450	00260425	-	-	-	-
2. FuJian-Pin.	C. Kyotensis	C. acontatalis	AA—-	CSF23095	20210524-1-(107)	00188451	OQ260426	-	-	-	-
2. Fujian-Pin.	C. Kyotensis	C. aconiaialis	AA—-	CSF2309/	20210524-1-(110)	00188452	00260427	-	-	-	-
2. FuJian-Pin.	C. Kyotensis	C. aconiaialis	AA—-	CSF23108	20210524-1-(128)	00188453	00260428	-	-	-	-
2. Fujian-Pin.	C. Kyotensis	C. acontatalis	AA—-	CSF23121	20210524-1-(143)	00188454	00260429	-	-	-	-
2. Fujian-Pin.	C. Kyotensis	C. aconiaialis	AA—-	CSF23120	20210524-1-(150)	00188455	00260430	-	-	-	-
2. Fujian-Pin.	C. kyotensis	C. acontatalis	AA—-	C5F23130	20210524-1-(154)	UQ188456	OQ260431	-	-	-	-

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d			GenBank Acce	ssion No. ^e		
						tef1	tub2	cmdA	his3	rpb2	act
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23131	20210524-1-(155)	OQ188457	OQ260432	-	-	_	-
FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23149	20210524-1-(181)	OQ188458	OQ260433	-	-	-	-
FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23151	20210524-1-(183)	OQ188459	OQ260434	-	-	-	-
FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23159	20210524-1-(192)	OQ188460	OQ260435	-	-	-	-
FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23168	20210524-1-(204)	OQ188461	OQ260436	-	-	-	-
FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23172	20210524-1-(209)	OQ188462	OQ260437	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23178	20210524-1-(218)	OQ188463	OQ260438	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23179	20210524-1-(219)	OQ188464	OQ260439	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23182	20210524-1-(223)	OQ188465	OQ260440	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23183	20210524-1-(224)	OQ188466	OQ260441	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23184	20210524-1-(226)	OQ188467	OQ260442	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23185	20210524-1-(227)	OQ188468	OQ260443	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23188	20210524-1-(230)	OQ188469	OQ260444	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23190	20210524-1-(232)	OQ188470	OQ260445	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23198	20210524-1-(245)	OQ188471	OQ260446	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	Al—-	CSF23076	20210524-1-(76)	OQ188472	OQ260447	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	Al—-	CSF23081	20210524-1-(83)	OQ188473	OQ260448	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	Al—-	CSF23125	20210524-1-(148)	OQ188474	OQ260449	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	Al—-	CSF23144	20210524-1-(174)	OQ188475	OQ260450	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AIAAAA	CSF23113	20210524-1-(135)	OQ188476	OQ260451	OQ261476	OQ302911	OQ303118	OQ303324
2. FuJian-Pin.	C. kyotensis	C. aconidialis	APAAAA	CSF23133	20210524-1-(158)	OQ188477	OQ260452	OQ261487	OQ302922	OQ303129	OQ303335
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AU—-	CSF22514	20210524-1-(7)	OQ188478	OQ260453	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AU—-	CSF23093	20210524-1-(103)	OQ188479	OQ260454	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AU—-	CSF23134	20210524-1-(159)	OQ188480	OQ260455	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AU—-	CSF23150	20210524-1-(182)	OQ188481	OQ260456	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AU—-	CSF23153	20210524-1-(185)	OQ188482	OQ260457	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconiaialis	AU—-	CSF23157	20210524-1-(189)	OQ188483	OQ260458	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	AU—-	CSF23200	20210524-1-(247)	OQ188484	OQ260459	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	CA—-	CSF22511	20210524-1-(2)	OQ188485	OQ260460	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconidialis	CA—-	CSF23062	20210524-1-(49)	OQ188486	OQ260461	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconiaialis	CA—-	CSF23107	20210524-1-(127)	OQ18848/	OQ260462	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconiaialis	CA—-	CSF23146	20210524-1-(176)	OQ188488	OQ260463	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. aconiaialis	CA	CSF23167	20210524-1-(201)	OQ188489	OQ260464	-	-	-	-
2. Fujian-Pin.	C. kyotensis	C. aconiaialis	CABAAA	CSF23196	20210524-1-(243)	00188490	00260465	00261502	00302937	00303144	00303350
2. Fujian-Pin.	C. kyotensis	C. acontatalis	CADAAA	C5F25147	20210524 - 1 - (177)	00100491	00260466	UQ261504	0Q302939	0Q303146	UQ303352
2. Fujian-Pin.	C. Kyotensis	C. hongkongensis	AA—-	CSF22515 CSF22515	20210524-1-(8)	OQ188492	00260467	-	-	-	-
2. Fujian-Pin.	C. Kyotensis	C. hongkongensis	AA—-	C5F22521	20210524-1-(21)	00188493	00260466	-	-	-	-
2. Fujian-Pin.	C. Kyotensis	C. hongkongensis	AA—-	CSF23053	20210524-1-(30)	OQ188494	OQ260469	-	-	-	-
2. Fujian-Pin.	C. Kyotensis	C. hongkongensis	AA—-	CSF23060	20210524 - 1 - (42)	00188495	00260470	-	-	-	-
2. Fujian-Fill.	C. kyotensis	C. hongkongensis	AA	CSF23061	20210524-1-(46)	00188407	00260471	-	-	-	-
2. Fujian-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23063	20210524-1-(50)	00188497	00260472	-	-	-	-
2. Fujian-Fill.	C. Kyolensis	C. hongkongensis	AA	CSF23000	20210524-1-(50)	OQ100490	00200473	-	-	-	-
2. Fujidh-Fill. 2. Fujian Pin	C. Ryotensis	C. hongkongensis	AA	CSF230/1 CSF23085	20210324-1-(09)	00188500	00260474	-	-	-	-
2. Fujian-Fill. 2. Fujian Din	C. Ryolensis	C. hongkongensis	ΔΔ	CSF23003	20210324-1-(92) 20210524, 1, (00)	00188501	00260475	_	_	_	-
2. Fujian-Fill.	C. Kyötensis	C. hongkongensis	AA	CSF23090	20210524-1-(99) 20210524 1 (102)	00188502	00260476	-	-	-	-
2. $rujian-rin.$ 2. $Fujian-Pin$	C. Ryolensis	C. hongkongensis	AA	CSF23092	20210524-1-(102)	00188502	00260477	_	_	_	_
2. Fujidit-Fill.	C. hydrensis	C. hongkongensis	A A	CSF23101 CSF22102	20210524 - 1 - (117) 20210524 1 (118)	00188504	00260470	-	-	-	-
2. Fujidit-Fill. 2. Fujian-Pin	C. Ryolensis	C. hongkongensis	ΔΔ	CSF23102	20210524-1-(110)	00188505	00260479	_	_	_	_
2. $rujian-rin.$ 2. $Fujian-Pin$	C. Ryolensis	C. hongkongensis	AA	CSF23110 CSF23110	20210524-1-(156)	00188506	00260460	_	_	_	_
∠. rujian-rin.	C. Kyotensis	C. nongkongensis	AA—-	C3F23119	20210524-1-(141)	00100000	00200401	-	-	-	-

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d			GenBank Acce	ssion No. ^e		
						tef1	tub2	cmdA	his3	rpb2	act
2. FuJian-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23122	20210524-1-(144)	OQ188507	OQ260482	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23128	20210524-1-(152)	OQ188508	OQ260483	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23129	20210524-1-(153)	OQ188509	OQ260484	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23155	20210524-1-(187)	OQ188510	OQ260485	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23158	20210524-1-(191)	OQ188511	OQ260486	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23162	20210524-1-(196)	OQ188512	OQ260487	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23169	20210524-1-(205)	OQ188513	OQ260488	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23173	20210524-1-(210)	OQ188514	OQ260489	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23186	20210524-1-(228)	OQ188515	OQ260490	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23192	20210524-1-(234)	OQ188516	OQ260491	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23197	20210524-1-(244)	OQ188517	OQ260492	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AB—-	CSF23055	20210524-1-(32)	OQ188518	OQ260493	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AB—-	CSF23164	20210524-1-(198)	OQ188519	OQ260494	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AD—-	CSF23072	20210524-1-(70)	OQ188520	OQ260495	-			
FuJian-Pin.	C. kyotensis	C. hongkongensis	AEBAAA	CSF23136	20210524-1-(161)	OQ188521	OQ260496	OQ261532	OQ302967	OQ303174	OQ303380
FuJian-Pin.	C. kyotensis	C. hongkongensis	AF—-	CSF23050	20210524-1-(26)	OQ188522	OQ260497	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AF—-	CSF23080	20210524-1-(82)	OQ188523	OQ260498	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AF—-	CSF23156	20210524-1-(188)	OQ188524	OQ260499	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AF—-	CSF23171	20210524-1-(208)	OQ188525	OQ260500	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AF—-	CSF23180	20210524-1-(221)	OQ188526	OQ260501	-	-	-	-
FuJian-Pin.	C. kyotensis	C. hongkongensis	AFAAAA	CSF23068	20210524-1-(59)	OQ188527	OQ260502	OQ261536	OQ302971	OQ303178	OQ303384
FuJian-Pin.	C. kyotensis	C. hongkongensis	AFBAAA	CSF23142	20210524-1-(168)	OQ188528	OQ260503	OQ261541	OQ302976	OQ303183	OQ303389
FuJian-Pin.	C. kyotensis	C. hongkongensis	AGBAAA	CSF23137	20210524-1-(162)	OQ188529	OQ260504	OQ261544	OQ302979	OQ303186	OQ303392
FuJian-Pin.	C. kyotensis	C. hongkongensis	AGBAAA	CSF23166	20210524-1-(200)	OQ188530	OQ260505	OQ261545	OQ302980	OQ303187	OQ303393
FuJian-Pin.	C. kyotensis	C. ilicicola	AA—-	CSF23083	20210524-1-(87)	OQ188531	OQ260506	-	-	-	-
FuJian-Pin.	C. kyotensis	C. ilicicola	AA—-	CSF23127	20210524-1-(151)	OQ188532	OQ260507	-	-	-	-
FuJian-Pin.	C. kyotensis	C. ilicicola	AA—-	CSF23195	20210524-1-(241)	OQ188533	OQ260508	-	-	-	-
FuJian-Pin.	C. kyotensis	C. ilicicola	AABAAA	CSF23189	20210524-1-(231)	OQ188534	OQ260509	OQ261553	OQ302988	OQ303194	OQ303401
FuJian-Pin.	C. kyotensis	C. kyotensis	AA—-	CSF23138	20210524-1-(163)	OQ188535	OQ260510	-	-	-	-
FuJian-Pin.	C. kyotensis	C. kyotensis	AAAAAA	CSF23086	20210524-1-(93)	OQ188536	OQ260511	OQ261559	OQ302994	OQ303200	OQ303407
FuJian-Pin.	C. kyotensis	C. kyotensis	ADAAAA	CSF23115	20210524-1-(137)	OQ188537	OQ260512	OQ261561	OQ302996	OQ303202	OQ303409
FuJian-Pin.	C. kyotensis	C. kyotensis	ADAAAA	CSF23120	20210524-1-(142)	OQ188538	OQ260513	OQ261562	OQ302997	OQ303203	OQ303410
FuJian-Pin.	C. kyotensis	C. kyotensis	AF—-	CSF23099	20210524-1-(115)	OQ188539	OQ260514	-	-	-	-
FuJian-Pin.	C. kyotensis	C. kyotensis	AF—-	CSF23105	20210524-1-(124)	OQ188540	OQ260515	-	-	-	-
FuJian-Pin.	C. kyotensis	C. kyotensis	AF—-	CSF23170	20210524-1-(206)	OQ188541	OQ260516	-	-	-	-
FuJian-Pin.	C. kyotensis	C. kyotensis	AFAAAA	CSF23163	20210524-1-(197)	OQ188542	OQ260517	OQ261565	OQ303000	OQ303206	OQ303413
FuJian-Pin.	C. kyotensis	C. kyotensis	AI—-	CSF23057	20210524-1-(35)	OQ188543	OQ260518	-	-	-	-
FuJian-Pin.	C. kyotensis	C. kyotensis	AI—-	CSF23103	20210524-1-(122)	OQ188544	OQ260519	-	-	-	-
FuJian-Pin.	C. kyotensis	C. kyotensis	AI—-	CSF23117	20210524-1-(139)	OQ188545	OQ260520	-	-	-	-
FuJian-Pin.	C. kyotensis	C. kyotensis	AI—-	CSF23123	20210524-1-(145)	OQ188546	OQ260521	-	-	-	-
FuJian-Pin.	C. kyotensis	C. kyotensis	AI—-	CSF23199	20210524-1-(246)	OQ188547	OQ260522	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. kyotensis	AIDABA	CSF23104	20210524-1-(123)	OQ188548	OQ260523	OQ261571	OQ303006	OQ303212	OQ303419
FuJian-Pin.	C. kyotensis	C. kyotensis	AIFAAA	CSF23181	20210524-1-(222)	OQ188549	OQ260524	OQ261572	OQ303007	OQ303213	OQ303420
FuJian-Pin.	C. kyotensis	C. kyotensis	AKAAAA	CSF23070	20210524-1-(68)	OQ188550	OQ260525	OQ261573	OQ303008	OQ303214	OQ303421
FuJian-Pin.	C. kyotensis	C. kyotensis	AKAAAA	CSF23096	20210524-1-(108)	OQ188551	OQ260526	OQ261574	OQ303009	OQ303215	OQ303422
2. FuJian-Pin.	C. kyotensis	C. kyotensis	AL—-	CSF23132	20210524-1-(157)	OQ188552	OQ260527	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. kyotensis	AL—-	CSF23194	20210524-1-(240)	OQ188553	OQ260528	-	-	-	-
2. FuJian-Pin.	C. kyotensis	C. kyotensis	ALABAA	CSF23098	20210524-1-(112)	OQ188554	OQ260529	OQ261575	OQ303010	OQ303216	OQ303423
2. FuJian-Pin.	C. kyotensis	C. kyotensis	ALBAAA	CSF22516	20210524-1-(14)	OQ188555	OQ260530	OQ261576	OQ303011	OQ303217	OQ303424

$ \frac{ t }{2} Fujian-Pin. C. kyotensis D. A. CSP23177 20210524-1(216) OC188566 OC280530$	te and Tree ecies Code ^a	0. ^e	GenBank Accessi	
2 Lujan-Pin. C. kyotensis C. Lujon-sis D.A C. Status Z. Lujon-sis C. Lujon-sis D.A C. Lujon-sis C. Lujon-sis C. Lujon-sis C. Lujon-sis D.L C. Lujon-sis C. Lujon-sis C. Lujon-sis <th></th> <th>s3 rpb2</th> <th>cmdA</th> <th>act</th>		s3 rpb2	cmdA	act
2. Fujian-Pin. C. Kyotensis C. Kyotensis C. C. C. Spatial 2010524-1(132) 00210524-1(134) 00210533	FuJian-Pin.	03012 OQ303218	OQ261577	OQ303425
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.	03028 OQ303234	OQ261593	OQ303441
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.		-	-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.	03032 OQ303238	OQ261597	OQ303445
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.	03034 OQ303240	OQ261599	OQ303447
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.	03046 OQ303252	OQ261611	OQ303459
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.		-	-
2 Pujian-Pin. C. Kuotensis C. Kuotensis D.A	FuJian-Pin.		-	-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.		-	-
2. Fujian-Pin. C. Kuotensis C. Kuotensis DAAAAA SEP2143 220105241-1(169) OQ218556 OQ260541 OQ260542 -	FuJian-Pin.		-	-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.	03059 OQ303265	OQ261624	OQ303472
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.		-	-
2. Fujian-Pin. C. Kyotensis DDAABA CSF23118 20210524-1(140) OQ188569 OQ260544 OQ261627 OQ303064 OQ303268 OQ3 2. Fujian-Pin. C. kyotensis DF— CSF23179 20210524-1(175) OQ188571 OQ260547 -	FuJian-Pin.		-	-
2. Fujian-Pin. C. Kyotensis DDAAA CSF23145 20205241-(175) OQ280545 OQ261629 OQ303270 OQ3 2. Fujian-Pin. C. Kyotensis DF— CSF23079 202015241-(81) OQ188571 OQ260547 -	FuJian-Pin.	03062 OQ303268	OQ261627	OQ303475
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.	03064 OQ303270	OQ261629	OQ303477
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.		-	-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.		-	_
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.		-	_
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$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Fulian-Pin.	03068 00303274	OO261633	OO303481
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FuJian-Pin.	- ~ _	~ _	~ _
2. FuJian-Pin.C. kyotensisC. kyotensisDI—CSF2311120210524-1-(133) $OQ188580$ $OQ260555$ 2. FuJian-Pin.C. kyotensisC. kyotensisDI—CSF2313520210524-1-(160)OQ188581OQ260556	FuJian-Pin.		-	_
2. Fujian-Pin.C. kyotensisD.L.CSF2313520210524-1-(160) $OQ188581$ $OQ260556$ 2. Fujian-Pin.C. kyotensisD.L.CSF2314020210524-1-(165)OQ188582OQ260557	FuJian-Pin.		-	_
2. Fujian-Pin.C. kyotensisC. kyotensisDI—CSF23140 $20210524-1-(165)$ OQ188582OQ260557 <td>Fulian-Pin.</td> <td></td> <td>-</td> <td>_</td>	Fulian-Pin.		-	_
2. FuJian-Pin. C. kyotensis C. kyotensis DI— CSF23141 20210524-1-(166) OQ188583 OQ260558 - <td>FuJian-Pin.</td> <td></td> <td>-</td> <td>_</td>	FuJian-Pin.		-	_
2. FuJian-Pin. C. kyotensis C. kyotensis DI— CSF23191 20210524-1-(233) OQ188584 OQ260559 - <td>Fulian-Pin.</td> <td></td> <td>-</td> <td>_</td>	Fulian-Pin.		-	_
2. Fujian-Pin. C. kyotensis C. kyotensis DIAAAA CSF23052 20210524-1-(28) OQ188585 OQ260560 OQ261635 OQ303070 OQ303276 OQ3 2. Fujian-Pin. C. kyotensis C. kyotensis DJBAAA CSF23054 20210524-1-(31) OQ188586 OQ260561 OQ261637 OQ303072 OQ303278 OQ3 2. Fujian-Pin. C. kyotensis C. kyotensis DKAAAA CSF23106 20210524-1-(131) OQ188587 OQ260562 - <td>Fulian-Pin.</td> <td></td> <td>-</td> <td>_</td>	Fulian-Pin.		-	_
2. FuJian-Pin. C. kyotensis C. kyotensis DJBAAA CSF23054 20210524-1-(31) OQ188586 OQ260561 OQ261637 OQ303072 OQ303278 OQ3 2. FuJian-Pin. C. kyotensis DK— CSF23106 20210524-1-(31) OQ188587 OQ260562 -	Fulian-Pin.	03070 00303276	OO261635	OO303483
2. FuJian-Pin. C. kyotensis C. kyotensis DK— CSF23106 20210524-1-(126) OQ188587 OQ260562 - <td>Fulian-Pin.</td> <td>03072 OÕ303278</td> <td>OÕ261637</td> <td>OÕ303485</td>	Fulian-Pin.	03072 OÕ303278	OÕ261637	OÕ303485
2. FuJian-Pin. C. kyotensis C. kyotensis DKAAAA CSF23109 20210524-1-(131) OQ188588 OQ260563 OQ261640 OQ303075 OQ303281 OQ3 2. FuJian-Pin. C. kyotensis C. kyotensis DKAAAA CSF23105 20210524-1-(199) OQ188589 OQ260564 OQ261641 OQ303076 OQ303282 OQ3 2. FuJian-Pin. C. kyotensis DL— CSF23058 20210524-1-(37) OQ188590 OQ260565 -	Fulian-Pin.		_	_
2. FuJian-Pin. C. kyotensis C. kyotensis DKAAAA CSF23165 20210524-1-(199) OQ188589 OQ200564 OQ261641 OQ303076 OQ303282 OQ3 2. FuJian-Pin. C. kyotensis DL CSF23058 20210524-1-(37) OQ188590 OQ260565 -	Fulian-Pin.	03075 00303281	00261640	00303488
2. FuJian-Pin. C. kyotensis DL— CSF23058 20210524-1-(37) OQ188590 OQ260565 - <td< td=""><td>Fulian-Pin.</td><td>03076 OÕ303282</td><td>OÕ261641</td><td>OO303489</td></td<>	Fulian-Pin.	03076 OÕ303282	OÕ261641	OO303489
2. FuJian-Pin. C. kyotensis DL— CSF23139 20210524-1-(164) OQ188591 OQ260566 - <t< td=""><td>Fulian-Pin.</td><td></td><td>_</td><td>_</td></t<>	Fulian-Pin.		_	_
2. FuJian-Pin. C. kyotensis DM— CSF22523 20210524-1-(24) OQ188592 OQ260567 - <td< td=""><td>Fulian-Pin.</td><td></td><td>-</td><td>_</td></td<>	Fulian-Pin.		-	_
2. FuJian-Pin. C. kyotensis C. kyotensis DM— CSF23051 20210524-1-(27) OQ188593 OQ260568 – – – – – – 2. FuJian-Pin. C. kyotensis DM— CSF23065 20210524-1-(54) OQ188594 OQ260569 – – – – – – – – – – – – – – – – – – –	Fulian-Pin.		-	_
2. FuJian-Pin. C. kyotensis C. kyotensis DM— CSF23065 20210524-1-(54) OQ188594 OQ260569	Fulian-Pin.		_	_
	Fulian-Pin.		_	_
2. FUIIAN-PIN. U. KUOTENSIS U. KUOTENSIS UMAAAA USE23193 20210524-1-1239) UU280595 UU260570 UU261646 UU303081 UU303287 UU39	Fulian-Pin.	03081 00303287	00261646	00303494
2. Fulian-Pin. C. kvotensis C. kvotensis DO- CSF23154 20210524-1-(186) OO188596 OO260571	Fulian-Pin.		_	_
2. Fulian-Pin. C. kvotensis C. kvotensis DOAAAA CSF22519 20210524-1-(18) OO188597 OO260572 OO261647 OO303082 OO303288 OO3	Fulian-Pin.	03082 00303288	00261647	00303495
2 Fulian-Pin C kuotensis DOAAAA CSF23087 20210524-1-(94) OO188598 OO260573 OO261648 OO3030883 OO303289 OO3	Fulian-Pin	03083 00303289	00261648	00303496
3 Eulian-Cun C kvotensis C aconidialis AA — CSF22499 20210525-1-(7) QQ188599 QQ260574 – – –	Fulian-Cun		-	-
3. Fulian-Cun. C. kvotensis C. aconidialis AA— CSF22500 20210525-1-(8) OO188600 OO260575	Fulian-Cun		_	_
3. Fulian-Cun. C. kvotensis C. aconidialis AA— CSF22504 20210525-1-(13) QQ188601 QQ260576	Fulian-Cun.		_	_
3. Fulian-Cun. C. kvotensis C. aconidialis AA— CSF22505 20210525-1-(14) OO188602 OO260577	Fulian-Cun.		_	_
3. Fulian-Cun. C. kvotensis C. aconidialis AA— CSF22506 20210525-1-(15) OO188603 OO260578	Fulian-Cun		_	_
3. FuJian-Cun. C. kyotensis C. aconidialis AA CSF22507 20210525-1-(16) OQ188604 OQ260579	FuJian-Cun.		-	-

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d			GenBank Acce	ssion No. ^e		
						tef1	tub2	cmdA	his3	rpb2	act
3. Fulian-Cun.	C. kvotensis	C. aconidialis	AA—-	CSF22970	20210525-1-(26)	OO188605	OO260580	_	_	_	_
Fulian-Cun.	C. kvotensis	C. aconidialis	AA—-	CSF22972	20210525-1-(29)	OÕ188606	OÕ260581	-	-	-	-
Fulian-Cun.	C kvotensis	C aconidialis	AA—-	CSF22973	20210525-1-(33)	OÕ188607	OÕ260582	_	_	_	_
3. Fulian-Cun.	C. kvotensis	C. aconidialis	AA—-	CSF22974	20210525-1-(34)	00188608	00260583	_	_	_	_
3. Fulian-Cun.	C. kvotensis	C. aconidialis	AA—-	CSF22975	20210525-1-(36)	00188609	00260584	_	_	_	_
3 Fulian-Cun	C kyotensis	C aconidialis	A A	CSF22977	20210525-1-(38)	00188610	00260585	_	_	_	_
3 Fulian-Cun	C. kyotensis	C. aconidialis	AA—-	CSF22979	20210525-1-(40)	00188611	00260586	_	_	_	_
3. Fulian-Cun	C kyotensis	C aconidialis	AA—-	CSF22982	20210525 - 1 - (44)	00188612	00260587	_	_	_	_
3 Fulian-Cun	C kyotensis	C aconidialis	A A	CSF22984	20210525-1-(53)	00188613	00260588	_	_	_	_
3 Fulian-Cun	C kyotensis	C aconidialis	AA—-	CSF22985	20210525-1-(57)	00188614	00260589	_	_	_	_
3 Fulian-Cun	C kyotensis	C aconidialis	A A	CSF22986	20210525-1-(58)	00188615	OO260590	_	_	_	_
3 Fulian-Cun	C kyotensis	C aconidialis	ΔΔ	CSF22988	20210525-1-(67)	00188616	OO260591	_	_	_	_
3 Fulian-Cun	C kyotensis	C aconidialis	ΔΔ	CSE22989	20210525-1-(69)	00188617	00260592	_	_	_	_
3 Fulian-Cun	C. kyotensis	C. aconidialis	ΔΔ	CSF22900	20210525-1-(07)	00188618	00260592				
3 Fulian-Cun	C. hydensis	C. aconidialis	ΔΔ	CSF22002	20210525-1-(72)	00188619	00260593				
3 Fulian Cun	C. Ryotensis	C. aconidialis	ΔA	CSE22004	20210525-1-(70)	00188620	00260595	_	_	_	_
3. Fulian Cun	C. Ryotensis	C. aconidialis	AA	CSE22005	20210525-1-(80)	00188621	00260595	-	-	-	-
3. Fulian Cun	C. Kyolensis	C. aconidialis	AA	CSE22995	20210525-1-(90)	00188622	00260590	-	-	-	-
2 Fulian Cun	C. Kyolensis	C. acomidialio	AA	CSF22990 CSF22007	20210525-1-(91)	00100022	00260597	-	-	-	-
2 Fulian Cun	C. Kyolensis	C. acomidialia	AA	CSF22997	20210525-1-(95)	00100023	00260596	-	-	-	-
2 Fulian Cun	C. Kyotensis	C. acomidialia	AA	C5F23003	20210525-1-(111)	00100024	00260399	-	-	-	-
3. Fujian-Cun.	C. Kyotensis	C. acomidialia	AA—-	C5F25005	20210525-1-(119)	00188625	00260600	-	-	-	-
3. Fujian-Cun.	C. kyotensis	C. acontations	AA—-	C5F23007	20210525-1-(124)	OQ100020	00260601	-	-	-	-
3. Fujian-Cun.	C. Kyötensis	C. acontatalis	AA—-	CSF23012	20210525-1-(144)	00188627	00260602	-	-	-	-
3. Fujian-Cun.	C. kyotensis	C. aconiaialis	AA—-	CSF23013	20210525-1-(148)	00188628	00260603	-	-	-	-
3. Fujian-Cun.	C. kyotensis	C. aconiaialis	AA—-	CSF23014	20210525-1-(152)	OQ188629	00260604	-	-	-	-
3. Fujian-Cun.	C. kyotensis	C. acontatalis	AA—-	CSF23015	20210525-1-(156)	00188630	00260605	-	-	-	-
3. Fujian-Cun.	C. kyotensis	C. aconiaialis	AA—-	CSF23016	20210525-1-(159)	00188631	OQ260606	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. aconiaialis	AA—-	CSF23017	20210525-1-(160)	OQ188632	OQ260607	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. aconiaialis	AA—-	CSF23019	20210525-1-(171)	OQ188633	00260608	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23025	20210525-1-(190)	OQ188634	OQ260609	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23026	20210525-1-(196)	OQ188635	OQ260610	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. aconiaialis	AA—-	CSF23027	20210525-1-(197)	OQ188636	OQ260611	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23028	20210525-1-(198)	OQ188637	OQ260612	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23029	20210525-1-(201)	OQ188638	OQ260613	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23030	20210525-1-(202)	OQ188639	OQ260614	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23031	20210525-1-(203)	OQ188640	OQ260615	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23033	20210525-1-(206)	OQ188641	OQ260616	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23039	20210525-1-(223)	OQ188642	OQ260617	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23040	20210525-1-(225)	OQ188643	OQ260618	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23041	20210525-1-(226)	OQ188644	OQ260619	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23042	20210525-1-(229)	OQ188645	OQ260620	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23043	20210525-1-(231)	OQ188646	OQ260621	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23045	20210525-1-(234)	OQ188647	OQ260622	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23048	20210525-1-(247)	OQ188648	OQ260623				
FuJian-Cun.	C. kyotensis	C. aconidialis	AAABAA	CSF22498	20210525-1-(4)	OQ188649	OQ260624	OQ261463	OQ302898	OQ303105	OQ303311
FuJian-Cun.	C. kyotensis	C. aconidialis	ADDAAA	CSF22991	20210525-1-(74)	OQ188650	OQ260625	OQ261469	OQ302904	OQ303111	OQ303317
FuJian-Cun.	C. kyotensis	C. aconidialis	AFAAAA	CSF23011	20210525-1-(141)	OQ188651	OQ260626	OQ261471	OQ302906	OQ303113	OQ303319
3. FuJian-Cun.	C. kyotensis	C. aconidialis	AI—-	CSF22987	20210525-1-(60)	OQ188652	OQ260627	-	-	-	-

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d			GenBank Acce	ssion No. ^e		
						tef1	tub2	cmdA	his3	rpb2	act
3. FuJian-Cun.	C. kyotensis	C. aconidialis	AI—-	CSF23006	20210525-1-(122)	OQ188653	OQ260628	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AI—-	CSF23034	20210525-1-(209)	OQ188654	OQ260629	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AI—-	CSF23044	20210525-1-(232)	OQ188655	OQ260630	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AIAAAA	CSF23008	20210525-1-(137)	OQ188656	OQ260631	OQ261477	OQ302912	OQ303119	OQ303325
FuJian-Cun.	C. kyotensis	C. aconidialis	AQAAAA	CSF22503	20210525-1-(12)	OQ188657	OQ260632	OQ261488	OQ302923	OQ303130	OQ303336
FuJian-Cun.	C. kyotensis	C. aconidialis	AU—-	CSF22978	20210525-1-(39)	OQ188658	OQ260633	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AU—-	CSF23001	20210525-1-(101)	OQ188659	OQ260634	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AU—-	CSF23022	20210525-1-(186)	OQ188660	OQ260635	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AU—-	CSF23023	20210525-1-(187)	OQ188661	OQ260636	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AU—-	CSF23024	20210525-1-(188)	OQ188662	OQ260637	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AU—-	CSF23046	20210525-1-(235)	OQ188663	OQ260638	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	AUAAAA	CSF23021	20210525-1-(185)	OQ188664	OQ260639	OQ261496	OQ302931	OQ303138	OQ303344
FuJian-Cun.	C. kyotensis	C. aconidialis	CA—-	CSF22497	20210525-1-(1)	OQ188665	OQ260640	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	CA—-	CSF22502	20210525-1-(11)	OQ188666	OQ260641	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	CA—-	CSF22508	20210525-1-(17)	OQ188667	OQ260642	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	CA—-	CSF22976	20210525-1-(37)	OQ188668	OQ260643	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	CA—-	CSF22993	20210525-1-(85)	OQ188669	OQ260644	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	CA—-	CSF22999	20210525-1-(95)	OQ188670	OQ260645	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	CA—-	CSF23020	20210525-1-(184)	OQ188671	OQ260646	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	CA—-	CSF23032	20210525-1-(204)	OQ188672	OQ260647	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	CA—-	CSF23035	20210525-1-(212)	OQ188673	OQ260648	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	CA—-	CSF23037	20210525-1-(218)	OQ188674	OQ260649	-	-	-	-
FuJian-Cun.	C. kyotensis	C. aconidialis	CA—-	CSF23038	20210525-1-(221)	OQ188675	OQ260650				
3. FuJian-Cun.	C. kyotensis	C. aconidialis	CAAAAA	CSF23049	20210525-1-(250)	OQ188676	OQ260651	OQ261501	OQ302936	OQ303143	OQ303349
3. FuJian-Cun.	C. kyotensis	C. aconidialis	CADAAA	CSF23002	20210525-1-(110)	OQ188677	OQ260652	OQ261505	OQ302940	OQ303147	OQ303353
3. FuJian-Cun.	C. kyotensis	C. chinensis	AAAAAA	CSF22980	20210525-1-(41)	OQ188678	OQ260653	OQ261520	OQ302955	OQ303162	OQ303368
3. FuJian-Cun.	C. kyotensis	C. chinensis	BAAAAA	CSF22981	20210525-1-(43)	OQ188679	OQ260654	OQ261521	OQ302956	OQ303163	OQ303369
3. FuJian-Cun.	C. kyotensis	C. hongkongensis	AA—-	CSF22509	20210525-1-(24)	OQ188680	OQ260655	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. hongkongensis	AA—-	CSF22971	20210525-1-(28)	OQ188681	OQ260656	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. hongkongensis	AA—-	CSF22983	20210525-1-(45)	OQ188682	OQ260657	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. hongkongensis	AA—-	CSF23018	20210525-1-(166)	OQ188683	OQ260658	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. hongkongensis	ADBAAA	CSF22501	20210525-1-(10)	OQ188684	OQ260659	OQ261530	OQ302965	OQ303172	OQ303378
3. FuJian-Cun.	C. kyotensis	C. hongkongensis	AFCAAA	CSF23000	20210525-1-(98)	OQ188685	OQ260660	OQ261543	OQ302978	OQ303185	OQ303391
3. FuJian-Cun.	C. kyotensis	C. ilicicola	AA—-	CSF22998	20210525-1-(94)	OQ188686	OQ260661	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. ilicicola	AA—-	CSF23004	20210525-1-(113)	OQ188687	OQ260662	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. ilicicola	AA—-	CSF23036	20210525-1-(216)	OQ188688	OQ260663	-	-	-	-
3. FuJian-Cun.	C. kyotensis	C. ilicicola	AA—-	CSF23047	20210525-1-(245)	OQ188689	OQ260664	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22525	20210607-1-(2)	OQ188690	OQ260665	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconiaialis	AA—-	CSF22526	20210607-1-(3)	OQ188691	OQ260666	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. acontatalis	AA—-	CSF22527	20210607-1-(5)	OQ188692	OQ260667	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. acontatalis	AA—-	CSF22528	20210607-1-(6)	OQ188693	OQ260668	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. acontatalis	AA—-	CSF22529	20210607-1-(8)	OQ188694	OQ260669	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. acontatalis	AA—-	CSF22531	20210607-1-(10)	OQ188695	OQ260670	-	-	-	-
4. GuangDong-Euc.	C. Kyotensis	C. acontatalis	AA—-	C5F22532	20210607-1-(13)	00188696	002606/1	-	-	-	-
4. GuangDong-Euc.	C. Kyotensis	C. aconiaialis	AA	CSF22333	20210607-1-(14)	0010009/	00200072	-	-	-	-
4. GuangDong-Euc.	C. Kyotensis	C. acomidialia	AA	CSF22334	20210607-1-(10)	00100098	00260673	-	-	-	-
4. GuangDong Euc.	C. Kyolensis	C. aconidialic	AA	CSF22000	20210607-1-(19)	00188700	00260675	-	-	-	-
4. GuangDong-Euc. 4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22540	20210607-1-(22) 20210607-1-(24)	OQ188701	OQ260675 OQ260676	_	_	-	_

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d		(GenBank Acces	ssion No. ^e		
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4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23201	20210607-1-(26)	OQ188702	OQ260677	-	_	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23202	20210607-1-(27)	OQ188703	OQ260678	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23203	20210607-1-(28)	OQ188704	OQ260679	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23204	20210607-1-(29)	OQ188705	OQ260680	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23205	20210607-1-(30)	OQ188706	OQ260681	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23206	20210607-1-(31)	OQ188707	OQ260682	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23207	20210607-1-(32)	OQ188708	OQ260683	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23208	20210607-1-(33)	OQ188709	OQ260684	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23209	20210607-1-(34)	OQ188710	OQ260685	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23211	20210607-1-(36)	OQ188711	OQ260686	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23213	20210607-1-(38)	OQ188712	OQ260687	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23215	20210607-1-(40)	OQ188713	OQ260688	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23216	20210607-1-(41)	OQ188714	OQ260689	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23217	20210607-1-(42)	OQ188715	OQ260690	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23218	20210607-1-(43)	OQ188716	OQ260691	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23219	20210607-1-(44)	OO188717	OO260692	-	_	-	_
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23222	20210607-1-(47)	OQ188718	OQ260693	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23223	20210607-1-(48)	OO188719	OO260694	-	_	-	_
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23224	20210607-1-(49)	OÕ188720	OÕ260695	-	_	-	_
4. GuangDong-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23225	20210607-1-(51)	OÕ188721	OÕ260696	-	_	-	_
4. GuangDong-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23226	20210607-1-(53)	OÕ188722	OÕ260697	-	_	_	-
4. GuangDong-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23228	20210607-1-(55)	OÕ188723	OÕ260698	-	_	_	_
4. GuangDong-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23229	20210607-1-(56)	OÕ188724	00260699	_	_	_	_
4. GuangDong-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23232	20210607-1-(59)	OÕ188725	OÕ260700	-	_	_	_
4. GuangDong-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23233	20210607-1-(60)	OÕ188726	OÕ260701	-	_	_	_
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA	CSF23234	20210607-1-(61)	00188727	00260702	_	_	_	_
4. GuangDong-Euc.	C. kvotensis	C. aconidialis	AA	CSF23235	20210607-1-(62)	OÕ188728	00260703	_	_	_	_
4. GuangDong-Euc	C. kyotensis	C. aconidialis	A A	CSF23236	20210607-1-(63)	00188729	00260704	_	_	_	_
4. GuangDong-Euc	C. kyotensis	C. aconidialis	AA—-	CSF23238	20210607-1-(65)	OÕ188730	00260705	_	_	_	_
4. GuangDong-Euc	C kyotensis	C aconidialis	AA—-	CSF23239	20210607-1-(66)	00188731	00260706	_	_	_	_
4 GuangDong-Fuc	C kyotensis	C aconidialis	A A	CSF23241	20210607-1-(68)	00188732	OO260707	_	_	_	_
4. GuangDong-Euc	C. kyotensis	C. aconidialis	AA—-	CSF23242	20210607-1-(69)	00188733	00260708	_	_	_	_
4 GuangDong-Fuc	C kyotensis	C aconidialis	A A —	CSF23243	20210607-1-(70)	00188734	00260709	_	_	_	_
4 GuangDong-Fuc	C kyotensis	C aconidialis	A A	CSF23246	20210607-1-(74)	00188735	OO260710	_	_	_	_
4 GuangDong-Fuc	C kyotensis	C aconidialis	A A	CSF23248	20210607-1-(76)	00188736	OO260711	_	_	_	_
4 GuangDong-Fuc	C kyotensis	C aconidialis	A A	CSF23249	20210607-1-(77)	00188737	00260712	_	_	_	_
4 GuangDong-Fuc	C kyotensis	C aconidialis	A A	CSF23252	20210607-1-(80)	00188738	00260713	_	_	_	_
4. GuangDong-Euc	C kyotensis	C aconidialis	ΔΔ	CSE23253	20210607-1-(81)	00188739	OO260714	_	_	_	_
4. GuangDong-Euc	C kyotensis	C. aconidialis	ΔΔ	CSF23254	20210607-1-(01)	00188740	00260715			_	_
4. GuangDong-Euc	C. kyotensis	C. aconidialic	ΔΔ	CSF23255	20210607 1 (82)	00188741	00260716			_	_
4. CuangDong Euc	C. kyotensis	C. aconidialis		CSE23256	20210607-1-(83)	00188742	00260717	_	_	_	_
4 GuangDong-Euc	C. Kyotensis	C. aconidialis	ΔΔ	CSF23257	20210607-1-(04)	00188743	00260718	_	_	_	_
4. CuangDong Euc.	C. Ryotensis	C. aconidialic	A A	CSE23250	20210607-1-(03)	00188744	00260710	-	—	-	-
4. GuangDong Fuc	C. Kyotensis	C. acomidialic	Δ Δ	CSF23209	20210007-1-(07) 20210607-1-(88)	00188745	00260719	_	_	_	-
4 GuangDong-Euc	C. Kyolensis	C. aconidialia	ΔΔ	CSF23261	20210007-1-(00)	00188746	00260720	_	_	_	_
4. CuangDong Euc.	C. Kyolensis	C. aconidialic	A A	CSE23264	20210607 1 (02)	00188747	00260722	-	—	-	-
4. GuangDong Fuc	C. Kyotensis	C. acomidialic	Δ Δ	CSF22265	20210007-1-(92)	00188748	00260722	_	_	_	-
4. GuangDong Erra	C. Ryotensis	C. acomidialia	A A	CCE22203	$20210007^{-1}(93)$	00100740	00260723	-	—	-	-
4. GuangDong-Euc.	C. Kyötensis	C. acontaatis	AA	C5F23200	20210607-1-(94)	00100/49	0Q260724	-	-	-	-

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4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23267	20210607-1-(95)	OQ188750	OQ260725	-	_	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23268	20210607-1-(96)	OQ188751	OQ260726	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23270	20210607-1-(98)	OQ188752	OQ260727	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23271	20210607-1-(99)	OQ188753	OQ260728	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23272	20210607-1-(100)	OQ188754	OQ260729	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23273	20210607-1-(101)	OQ188755	OQ260730	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23274	20210607-1-(102)	OQ188756	OQ260731	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23275	20210607-1-(103)	OQ188757	OQ260732	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23276	20210607-1-(104)	OQ188758	OQ260733	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23277	20210607-1-(105)	OQ188759	OQ260734	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23278	20210607-1-(106)	OQ188760	OQ260735	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23279	20210607-1-(107)	OQ188761	OQ260736	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23280	20210607-1-(108)	OQ188762	OQ260737	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23281	20210607-1-(109)	OQ188763	OQ260738	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23282	20210607-1-(110)	OQ188764	OQ260739	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23283	20210607-1-(111)	OQ188765	OQ260740	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23286	20210607-1-(114)	OQ188766	OQ260741	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23288	20210607-1-(116)	OQ188767	OQ260742	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23290	20210607-1-(119)	OQ188768	OQ260743	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23291	20210607-1-(120)	OQ188769	OQ260744	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23292	20210607-1-(122)	OQ188770	OQ260745	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23293	20210607-1-(123)	OQ188771	OQ260746	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23295	20210607-1-(128)	OQ188772	OQ260747	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23296	20210607-1-(129)	OQ188773	OQ260748	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23297	20210607-1-(130)	OQ188774	OQ260749	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23298	20210607-1-(131)	OQ188775	OQ260750	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23299	20210607-1-(132)	OQ188776	OQ260751	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23300	20210607-1-(134)	OQ188777	OQ260752	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23303	20210607-1-(138)	OQ188778	OQ260753	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23305	20210607-1-(140)	OQ188779	OQ260754	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23307	20210607-1-(142)	OQ188780	OQ260755	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23308	20210607-1-(143)	OQ188781	OQ260756	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23310	20210607-1-(146)	OQ188782	OQ260757	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23311	20210607-1-(148)	OQ188783	OQ260758	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23312	20210607-1-(149)	OQ188784	OQ260759	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23313	20210607-1-(150)	OQ188785	OQ260760	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23314	20210607-1-(151)	OQ188786	OQ260761	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23318	20210607-1-(156)	OQ188787	OQ260762	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23319	20210607-1-(157)	OQ188788	OQ260763	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23320	20210607-1-(158)	OQ188789	OQ260764	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23322	20210607-1-(161)	OQ188790	OQ260765	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23326	20210607-1-(165)	OQ188791	OQ260766	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23328	20210607-1-(167)	OQ188792	OQ260767	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23331	20210607-1-(170)	OQ188793	OQ260768	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23333	20210607-1-(172)	OQ188794	OQ260769	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23334	20210607-1-(174)	OQ188795	OQ260770	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23335	20210607-1-(175)	OQ188796	OQ260771	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23336	20210607-1-(176)	OQ188797	OQ260772	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23338	20210607-1-(178)	OQ188798	OQ260773	-	-	-	-

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4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23342	20210607-1-(182)	OQ188799	OQ260774	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23343	20210607-1-(184)	OQ188800	OQ260775	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23344	20210607-1-(185)	OQ188801	OQ260776	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23345	20210607-1-(186)	OQ188802	OQ260777	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23348	20210607-1-(189)	OQ188803	OQ260778	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23349	20210607-1-(190)	OQ188804	OQ260779	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. acontatalis	AA—-	CSF23350 CSF23251	20210607-1-(191)	00188805	00260780	-	-	-	-
4. GuangDong-Euc.	C. Kyotensis	C. acontatalis	AA—-	C5F25551	20210607-1-(192)	OQ166606	00260781	-	-	-	-
4. GuangDong-Euc.	C. Kyötensis	C. acomidialis	AA—-	CSF20002	20210607-1-(194)	0010000/	00260782	-	-	-	-
4. GuangDong-Euc.	C. Kyötensis	C. acomidialis	AA	CSF25554 CSF25256	20210607-1-(196)	00100000	00260783	-	-	-	-
4. GuangDong Euc.	C. Ryotensis	C. aconidialis	AA	CSF23350	20210607-1-(198)	00188810	00260785	-	-	-	-
4. GuangDong Euc.	C. kyotensis	C. aconidialic	AA	CSF23360	20210007-1-(202) 20210607-1-(202)	00188811	00260785	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA	CSF23361	20210607-1-(205)	00188812	00260787	_	_	_	_
4. GuangDong-Euc.	C kyotensis	C. aconidialis	AA	CSF23362	20210607-1-(205)	00188813	00260788	_	_	_	_
4. GuangDong-Fuc	C kyotensis	C aconidialis	A A	CSF23363	20210607-1-(200)	00188814	00260789	_	_	_	_
4 GuangDong-Fuc	C kyotensis	C aconidialis	AA—-	CSF23364	20210607-1-(211)	00188815	OO260790	_	_	_	_
4 GuangDong-Fuc	C kyotensis	C aconidialis	AA—-	CSF23365	20210607-1-(213)	00188816	00260791	_	_	_	_
4. GuangDong-Euc	C. kyotensis	C. aconidialis	AA—-	CSF23367	20210607-1-(215)	00188817	00260792	_	_	_	_
4. GuangDong-Euc	C kyotensis	C aconidialis	AA—-	CSF23368	20210607-1-(216)	00188818	00260793	_	_	_	_
4. GuangDong-Euc	C. kyotensis	C. aconidialis	AA—-	CSF23369	20210607-1-(217)	00188819	$OO{2}60794$	_	_	_	_
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23371	20210607-1-(220)	OÕ188820	00260795	_	_	_	_
4. GuangDong-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23372	20210607-1-(221)	00188821	00260796	_	_	_	_
4. GuangDong-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23373	20210607-1-(222)	OÕ188822	OÕ260797	_	_	-	-
4. GuangDong-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23374	20210607-1-(223)	OÕ188823	OÕ260798	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23376	20210607-1-(226)	OÕ188824	OÕ260799	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23377	20210607-1-(228)	OQ188825	OQ260800	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23378	20210607-1-(229)	OQ188826	OQ260801	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23380	20210607-1-(232)	OQ188827	OQ260802	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23381	20210607-1-(233)	OQ188828	OQ260803	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23383	20210607-1-(235)	OQ188829	OQ260804	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23385	20210607-1-(237)	OQ188830	OQ260805	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23386	20210607-1-(239)	OQ188831	OQ260806	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23387	20210607-1-(240)	OQ188832	OQ260807	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23388	20210607-1-(241)	OQ188833	OQ260808	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23391	20210607-1-(245)	OQ188834	OQ260809	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23392	20210607-1-(246)	OQ188835	OQ260810	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23393	20210607-1-(247)	OQ188836	OQ260811	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23395	20210607-1-(249)	OQ188837	OQ260812	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23396	20210607-1-(250)	OQ188838	OQ260813	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	ABAAAA	CSF23317	20210607-1-(154)	OQ188839	OQ260814	OQ261464	OQ302899	OQ303106	OQ303312
4. GuangDong-Euc.	C. kyotensis	C. aconiaialis	AEAAAA	CSF23379	20210607-1-(231)	OQ188840	OQ260815	OQ261470	OQ302905	OQ303112	OQ303318
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AM—-	CSF23231	20210607-1-(58)	OQ188841	OQ260816	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. acontatalis	AM	CSF23340 CSF23252	20210607-1-(180)	00188842	00260817	-	-	-	-
4. GuangDong-Euc.	C. Kyotensis	C. acontatalis	AIVI—-	C5F23333	20210607-1-(195)	00188843	00260818	-	-	-	-
4. GuangDong-Euc.	C. Kyötensis	C. aconiaialis	AUCAAA	CSF23284 CSF22212	20210607 - 1 - (112)	00188844	00260819	UQ261486	0Q302921	0Q303128	0Q303334
4. GuangDong-Euc.	C. Kyötensis	C. acomidiation	AK—-	CSF23212 CSE32241	20210007-1-(37)	00100040	00260820	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. ucontatalis	AK—-	CSF23341 CSF22255	20210607-1-(181)	00188840	00200821	-	-	-	-
4. GuangDong-Euc.	C. Kyotensis	C. aconidialic		CSF23355	20210607-1-(197)	00188848	00260822	00261489	00302924	00303131	00303337
4. GuangDong-Buc.	C. Rybiensis	C. acontaanis	ANAAAA	C0120201	20210007-1-(79)	00100040	502200025	00201409	0002724	0000101	0000000

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						tef1	tub2	cmdA	his3	rpb2	act
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	ASACAA	CSF22524	20210607-1-(1)	OQ188849	OQ260824	OQ261492	OQ302927	OQ303134	OQ303340
GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF22535	20210607-1-(17)	OQ188850	OQ260825	-	_	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF22539	20210607-1-(21)	OQ188851	OQ260826	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF23214	20210607-1-(39)	OQ188852	OQ260827	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF23227	20210607-1-(54)	OQ188853	OQ260828	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF23237	20210607-1-(64)	OQ188854	OQ260829	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF23240	20210607-1-(67)	OQ188855	OQ260830	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF23245	20210607-1-(72)	OQ188856	OQ260831	-	-	-	-
GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF23247	20210607-1-(75)	OQ188857	OQ260832	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF23250	20210607-1-(78)	OQ188858	OQ260833	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF23262	20210607-1-(90)	OQ188859	OQ260834	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF23263	20210607-1-(91)	OQ188860	OQ260835	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF23269	20210607-1-(97)	OQ188861	OQ260836	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AI	CSF23287	20210607-1-(115)	OQ188862	OQ260837	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AI	CSF23301	20210607-1-(135)	OQ188863	OQ260838	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF23304	20210607-1-(139)	OQ188864	OQ260839	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	A1	CSF23309	20210607-1-(144)	OQ188865	OQ260840	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AT—-	CSF23315	20210607-1-(152)	OQ188866	OQ260841	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AI	CSF23321	20210607-1-(159)	OQ188867	OQ260842	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AI	CSF23323	20210607-1-(162)	OQ188868	OQ260843	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AT	CSF23324	20210607-1-(163)	OQ188869	OQ260844	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AI	CSF23327	20210607-1-(166)	OQ188870	OQ260845	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AT	CSF23329	20210607-1-(168)	OQ1888/1	OQ260846	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AI	CSF23337	20210607-1-(177)	OQ188872	OQ260847	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	Al—-	CSF23339	20210607-1-(179)	OQ188873	OQ260848	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	Al—-	CSF23346	20210607-1-(187)	OQ188874	OQ260849	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AI—-	CSF23347	20210607-1-(188)	OQ188875	OQ260850	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AI	CSF23357	20210607-1-(199)	OQ188876	OQ260851	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AI—-	CSF23358	20210607-1-(200)	OQ188877	OQ260852	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AI—-	CSF23384	20210607-1-(236)	OQ188878	OQ260853	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconidialis	AI—-	CSF23390	20210607-1-(243)	OQ188879	OQ260854	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconiaialis	Al—-	CSF23394	20210607-1-(248)	OQ188880	OQ260855	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconiaialis	GA—	CSF23294	20210607-1-(127)	OQ188881	OQ260856	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconiaialis	GA	CSF23302	20210607-1-(137)	OQ188882	00260857	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. aconiaialis	GAAAAA	CSF23306	20210607-1-(141)	00188883	00260858	OQ261510	OQ302945	OQ303152	0Q303358
4. GuangDong-Euc.	C. kyotensis	C. acontatalis	GO	CSF23325	20210607 - 1 - (164)	00188884	00260859	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. acontatans	GOCAAA	C5F25221	20210607-1-(46)	00100000	00260860	UQ261512	OQ302947	OQ303154	0Q303360
4. GuangDong-Euc.	C. kyotensis	C. hongkongensis	AA—-	CSF22530	20210607 - 1 - (9)	OQ188886	00260861	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. nongkongensis	AA—-	CSF22536	20210607-1-(18)	00188887	00260862	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. hongkongensis	AA—-	C5F25210	20210607-1-(35)	00100000	00260865	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. hongkongensis	AA—-	CSF23285	20210607-1-(113)	OQ188889	00260864	-	-	-	-
4. GuangDong-Euc.	C. kyotensis	C. nongkongensis	AA—-	C5F25550	20210607-1-(169)	OQ100090	00260865	-	-	-	-
4. GuangDong-Euc.	C. Kyötensis	C. hongkongensis	AA—-	C5F25552	20210607 - 1 - (171)	00100091	00260866	-	-	-	-
4. GuangDong-Euc.	C. Kyötensis	C. hongkongensis	AD	CSF23244 CSE22280	2021000/-1-(/1)	00188802	00260869	-	-	-	-
4. GuangDong-Euc.	C. Kyötensis	C. hongkongensis	AD	CSF23209	20210607 1 (57)	00100073	00260860	-	-	-	-
4. GuangDong Euc.	C. Kyolensis	C. hongkongensis	AC - AAAA	CSF23250 CSE23258	20210607-1-(57)	00188805	00260870	00261529	-	-	-
4. GuangDong-Euc.	C. Kyolensis	C. hongkongensis	ACAAAA	CSE22275	20210607 1 (225)	00100070	00260070	00201528	0Q302903	000001/0	00303376
4. GuangDong-Euc.	C. Kyolensis	C. hongkongensis		CSF23366	20210607-1-(223)	00188897	00260872	00261529	00302974	-	-
4. GuangDong-Euc. 4. GuangDong-Euc.	C. kyotensis C. kyotensis	C. ilicicola	BAAAAA	CSF23220	20210607-1-(214) 20210607-1-(45)	OQ188898	OQ260872 OQ260873	OQ261559 OQ261554	OQ302974 OQ302989	OQ303195	OQ303402

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4. GuangDong-Euc.	C. kyotensis	C. kyotensis	AIDAAA	CSF23316	20210607-1-(153)	OQ188899	OQ260874	OQ261568	OQ303003	OQ303209	OQ303416
GuangDong-Euc.	C. kyotensis	C. kyotensis	DDDAAA	CSF23382	20210607-1-(234)	OQ188900	OQ260875	OQ261630	OQ303065	OQ303271	OQ303478
GuangDong-Euc.	C. kyotensis	C. kyotensis	DIEAAA	CSF23389	20210607-1-(242)	OQ188901	OQ260876	OQ261636	OQ303071	OQ303277	OQ303484
GuangDong-Euc.	C. kyotensis	C. kyotensis	DVACAA	CSF23370	20210607-1-(219)	OQ188902	OQ260877	OQ261654	OQ303089	OQ303295	OQ303502
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22547	20210606-1-(1)	OQ188903	OQ260878	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22548	20210606-1-(2)	OQ188904	OQ260879	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22549	20210606-1-(3)	OQ188905	OQ260880	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22551	20210606-1-(5)	OQ188906	OQ260881	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22553	20210606-1-(7)	OQ188907	OQ260882	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22554	20210606-1-(8)	OQ188908	OQ260883	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22556	20210606-1-(10)	OO188909	OO260884	-	_	_	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22557	20210606-1-(11)	OÕ188910	OÕ260885	-	_	_	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22561	20210606-1-(16)	OO188911	OO260886	-	_	_	-
5. GuangDong-Pin.	C. kvotensis	C. aconidialis	AA—-	CSF22563	20210606-1-(18)	OÕ188912	OÕ260887	_	_	-	_
5. GuangDong-Pin.	C. kvotensis	C. aconidialis	AA—-	CSF22564	20210606-1-(19)	OÕ188913	OÕ260888	_	_	-	_
5. GuangDong-Pin.	C. kvotensis	C. aconidialis	AA—-	CSF22568	20210606-1-(24)	00188914	00260889	_	_	_	_
5. GuangDong-Pin.	C. kvotensis	C. aconidialis	AA—-	CSF23439	20210606-1-(30)	00188915	00260890	_	_	_	_
5. GuangDong-Pin	C. kvotensis	C. aconidialis	A A	CSF23440	20210606-1-(31)	00188916	00260891	_	_	_	_
5. GuangDong-Pin	C. kvotensis	C. aconidialis	AA—-	CSF23441	20210606-1-(32)	00188917	00260892	_	_	_	_
5. GuangDong-Pin	C kyotensis	C aconidialis	AA—-	CSF23442	20210606-1-(33)	00188918	00260893	_	_	_	_
5 GuangDong-Pin	C kyotensis	C aconidialis	A A	CSF23446	20210606-1-(37)	00188919	OO260894	_	_	_	_
5 GuangDong-Pin	C kyotensis	C aconidialis	AA—-	CSF23448	20210606-1-(39)	00188920	00260895	_	_	_	_
5 GuangDong-Pin	C kyotensis	C aconidialis	A A	CSF23453	20210606-1-(45)	00188921	00260896	_	_	_	_
5 GuangDong-Pin	C kyotensis	C. aconidialis	AA	CSF23454	20210606-1-(45)	00188922	00260897		_	_	_
5 GuangDong-Pin	C. kyotensis	C. aconidialis	ΔΔ	CSF23457	20210000 - 1 - (40)	00188923	00260898			_	
5 CuangDong-Pin	C kyotensis	C. aconidialis	ΔΔ	CSE23459	20210606-1-(47)	00188924	00260899	_	_	_	_
5 GuangDong-Pin	C kyotensis	C. aconidialis	ΔΔ	CSF23461	20210606-1-(51)	00188925	00200000			_	
5. GuangDong Pin	C. kyotensis	C. aconidialis	ΔA	CSE23462	20210606 1 (54)	00188026	OO260901	_	_	_	_
5. GuangDong Pin	C. Ryotensis	C. aconidialis	AA	CSE22462	20210606-1-(54)	00188027	00200901	-	-	-	-
5. GuangDong Pin	C. Ryotensis	C. acomidialia	AA	CSE23466	20210606-1-(55)	00188028	00200902	-	-	-	-
5. GuangDong Pin	C. Ryolensis	C. acomidialia	AA	CSF23400	20210606-1-(36)	00188020	00260903	-	-	-	-
5. GuangDong Pin	C. Ryolensis	C. acomidialia	AA	CSF23407 CSF22470	20210606-1-(39)	00188029	00260904	-	-	-	-
5. GuangDong-Fin.	C. Kyolensis	C. acomidialia	AA	C5F23479	20210000-1-(78)	00100930	00200903	-	-	-	-
5. GuangDong-Pin.	C. Kyotensis	C. acomidialis	AA—-	C5F23462	20210606-1-(61)	00188931	00260906	-	-	-	-
5. GuangDong-Pin.	C. Kyotensis	C. aconidialia	AA—-	C5F23464 C5F23485	20210606-1-(63)	00188932	00260907	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. acontatalis	AA—-	C5F25465	20210606-1-(84)	00100933	00260908	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. acontatalis	AA—-	CSF23487	20210606-1-(86)	00188934	00260909	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. acontatalis	AA—-	CSF23488	20210606-1-(87)	00188935	OQ260910	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23491	20210606-1-(90)	OQ188936	OQ260911	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23492	20210606-1-(91)	OQ188937	OQ260912	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23496	20210606-1-(95)	OQ188938	OQ260913	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23514	20210606-1-(118)	OQ188939	OQ260914	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23515	20210606-1-(120)	OQ188940	OQ260915	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23517	20210606-1-(124)	OQ188941	OQ260916	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23518	20210606-1-(126)	OQ188942	OQ260917	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23519	20210606-1-(127)	OQ188943	OQ260918	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23520	20210606-1-(129)	OQ188944	OQ260919	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23521	20210606-1-(130)	OQ188945	OQ260920	-	-	-	-
GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23524	20210606-1-(132)	OQ188946	OQ260921	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23526	20210606-1-(135)	OQ188947	OQ260922	-	-	-	-

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d	I Isolate ion ^d GenBank Accession No. ^e					
						tef1	tub2	cmdA	his3	rpb2	act
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23527	20210606-1-(136)	OQ188948	OQ260923	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23528	20210606-1-(137)	OQ188949	OQ260924	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23529	20210606-1-(138)	OQ188950	OQ260925	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23531	20210606-1-(140)	OQ188951	OQ260926	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23532	20210606-1-(141)	OQ188952	OQ260927	-	-	-	-
GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23536	20210606-1-(144)	OQ188953	OQ260928	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23537	20210606-1-(145)	OQ188954	OQ260929	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23538	20210606-1-(146)	OQ188955	OQ260930	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23540	20210606-1-(148)	OQ188956	OQ260931	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23542	20210606-1-(150)	OQ188957	OQ260932	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23544	20210606-1-(152)	OQ188958	OQ260933	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23545	20210606-1-(154)	OQ188959	OQ260934	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23546	20210606-1-(155)	OQ188960	OQ260935	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23551	20210606-1-(160)	OQ188961	OQ260936	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23552	20210606-1-(161)	OQ188962	OQ260937	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23556	20210606-1-(165)	00188963	00260938	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23559	20210606-1-(168)	OQ188964	OQ260939	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23560	20210606-1-(169)	00188965	00260940	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23564	20210606-1-(174)	OQ188966	00260941	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23566	20210606-1-(176)	OQ188967	OQ260942	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23568	20210606-1-(178)	OQ188968	00260943	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. acontatalis	AA—-	CSF23569	20210606-1-(179)	OQ188969	OQ260944	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23570	20210606-1-(180)	OQ188970	00260945	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23571	20210606-1-(181)	OQ188971	OQ260946	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF23573	20210606-1-(183)	OQ188972	OQ260947	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. acontatalis	AA—-	CSF23574	20210606-1-(184)	00188973	00260948	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. acontatalis	AA—-	CSF23575	20210606-1-(185)	OQ188974	00260949	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23577	20210606-1-(187)	OQ188975	00260950	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. acontatalis	AA—-	CSF23578	20210606-1-(188)	OQ188976	00260951	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. acontatalis	AA—-	C5F25565	20210606-1-(195)	OQ166977	00260952	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	C5F25560	20210606 - 1 - (200)	00100970	00260955	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. acontatalis	AA—-	C5F25566	20210606-1-(202)	OQ186979	00260954	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF20009 CSF202501	20210606 - 1 - (204)	00100900	00260955	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialia	AA—-	CSF23591 CSF22502	20210606-1-(206)	00188981	00260956	-	-	-	-
5. GuangDong Pin	C. kyotensis	C. aconidialia	AA	CSF23392	20210606-1-(207)	00100902	00260957	-	-	—	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialia	AA—-	CSF23394 CSF22505	20210606-1-(209)	00188983	00260956	-	-	-	-
5. GuangDong Pin	C. Kyolensis	C. acomidialia	AA	CSF23393	20210606 - 1 - (210)	00100904	00260939	-	-	—	-
5. GuangDong Pin	C. Kyolensis	C. acomidialio	AA	CSF23397	20210000-1-(212) 20210606 - 1 - (212)	00100900	00260960	-	-	—	-
5. GuangDong Pin	C. Kyolensis	C. acomidialia	AA	CSF23596	20210606-1-(213)	00188987	00260961	-	-	—	-
5. GuangDong Pin	C. kyotensis	C. aconidialia	AA	CSF23001 CSF23604	20210606-1-(210)	00100907	00260962	-	-	—	-
5. GuangDong Pin	C. Kyolensis	C. acomidialio	AA	CSF23004 CSF22607	20210000-1-(219) 20210606 - 1 (222)	00100900	00260963	-	-	—	-
5. GuangDong Pin	C. Kyolensis	C. acomidialia	AA	CSF23007	20210606 - 1 - (222)	00188000	00260964	-	-	—	-
5. GuangDong Pin	C. Kyolensis	C. acomidialio	AA	CSF23009	20210606 - 1 - (224)	00100990	00260965	-	-	—	-
5 GuangDong Pin	C. Kyolensis	C. uconiuuiis	ΔΔ	CSF23010	20210000-1-(223)	00188002	00260960	_	_	_	_
5. GuangDong Pin	C. Kyötensis	C. uconiuuiis C. aconidialic	AA	CSF23012 CSF23615	20210000-1-(227)	00188002	00260967	-	-	-	-
5. GuangDong Pin	C. Kyolensis	C. aconidialic	AA	CSF23013 CSF23617	20210000-1-(230)	00188004	00260968	-	-	-	-
5. GuangDong Pin	C. Kyolensis	C. uconiuuiis	AA	CSF23017	20210000-1-(232) 20210606 - 1 (234)	00100774	00260909	-	-	-	-
5. GuangDong Pin	C. Kyolensis	C. acomidialic	ΔΔ	CSF23619	20210000-1-(234)	00188006	00260970	_	_	_	_
5. GuangDong-Pin	C. Kyolensis	C. aconidialic	AA	CSF23620	20210000-1-(233)	00188007	00260971	_	_	_	_
J. GuangDong-Pin.	C. Kyotensis	C. ucontututis	AA—-	C3F23022	20210000-1-(237)	UQ10099/	00200972	-	-	-	-

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d	olate 1 ^d GenBank Accession No. ^e <u>tef1 tub2 cmdA his3 rpb2 act</u>					
						tef1	tub2	cmdA	his3	rpb2	act
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23624	20210606-1-(239)	OO188998	OO260973	_	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23625	20210606-1-(240)	OQ188999	OQ260974	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23626	20210606-1-(241)	OQ189000	OQ260975	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23628	20210606-1-(244)	OQ189001	OQ260976	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23629	20210606-1-(245)	OQ189002	OQ260977	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23630	20210606-1-(246)	OQ189003	OQ260978	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23632	20210606-1-(248)	OQ189004	OQ260979	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF23634	20210606-1-(250)	OQ189005	OQ260980	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AB—-	CSF23445	20210606-1-(36)	OQ189006	OQ260981	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	ABAAAA	CSF22562	20210606-1-(17)	OQ189007	OQ260982	OQ261465	OQ302900	OQ303107	OQ303313
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AF—-	CSF23490	20210606-1-(89)	OQ189008	OQ260983	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AF—-	CSF23495	20210606-1-(94)	OQ189009	OQ260984	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AF—-	CSF23530	20210606-1-(139)	OO189010	OO260985	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AF—-	CSF23603	20210606-1-(218)	OÕ189011	OÕ260986	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AF—-	CSF23627	20210606-1-(242)	OQ189012	OQ260987	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AF—-	CSF23631	20210606-1-(247)	OO189013	OO260988	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AFEAAA	CSF23623	20210606-1-(238)	OQ189014	OQ260989	OQ261472	OQ302907	OQ303114	OQ303320
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AHAAAA	CSF23621	20210606-1-(236)	OÕ189015	OÕ260990	OÕ261474	OÕ302909	OÕ303116	OÕ303322
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AJAAAA	CSF23585	20210606-1-(198)	OÕ189016	OÕ260991	OÕ261478	OÕ302913	OÕ303120	OÕ303326
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AŔAAAA	CSF23444	20210606-1-(35)	OQ189017	OQ260992	OQ261490	OQ302925	OQ303132	OQ303338
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	ASAAAA	CSF23497	20210606-1-(96)	OO189018	OO260993	OO261491	OO302926	OO303133	OO303339
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT	CSF23458	20210606-1-(50)	OQ189019	OQ260994	~ _	~ _	~ _	~ _
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT—-	CSF23464	20210606-1-(56)	OO189020	OO260995	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT	CSF23483	20210606-1-(82)	OQ189021	OQ260996	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT	CSF23493	20210606-1-(92)	OQ189022	OQ260997	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT	CSF23533	20210606-1-(142)	OQ189023	OQ260998	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT	CSF23539	20210606-1-(147)	OQ189024	OQ260999	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT—-	CSF23549	20210606-1-(158)	OO189025	OO261000	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT	CSF23553	20210606-1-(162)	OQ189026	OQ261001	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT—-	CSF23557	20210606-1-(166)	OQ189027	OQ261002	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT	CSF23561	20210606-1-(170)	OQ189028	OQ261003	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT—-	CSF23565	20210606-1-(175)	OQ189029	OQ261004	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT	CSF23567	20210606-1-(177)	OQ189030	OQ261005	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT—-	CSF23579	20210606-1-(189)	OQ189031	OQ261006	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT—-	CSF23613	20210606-1-(228)	OQ189032	OQ261007	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	AT	CSF23616	20210606-1-(231)	OQ189033	OQ261008	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	GA—	CSF22558	20210606-1-(12)	OQ189034	OQ261009	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	GA—	CSF23548	20210606-1-(157)	OQ189035	OQ261010	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	GAAAAA	CSF23563	20210606-1-(173)	OQ189036	OQ261011	OQ261511	OQ302946	OQ303153	OQ303359
5. GuangDong-Pin.	C. kyotensis	C. aconidialis	GOCAAA	CSF23547	20210606-1-(156)	OQ189037	OQ261012	OQ261513	OQ302948	OQ303155	OQ303361
5. GuangDong-Pin.	C. kyotensis	C. curvispora	AA—-	CSF22560	20210606-1-(15)	OQ189038	OQ261013	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. curvispora	AA—-	CSF22566	20210606-1-(21)	OQ189039	OQ261014	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. curvispora	AAAAAA	CSF22555	20210606-1-(9)	OQ189040	OQ261015	OQ261522	OQ302957	OQ303164	OQ303370
5. GuangDong-Pin.	C. kyotensis	C. curvispora	AAAAAA	CSF23447	20210606-1-(38)	OQ189041	OQ261016	OQ261523	OQ302958	OQ303165	OQ303371
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF22565	20210606-1-(20)	OQ189042	OQ261017	-	_	-	_
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF22567	20210606-1-(22)	OQ189043	OQ261018	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF22569	20210606-1-(25)	OQ189044	OQ261019	-	-	-	-

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d	ate GenBank Accession No. e					
						tef1	tub2	cmdA	his3	rpb2	act
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23438	20210606-1-(28)	OQ189045	OQ261020	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23449	20210606-1-(40)	OQ189046	OQ261021	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23451	20210606-1-(42)	OQ189047	OQ261022	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23456	20210606-1-(48)	OQ189048	OQ261023	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23465	20210606-1-(57)	OQ189049	OQ261024	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23469	20210606-1-(61)	OQ189050	OQ261025	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23472	20210606-1-(68)	OQ189051	OQ261026	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23473	20210606-1-(69)	OQ189052	OQ261027	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23478	20210606-1-(75)	OQ189053	OQ261028	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23498	20210606-1-(97)	OQ189054	OQ261029	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23500	20210606-1-(99)	00189055	OQ261030	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	C5F23502	20210606-1-(101)	OQ189056	00261031	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23508	20210606-1-(110)	OQ189057	OQ261032	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	CSF23510 CSF22511	20210606-1-(114)	00189058	00261033	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	C5F23511	20210606-1-(115)	OQ189059	OQ261034	-	-	-	-
5. GuangDong-Pin.	C. Kyotensis	C. hongkongensis	AA—-	CSF23513	20210606-1-(117)	OQ189060	00261035	-	-	-	-
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AA—-	C5F25525	20210606-1-(134)	00189061	00261036	-	-	-	-
5. GuangDong-Pin.	C. Kyotensis	C. hongkongensis	AA—-	CSF23541 CSF22550	20210606-1-(149)	OQ189062	00261037	-	-	-	-
5. GuangDong-Pin.	C. Kyötensis	C. hongkongensis	AA—-	C5F25550	20210606-1-(159)	00189063	00261036	-	-	-	-
5. GuangDong-Pin.	C. Kyotensis	C. hongkongensis	AA—-	C5F25556	20210606 - 1 - (167)	OQ169064	00261039	-	-	-	-
5. GuangDong-Pin.	C. Kyotensis	C. hongkongensis	AA—-	CSF23302	20210606-1-(172)	00189065	00261040	-	-	-	-
5. GuangDong-Fin.	C. Kyolensis	C. hongkongensis	AA	CSF23370	20210000-1-(100)	OQ109000	00261041	-	-	-	-
5. GuangDong-Pin.	C. Kyotensis	C. hongkongensis	AA—-	CSF23367	20210606-1-(201)	00189067	00261042	-	-	-	-
5. GuangDong Pin	C. Ryotensis	C. hongkongensis	AA	CSF23590	20210606-1-(203)	00189068	00261045	-	-	-	-
5. GuangDong Pin	C. Kyolensis	C. hongkongensis	AA	CSF23595	20210000-1-(200) 20210606-1-(200)	00189009	00261044	-	-	-	-
5. GuangDong Pin	C. kyotensis	C. hongkongensis	AA	CSE23500	20210606 - 1 - (211)	00189070	00261045	-	-	-	-
5. GuangDong Pin	C. kyotensis	C. hongkongensis	AA	CSE23600	$20210000^{-1}(214)$ 20210606(1)(215)	00189071	00261040	-	-	-	-
5 GuangDong-Pin	C. kyotensis	C. hongkongensis	AA	CSF23605	20210606-1-(213)	00189072	00261047	_	_	_	_
5 GuangDong-Pin	C. kyotensis	C. hongkongensis	ΔΔ	CSF23611	20210606 1 (226)	00189074	00261049				
5 GuangDong-Pin	C. kyotensis	C. hongkongensis	ΔΔ	CSF23633	20210000-1-(220) 20210606-1-(249)	00189075	OO261049				
5 GuangDong-Pin	C kyotensis	C. hongkongensis		CSF22552	20210000-1-(24))	00189076	00261051	00261525	00302960	00303167	00303373
5 GuangDong-Pin	C kyotensis	C hongkongensis	AB	CSF22550	20210606-1-(4)	00189077	OO261052	-	-	-	-
5 GuangDong-Pin	C kyotensis	C. hongkongensis	AB	CSF23522	20210000-1-(4) 20210606-1-(131)	00189078	00261052	_	_	_	_
5 GuangDong-Pin	C kyotensis	C hongkongensis	ABBAAA	CSF23580	20210606-1-(191)	00189079	00261054	00261527	00302962	00303169	00303375
5 GuangDong-Pin	C kyotensis	C hongkongensis	ACAAAA	CSF23476	20210606-1-(73)	00189080	00261055	00261529	00302964	00303171	00303377
5. GuangDong-Pin	C. kyotensis	C. hongkongensis	AD	CSF23460	20210606-1-(52)	00189081	00261056	-	-	-	-
5 GuangDong-Pin	C kyotensis	C hongkongensis	AD	CSF23516	20210606-1-(123)	00189082	00261057	_	_	_	_
5 GuangDong-Pin	C kyotensis	C hongkongensis	ADBAAB	CSF23471	20210606-1-(64)	00189083	00261058	00261531	00302966	00303173	00303379
5. GuangDong-Pin	C kyotensis	C hongkongensis	AE	CSF23606	20210606-1-(221)	00189084	00261059	-	-	-	-
5. GuangDong-Pin	C. kyotensis	C. hongkongensis	AEBAAA	CSF23443	20210606-1-(34)	00189085	00261060	00261533	00302968	00303175	00303381
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AF—-	CSF22559	20210606-1-(14)	00189086	OO261061	-	-	-	-
5. GuangDong-Pin	C. kyotensis	C. honokongensis	AF	CSF23486	20210606-1-(85)	00189087	00261062	_	_	_	_
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AF—-	CSF23503	20210606-1-(102)	00189088	00261063	_	_	_	_
5. GuangDong-Pin.	C. kvotensis	C. hongkongensis	AFAAAA	CSF23470	20210606-1-(63)	OÕ189089	OÕ261064	OO261537	OO302972	OO303179	OO303385
5. GuangDong-Pin.	C. kvotensis	C. hongkongensis	AFBAAA	CSF23602	20210606-1-(217)	OÕ189090	OÕ261065	OO261542	OÕ302977	OÕ303184	OO303390
5. GuangDong-Pin.	C. kyotensis	C. hongkongensis	AHAAAA	CSF23506	20210606-1-(108)	OÕ189091	OÕ261066	OÕ261548	OÕ302983	OÕ303190	OÕ303396
5. GuangDong-Pin.	C. kyotensis	C. ilicicola	BA—-	CSF23501	20210606-1-(100)	OÕ189092	OÕ261067	_	_	~-	_
5. GuangDong-Pin.	C. kýotensis	C. ilicicola	BAAAAA	CSF23489	20210606-1-(88)	OQ189093	OQ261068	OQ261555	OQ302990	OQ303196	OQ303403

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d	d Isolate tion ^d GenBank Accession No. ^e <u>tef1 tub2 cmdA his3 rpb2 act</u>					
						tef1	tub2	cmdA	his3	rpb2	act
5. GuangDong-Pin.	C. kyotensis	C. kyotensis	AA—-	CSF23554	20210606-1-(163)	OQ189094	OQ261069	_	-	-	-
GuangDong-Pin.	C. kyotensis	C. kyotensis	ADAAAA	CSF23614	20210606-1-(229)	OQ189095	OQ261070	OQ261563	OQ302998	OQ303204	OQ303411
5. GuangDong-Pin.	C. kyotensis	C. kyotensis	AIDAAA	CSF23480	20210606-1-(79)	OQ189096	OQ261071	OQ261569	OQ303004	OQ303210	OQ303417
5. GuangDong-Pin.	C. kyotensis	C. kyotensis	AIDAAA	CSF23555	20210606-1-(164)	OO189097	OO261072	OO261570	OO303005	OO303211	OO303418
5. GuangDong-Pin.	C. kyotensis	C. kyotensis	AOAAAA	CSF23468	20210606-1-(60)	OQ189098	OQ261073	OQ261578	OQ303013	OQ303219	OQ303426
5. GuangDong-Pin.	C. kvotensis	C. kvotensis	AOAAAA	CSF23481	20210606-1-(80)	OÕ189099	OÕ261074	OÕ261579	OÕ303014	OÕ303220	OÕ303427
5. GuangDong-Pin.	C. kvotensis	C. kvotensis	AOAAAA	CSF23572	20210606-1-(182)	OÕ189100	OÕ261075	OÕ261580	OÕ303015	OÕ303221	OÕ303428
5. GuangDong-Pin.	C. kvotensis	C. kvotensis	AODAAA	CSF23455	20210606-1-(47)	OÕ189101	OÕ261076	OÕ261581	OÕ303016	OÕ303222	OÕ303429
5. GuangDong-Pin.	C. kvotensis	C. kvotensis	AODAAA	CSF23584	20210606-1-(196)	00189102	00261077	OO261582	00303017	00303223	00303430
5. GuangDong-Pin.	C. kvotensis	C. kyotensis	APAAAA	CSF23505	20210606-1-(107)	00189103	00261078	00261583	00303018	00303224	00303431
5. GuangDong-Pin	C. kyotensis	C. kyotensis	ARAAAA	CSF23437	20210606-1-(27)	00189104	00261079	00261585	00303020	00303226	00303433
5. GuangDong-Pin	C. kyotensis	C. kyotensis	DA—-	CSF23477	20210606-1-(74)	00189105	00261080	-	-	-	-
5 GuangDong-Pin	C kyotensis	C kyotensis	DA—-	CSF23504	20210606-1-(106)	00189106	OO261081	_	_	_	_
5 GuangDong-Pin	C kyotensis	C kyotensis	DCABAA	CSF23581	20210606-1-(193)	00189107	00261082	00261626	00303061	00303267	00303474
5 GuangDong-Pin	C kyotensis	C kyotensis	DGDAAA	CSF23494	20210606-1-(93)	00189108	00261083	00261634	00303069	00303275	00303482
5 GuangDong-Pin	C kyotensis	C kyotensis	DU	CSF23509	20210606-1-(113)	00189109	00261084	-	-	-	-
5 GuangDong-Pin	C. kyotensis	C kyotensis		CSF23507	20210606-1-(113)	00189110	00261085	00261643	00303078	00303284	00303491
5. GuangDong Pin	C. hydensis	C kyotensis	DO	CSE23450	20210000-1-(10)) 20210606 - 1 (41)	00180111	00261086	00201045	0000070	00000204	0000471
5. GuangDong Pin	C. Ryolensis	C. kyotensis		CSE23452	20210000-1-(41) 20210606 - 1 (43)	00189111	00261087	00261649	00303084	00303300	00202407
5. GuangDong Pin	C. Kyblensis	C. Ryotensis	DODBAA	CSE22582	20210000-1-(43)	00189112	00261087	00261650	00303085	00303290	00303497
5. GuangDong Pin	C. Kyolensis	C. Ryotensis		CSF23362	$20210606 \cdot 1 \cdot (194)$	00189113	00261088	00261650	00202087	00202291	00202500
5. GuangDong-Fin.	C. Kyolensis	C. Ryotensis		CSF23475 CSF22524	20210606 - 1 - (71)	00109114	00261069	00261652	00303087	00303293	00303500
5. GuangDong-Fin.	C. Kyölensis	C. Kyötensis		CSF25054 CSF252510	20210000-1-(143)	00109115	00261090	00201005	00303088	00203294	00303501
5. GuangDong-Pin.	C. kyotensis	C. kyotensis	EADAAA	C5F23512	20210606-1-(116)	OQ189116	00261091	00261655	00303090	00303296	00303503
5. GuangDong-Pin.	C. Kyötensis	C. kyotensis	ELAAAA	CSF23499	20210606-1-(98)	00189117	00261092	00261656	00303091	00303297	00303504
5. GuangDong-Pin.	C. kyotensis	C. kyotensis	EOAAAA	CSF23474	20210606-1-(70)	00189118	00261093	OQ261657	00303092	00303298	00303505
5. GuangDong-Pin.	C. kyotensis	C. pacifica	AAAAAA	CSF23543	20210606-1-(151)	00189119	00261094	00261658	00303093	00303299	00303506
5. GuangDong-Pin.	C. kyotensis	C. pacifica	BBBAAA	CSF23608	20210606-1-(223)	00189120	OQ261095	OQ261660	OQ303095	OQ303301	OQ303508
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF22543	20210609-1-(4)	OQ189121	OQ261096	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF22545	20210609-1-(13)	OQ189122	OQ261097	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23397	20210609-1-(28)	OQ189123	OQ261098	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23399	20210609-1-(35)	OQ189124	OQ261099	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23400	20210609-1-(37)	OQ189125	OQ261100	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23402	20210609-1-(58)	OQ189126	OQ261101	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23403	20210609-1-(61)	OQ189127	OQ261102	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23404	20210609-1-(67)	OQ189128	OQ261103	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23405	20210609-1-(68)	OQ189129	OQ261104	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23407	20210609-1-(74)	OQ189130	OQ261105	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23410	20210609-1-(97)	OQ189131	OQ261106	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23411	20210609-1-(103)	OQ189132	OQ261107	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23412	20210609-1-(107)	OQ189133	OQ261108	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23414	20210609-1-(115)	OQ189134	OQ261109	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23415	20210609-1-(116)	OQ189135	OQ261110	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23419	20210609-1-(150)	OQ189136	OQ261111	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23420	20210609-1-(151)	OQ189137	OÕ261112	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23421	20210609-1-(155)	OQ189138	OÕ261113	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23422	20210609-1-(157)	OÕ189139	OÕ261114	_	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23424	20210609-1-(166)	OQ189140	OQ261115	_	-	-	-

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d	Isolate ion ^d GenBank Accession No. ^e tef1 tub2 cmdA his3 rpb2 act					
						tef1	tub2	cmdA	his3	rpb2	act
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23425	20210609-1-(178)	OQ189141	OQ261116	-	_	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23426	20210609-1-(181)	OQ189142	OQ261117	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23427	20210609-1-(186)	OQ189143	OQ261118	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23428	20210609-1-(212)	OQ189144	OQ261119	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23430	20210609-1-(220)	OQ189145	OQ261120	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23431	20210609-1-(231)	OQ189146	OQ261121	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23432	20210609-1-(233)	OQ189147	OQ261122	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23433	20210609-1-(235)	OQ189148	OQ261123	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23435	20210609-1-(239)	OQ189149	OQ261124	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF23436	20210609-1-(240)	OQ189150	OQ261125	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. aconidialis	AHAAAA	CSF23409	20210609-1-(92)	OQ189151	OQ261126	OQ261475	OQ302910	OQ303117	OQ303323
GuangDong-Cun.	C. kyotensis	C. aconidialis	AMCAAA	CSF22542	20210609-1-(3)	OQ189152	OQ261127	OQ261483	OQ302918	OQ303125	OQ303331
GuangDong-Cun.	C. kyotensis	C. aconidialis	AT—-	CSF23398	20210609-1-(29)	OQ189153	OQ261128	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. aconidialis	ATAAAA	CSF23429	20210609-1-(213)	OQ189154	OQ261129	OQ261493	OQ302928	OQ303135	OQ303341
GuangDong-Cun.	C. kyotensis	C. aconidialis	FAAAAA	CSF23401	20210609-1-(52)	OQ189155	OQ261130	OQ261509	OQ302944	OQ303151	OQ303357
GuangDong-Cun.	C. kyotensis	C. ilicicola	AA—-	CSF23406	20210609-1-(71)	OQ189156	OQ261131	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. ilicicola	AA—-	CSF23416	20210609-1-(133)	OQ189157	OQ261132	-	-	-	-
6. GuangDong-Cun.	C. kyotensis	C. ilicicola	AA—-	CSF23423	20210609-1-(164)	OQ189158	OQ261133	-	-	-	-
GuangDong-Cun.	C. kyotensis	C. kyotensis	CRAACA	CSF23408	20210609-1-(84)	OQ189159	OQ261134	OQ261615	OQ303050	OQ303256	OQ303463
GuangDong-Cun.	C. kyotensis	C. kyotensis	DA—-	CSF23413	20210609-1-(108)	OQ189160	OQ261135	-	_	_	_
6. GuangDong-Cun.	C. kyotensis	C. kyotensis	DADAAA	CSF23418	20210609-1-(141)	OQ189161	OQ261136	OQ261625	OQ303060	OQ303266	OQ303473
6. GuangDong-Cun.	C. kyotensis	C. kyotensis	DDABAA	CSF22546	20210609-1-(17)	OQ189162	OQ261137	OQ261628	OQ303063	OQ303269	OQ303476
6. GuangDong-Cun.	C. kyotensis	C. kyotensis	DL—-	CSF23434	20210609-1-(238)	OQ189163	OQ261138	_	_	_	_
6. GuangDong-Cun.	C. kyotensis	C. pacifica	ACAAAA	CSF22544	20210609-1-(11)	OQ189164	OQ261139	OQ261659	OQ303094	OQ303300	OQ303507
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22570	20210621-1-(1)	OQ189165	OQ261140	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22574	20210621-1-(3)	OQ189166	OQ261141	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22582	20210621-1-(7)	OQ189167	OQ261142	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22584	20210621-1-(8)	OQ189168	OQ261143	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22590	20210621-1-(11)	OQ189169	OQ261144	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22600	20210621-1-(16)	OQ189170	OQ261145	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22602	20210621-1-(17)	OQ189171	OQ261146	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22604	20210621-1-(18)	OQ189172	OQ261147	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22608	20210621-1-(20)	OQ189173	OQ261148	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22610	20210621-1-(21)	OQ189174	OQ261149	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22612	20210621-1-(22)	OQ189175	OQ261150	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF22616	20210621-1-(25)	OQ189176	OQ261151	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23635	20210621-1-(27)	OQ189177	OQ261152	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23636	20210621-1-(29)	OQ189178	OQ261153	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23637	20210621-1-(30)	OQ189179	OQ261154	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23638	20210621-1-(31)	OQ189180	OQ261155	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23639	20210621-1-(32)	OQ189181	OQ261156	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23640	20210621-1-(33)	OQ189182	OQ261157	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23641	20210621-1-(34)	OQ189183	OQ261158	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23642	20210621-1-(35)	OQ189184	OQ261159	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23647	20210621-1-(40)	OQ189185	OQ261160	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23648	20210621-1-(42)	OQ189186	OQ261161	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23649	20210621-1-(43)	OQ189187	OQ261162	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23650	20210621-1-(44)	OQ189188	OQ261163	-	-	-	-
7. GuanğXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23652	20210621-1-(46)	OQ189189	OQ261164	-	-	-	-
GuanğXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23653	20210621-1-(48)	OQ189190	OQ261165	-	-	-	-

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d			GenBank Acces	ssion No. ^e		
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7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23654	20210621-1-(49)	OQ189191	OQ261166	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23655	20210621-1-(50)	OQ189192	OQ261167	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23656	20210621-1-(51)	OQ189193	OQ261168	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23657	20210621-1-(52)	OO189194	OO261169	_	_	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23658	20210621-1-(53)	OQ189195	OQ261170	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23659	20210624-1-(2)	OÕ189196	OÕ261171	_	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23661	20210624-1-(4)	OÕ189197	OÕ261172	_	_	-	-
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23662	20210624-1-(5)	OÕ189198	OÕ261173	_	_	-	-
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23663	20210624-1-(9)	OÕ189199	OÕ261174	_	_	-	_
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23664	20210624-1-(11)	OÕ189200	OÕ261175	_	_	-	_
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23665	20210624-1-(12)	00189201	00261176	_	_	_	_
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23666	20210624-1-(16)	00189202	00261177	_	_	_	_
7. GuangXi-Euc	C. kvotensis	C. aconidialis	A A	CSF23667	20210624-1-(17)	00189203	00261178	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C. aconidialis	A A	CSF23668	20210624-1-(18)	00189204	00261179	_	_	_	_
7. GuangXi-Euc	C kyotensis	C aconidialis	A A	CSF23670	20210624-1-(23)	00189205	00261180	_	_	_	_
7 GuangXi-Euc	C kyotensis	C aconidialis	A A	CSF23672	20210624-1-(26)	00189206	00261181	_	_	_	_
7 GuangXi-Fuc	C kyotensis	C aconidialis	A A	CSF23673	20210624-1-(20)	00189207	OO261182	_	_	_	_
7 GuangXi-Euc	C kyotensis	C aconidialis	A A	CSF23674	20210624-1-(29)	00189208	00261183	_	_	_	_
7 GuangXi-Euc	C kyotensis	C aconidialis	ΔΔ	CSF23676	20210624-1-(2))	00189209	00261184	_	_	_	_
7 GuangXi-Euc	C kyotensis	C aconidialie	ΔΔ	CSF23677	202100241(01) 20210624-1-(32)	00189210	00261185	_	_	_	_
7 GuangXi-Euc	C. kyotensis	C. aconidialis	ΔΔ	CSF23678	20210024-1-(32) 20210624-1-(33)	00189211	00261186	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C. aconidialis	ΔΔ	CSF23680	20210024-1-(35) 20210624-1-(35)	00189212	00261187				
7. GuangXi-Euc.	C. hydensis	C. aconidialic	ΔA	CSE22681	20210024-1-(00) 20210624 + 1 (36)	00180212	00261188	_	_	_	_
7. GuangXi-Euc.	C. hydrensis	C. aconidialis	AA	CSF23682	20210024-1-(30) 20210624-1-(37)	00189213	00261189	_	_	_	_
7. GuangXi-Euc	C. hydensis	C. aconidialic	ΔΔ	CSF23683	20210024-1-(57) 20210624, 1, (38)	00189215	OO261100				
7. GuangXi-Euc.	C. Ryolensis	C. aconidialis	ΔA	CSE23684	20210024-1-(30) 20210624 + 1 (30)	00180216	00261101	_	_	_	_
7. GuangXi-Euc.	C. hydrensis	C. aconidialis	AA	CSF23685	20210024-1-(39) 20210624-1-(40)	00189217	00261191	_	_	_	_
7. GuangXi-Euc.	C. Ryolensis	C. acomidialis	AA	CSF23003	20210024-1-(40) 20210624, 1, (42)	00180217	00261192	-	-	-	-
7. GuangXi-Euc.	C. Ryolensis	C. aconidialis	AA	CSF23687	20210024 - 1 - (42) 20210624 - 1 - (42)	00189210	00261193	-	-	-	-
7. GuangXI-Euc.	C. Kyolensis	C. acomidialia	AA	CSF23007	20210624 - 1 - (43)	00189219	00261194	-	-	-	-
7. GuangXi-Euc.	C. Kyolensis	C. acomidialis	AA	CSF23009	20210624 - 1 - (43) 20210624 - 1 - (45)	00189220	00261195	-	-	-	-
7. GuangXI-Euc.	C. Kyotensis	C. acomidialis	AA—-	CSF23090	20210624 - 1 - (40) 20210624 - 1 - (47)	00189221	OQ261196	-	-	-	-
7. GuangAl-Euc.	C. Kyolensis	C. acomidialia	AA	CSF23091	20210624 - 1 - (47)	00109222	00201197	-	-	-	-
7. GuangAl-Euc.	C. Kyotensis	C. acomidialis	AA—-	C5F23092	20210624-1-(46)	00169225	00261196	-	-	-	-
7. GuangAl-Euc.	C. Kyötensis	C. acontatalis	AA—-	C5F23093	20210624-1-(49)	00169224	00261199	-	-	-	-
7. GuangAl-Euc.	C. kyotensis	C. acontatalis	AA—-	C5F23094	20210624-1-(50)	00169225	00261200	-	-	-	-
7. Guangxi-Euc.	C. kyotensis	C. acontatalis	AA—-	CSF23695	20210624-1-(51)	OQ189226	00261201	-	-	-	-
7. Guangxi-Euc.	C. kyotensis	C. aconiaialis	AA—-	CSF23698	20210624-1-(54)	OQ189227	00261202	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconiaialis	AA—-	CSF23699	20210624-1-(55)	OQ189228	00261203	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconiaialis	AA—-	CSF23701	20210624-1-(58)	OQ189229	00261204	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23702	20210624-1-(60)	OQ189230	OQ261205	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23704	20210624-1-(65)	OQ189231	OQ261206	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23705	20210624-1-(66)	OQ189232	OQ261207	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23706	20210624-1-(6/)	OQ189233	OQ261208	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23709	20210624-1-(74)	OQ189234	OQ261209	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23710	20210624-1-(75)	OQ189235	OQ261210	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23712	20210624-1-(77)	OQ189236	OQ261211	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23713	20210624-1-(78)	OQ189237	OQ261212	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23714	20210624-1-(79)	OQ189238	OQ261213	-	-	-	-

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7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23717	20210624-1-(82)	OO189239	OO261214	_	_	-	_
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23719	20210624-1-(84)	OQ189240	OQ261215	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23720	20210624-1-(87)	OQ189241	OQ261216	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23721	20210624-1-(88)	OQ189242	OQ261217	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23723	20210624-1-(90)	OQ189243	OQ261218	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23724	20210624-1-(92)	OO189244	OO261219	-	_	_	_
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23725	20210624-1-(94)	OQ189245	OQ261220	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23726	20210624-1-(96)	OQ189246	OQ261221	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23727	20210624-1-(97)	OO189247	OO261222	-	_	_	_
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23728	20210624-1-(100)	OQ189248	OQ261223	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23729	20210624-1-(106)	OÕ189249	OÕ261224	-	-	_	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23730	20210624-1-(107)	OÕ189250	OÕ261225	-	_	_	_
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23731	20210624-1-(108)	OÕ189251	OÕ261226	_	_	-	-
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23732	20210624-1-(113)	OÕ189252	OÕ261227	_	_	-	-
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23733	20210624-1-(114)	OÕ189253	OÕ261228	-	-	_	-
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23734	20210624-1-(115)	OÕ189254	OÕ261229	_	_	-	-
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23735	20210624-1-(116)	OÕ189255	OÕ261230	_	_	-	-
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23737	20210624-1-(118)	OÕ189256	00261231	_	_	_	_
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23742	20210624-1-(133)	00189257	00261232	_	_	_	_
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23743	20210624-1-(138)	00189258	00261233	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C aconidialis	AA	CSF23745	20210624-1-(140)	00189259	00261234	_	_	_	_
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23746	20210624-1-(142)	00189260	00261235	_	_	_	_
7. GuangXi-Euc	C. kvotensis	C. aconidialis	AA	CSF23749	20210624-1-(146)	00189261	00261236	_	_	_	_
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23750	20210624-1-(148)	00189262	00261237	_	_	_	_
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23751	20210624-1-(151)	00189263	00261238	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C aconidialis	AA	CSF23752	20210624-1-(152)	00189264	00261239	_	_	_	_
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23753	20210624-1-(153)	00189265	00261240	_	_	_	_
7. GuangXi-Euc	C. kvotensis	C. aconidialis	AA	CSF23755	20210624-1-(155)	00189266	00261241	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C aconidialis	AA—-	CSF23756	20210624-1-(156)	00189267	00261242	_	_	_	_
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23757	20210624-1-(157)	00189268	00261243	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C. aconidialis	AA—-	CSF23759	20210624-1-(160)	00189269	00261244	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C aconidialis	AA—-	CSF23760	20210624-1-(161)	00189270	00261245	_	_	_	_
7. GuangXi-Euc	C. kvotensis	C. aconidialis	AA	CSF23762	20210624-1-(163)	00189271	00261246	_	_	_	_
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23764	20210624-1-(165)	00189272	00261247	_	_	_	_
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23766	20210624-1-(167)	00189273	00261248	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C aconidialis	AA	CSF23767	20210624-1-(168)	00189274	00261249	_	_	_	_
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23768	20210624-1-(169)	00189275	00261250	_	_	_	_
7. GuangXi-Euc	C. kvotensis	C. aconidialis	AA—-	CSF23770	20210624-1-(171)	00189276	00261251	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C aconidialis	AA—-	CSF23772	20210624-2-(2)	00189277	00261252	_	_	_	_
7. GuangXi-Euc	C kyotensis	C aconidialis	AA—-	CSF23774	20210624-2-(4)	00189278	00261253	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C. aconidialis	AA—-	CSF23775	20210624-2-(5)	00189279	00261254	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C aconidialis	AA—-	CSF23776	20210624-2-(6)	00189280	00261255	_	_	_	_
7. GuangXi-Euc	C. kvotensis	C. aconidialis	AA—-	CSF23777	20210624-2-(7)	00189281	00261256	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C. aconidialis	AA—-	CSF23778	20210624-2-(8)	00189282	00261257	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C. aconidialis	AA—-	CSF23780	20210624-2-(10)	OÕ189283	00261258	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C. aconidialis	A A	CSF23781	20210624-2-(12)	00189284	00261259	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C. aconidialis	AA—-	CSF23785	20210624-2-(16)	00189285	00261260	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C. aconidialis	A A	CSF23786	20210624-2-(17)	00189286	00261261	_	_	_	_
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23787	20210624-2-(18)	OQ189287	OQ261262	-	-	-	-

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7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23788	20210624-2-(19)	OQ189288	OQ261263	-	_	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23789	20210624-2-(20)	OQ189289	OQ261264	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23790	20210624-2-(21)	OQ189290	OQ261265	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	AA—-	CSF23791	20210624-2-(22)	OO189291	OO261266	-	_	-	-
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23792	20210624-2-(23)	OÕ189292	OÕ261267	-	_	-	-
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23793	20210624-2-(24)	OÕ189293	OÕ261268	-	_	_	-
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AA—-	CSF23795	20210624-2-(26)	OÕ189294	OÕ261269	-	_	_	-
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	AC—-	CSF23748	20210624-1-(145)	OÕ189295	OÕ261270	-	_	_	-
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	ACAAAA	CSF23671	20210624-1-(25)	00189296	00261271	00261466	00302901	00303108	00303314
7. GuangXi-Euc.	C. kvotensis	C. aconidialis	ACAAAA	CSF23740	20210624-1-(128)	00189297	00261272	00261467	00302902	00303109	00303315
7. GuangXi-Euc	C. kyotensis	C. aconidialis	AL.—-	CSF22572	20210621-1-(2)	00189298	00261273	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C. aconidialis	AL	CSF22576	20210621-1-(4)	00189299	00261274	_	_	_	_
7 GuangXi-Fuc	C kyotensis	C aconidialis	AI —-	CSF22580	20210621-1-(6)	00189300	$OO{2}61275$	_	_	_	_
7 GuangXi-Fuc	C kyotensis	C aconidialis	AL	CSF22589	20210621-1-(10)	00189301	00261276	_	_	_	_
7 GuangXi-Fuc	C kyotensis	C aconidialis	AL	CSF22592	20210621 - 1 - (10)	00189302	00261277	_	_	_	_
7 GuangXi-Fuc	C kyotensis	C. aconidialis	AI	CSF22614	20210021-1-(12) 20210621-1-(24)	00189303	00261278	_	_	_	_
7 GuangXi-Euc	C kyotensis	C aconidialis	AI	CSF23643	20210621-1-(36)	00189304	00261270	_	_	_	_
7 GuangXi-Euc	C kyotensis	C aconidialis	AI	CSE23646	202100211(00)	00189305	00261280	_	_	_	_
7. GuangXi-Euc	C. kyotensis	C aconidialis		CSE22578	20210021-1-(5)	00189306	00261281	00261481	00302916	00303123	00303329
7. GuangXi-Euc	C. hydensis	C. aconidialic		CSF23747	$20210021^{-1}(5)$	00189307	00261282	00261482	00302917	00303123	00303330
7. GuangXi-Euc.	C. Kyolensis	C. acomidialia	AMCDAA	CSF23747	$20210624 \cdot 1 \cdot (144)$ $20210621 \cdot 1 \cdot (15)$	00189307	00261282	00261482	00202010	00202124	000000000
7. GuangXI-Euc.	C. Kyolensis	C. acomidialia	AMCDAA	CSF22099	20210621-1-(15) 20210621-1-(15)	00189308	00261265	OQ201404	OQ302919	0Q303120	0Q303332
7. GuangXi-Euc.	C. Ryolensis	C. acomidialia	AT	CSF23031	20210021-1-(45)	00189309	00261285	-	-	-	-
7. GuangXI-Euc.	C. Kyotensis	C. aconidialis	AI—-	CSF23730 CSF22771	20210624 - 1 - (117) 20210624 - 2 (1)	00189310	00261265	-	-	-	-
7. GuangAl-Euc.	C. Kyötensis	C. acontatalis	AI—-	C5F25771 C5F22772	20210624-2-(1)	00189311	00201200	-	-	-	-
7. GuangAl-Euc.	C. kyotensis	C. acontatalis	AI—-	C5F25775	20210624-2-(3)	00189312	00261267	-	-	-	-
7. Guangxi-Euc.	C. kyotensis	C. acontatalis	AI	CSF23783	20210624-2-(14)	00189313	00261288	-	-	-	-
7. Guangxi-Euc.	C. kyotensis	C. aconiaialis	AIAAAA	CSF22596	20210621-1-(14)	OQ189314	00261289	OQ261494	00302929	00303136	00303342
7. GuangXi-Euc.	C. kyotensis	C. aconiaialis	BAAAAA	CSF23761	20210624-1-(162)	OQ189315	OQ261290	OQ261497	OQ302932	OQ303139	OQ303345
7. GuangXi-Euc.	C. kyotensis	C. aconiaialis	EA—-	CSF23794	20210624-2-(25)	OQ189316	OQ261291	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	EAAAAA	CSF23741	20210624-1-(132)	OQ189317	OQ261292	OQ261507	00302942	00303149	OQ303355
7. GuangXi-Euc.	C. kyotensis	C. aconidialis	EAAAAA	CSF23779	20210624-2-(9)	OQ189318	OQ261293	OQ261508	OQ302943	00303150	OQ303356
7. GuangXi-Euc.	C. kyotensis	C. hongkongensis	AFAAAA	CSF23718	20210624-1-(83)	OQ189319	OQ261294	OQ261538	OQ302973	OQ303180	OQ303386
7. GuangXi-Euc.	C. kyotensis	C. hongkongensis	BFBAAA	CSF23782	20210624-2-(13)	OQ189320	OQ261295	OQ261550	OQ302985	OQ303192	OQ303398
7. GuangXi-Euc.	C. kyotensis	C. ilicicola	AA—-	CSF22606	20210621-1-(19)	OQ189321	OQ261296	-	-	-	-
7. GuangXi-Euc.	C. kyotensis	C. ilicicola	AA—-	CSF23700	20210624-1-(56)	OQ189322	OQ261297	-	-	-	-
GuangXi-Euc.	C. kyotensis	C. ilicicola	AA—-	CSF23739	20210624-1-(122)	OQ189323	OQ261298	_			
GuangXi-Euc.	C. kyotensis	C. kyotensis	CAABAA	CSF22586	20210621-1-(9)	OQ189324	OQ261299	OQ261587	OQ303022	OQ303228	OQ303435
GuangXi-Euc.	C. kyotensis	C. kyotensis	CADAAA	CSF23738	20210624-1-(121)	OQ189325	OQ261300	OQ261588	OQ303023	OQ303229	OQ303436
GuangXi-Euc.	C. kyotensis	C. kyotensis	CADAAA	CSF23784	20210624-2-(15)	OQ189326	OQ261301	OQ261589	OQ303024	OQ303230	OQ303437
GuangXi-Euc.	C. kyotensis	C. kyotensis	CADBAA	CSF23716	20210624-1-(81)	OQ189327	OQ261302	OQ261590	OQ303025	OQ303231	OQ303438
GuangXi-Euc.	C. kyotensis	C. kyotensis	CADDAA	CSF23644	20210621-1-(37)	OQ189328	OQ261303	OQ261591	OQ303026	OQ303232	OQ303439
GuangXi-Euc.	C. kyotensis	C. kyotensis	CEADAA	CSF23660	20210624-1-(3)	OQ189329	OQ261304	OQ261594	OQ303029	OQ303235	OQ303442
GuangXi-Euc.	C. kyotensis	C. kyotensis	CEDDAA	CSF23711	20210624-1-(76)	OQ189330	OQ261305	OQ261595	OQ303030	OQ303236	OQ303443
GuanğXi-Euc.	C. kyotensis	C. kyotensis	CHDBAA	CSF23697	20210624-1-(53)	OQ189331	OQ261306	OQ261598	OQ303033	OQ303239	OQ303446
GuangXi-Euc.	C. kyotensis	C. kyotensis	CMDBAA	CSF23765	20210624-1-(166)	OQ189332	OQ261307	OQ261601	OQ303036	OQ303242	OQ303449
GuangXi-Euc.	C. kyotensis	C. kyotensis	CMDBAA	CSF23769	20210624-1-(170)	OQ189333	OQ261308	OQ261602	OQ303037	OQ303243	OQ303450
GuanğXi-Euc.	C. kyotensis	C. kyotensis	CMDDAA	CSF23715	20210624-1-(80)	OQ189334	OQ261309	OQ261603	OQ303038	OQ303244	OQ303451
7. GuangXi-Euc.	C. kyotensis	C. kyotensis	CNDBAA	CSF22594	20210621-1-(13)	OQ189335	OQ261310	OQ261604	OQ303039	OQ303245	OQ303452

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7. GuangXi-Euc.	C. kyotensis	C. kyotensis	COAAAA	CSF23708	20210624-1-(70)	OO189336	OO261311	OO261606	OO303041	OO303247	OO303454
GuangXi-Euc.	C. kyotensis	C. kvotensis	COABAA	CSF23675	20210624-1-(30)	OO189337	OO261312	OO261607	OO303042	OO303248	OO303455
7. GuangXi-Euc.	C. kvotensis	C. kvotensis	COABAA	CSF23754	20210624-1-(154)	OÕ189338	OÕ261313	OÕ261608	OÕ303043	OÕ303249	OÕ303456
7. GuangXi-Euc.	C. kvotensis	C. kvotensis	COABAA	CSF23758	20210624-1-(158)	00189339	00261314	00261609	00303044	00303250	00303457
7. GuangXi-Euc.	C. kvotensis	C. kyotensis	COABAA	CSF23763	20210624-1-(164)	00189340	00261315	00261610	00303045	00303251	00303458
7 GuangXi-Euc	C kyotensis	C kyotensis	CODDAA	CSF23703	20210624-1-(64)	00189341	00261316	00261613	00303048	00303254	00303461
7 GuangXi-Euc	C kyotensis	C kyotensis	CRABDA	CSF23696	20210624-1-(52)	00189342	00261317	00261616	00303051	00303257	00303464
7 GuangXi-Euc	C kyotensis	C kyotensis	CRABDA	CSF23707	20210624-1-(69)	00189343	00261318	00261617	00303052	00303258	00303465
7 GuangXi-Fuc	C kyotensis	C kyotensis	CRABDA	CSF23722	20210624-1-(89)	00189344	00261319	00261618	00303053	00303259	00303466
7. GuangXi-Euc	C kyotensis	C hyptensis	CLIDAAA	CSE23744	202100241(09)	00189345	00261320	00261622	00303057	00303263	00303470
7. GuangXi-Euc.	C. Ryotensis	C. Kyötensis		CSE23645	20210024-1-(139) 20210621, 1, (38)	00180346	00261320	00261621	00303066	00303272	00303470
8 CuangXi-Euc.	C. Ryotensis	C. Ryotensis		CSE22653	20210621-1-(58)	00189340	00261321	00201001	0000000	00000272	0000479
8. GuangXi-I III.	C. Ryotensis	C. acomidialio	AA	CSF22055	20210021-5-(40)	00100347	00261322	-	-	-	-
8. GuangAl-Pin.	C. kyotensis	C. acomidialis	AA—-	C5F22034 C6F22654	20210622-1-(1)	00189348	00261323	-	-	-	-
8. GuangAl-Pin.	C. kyotensis	C. acontatalis	AA—-	C5F22000	20210622-1-(6)	00189349	00261324	-	-	-	-
8. GuangAl-Pin.	C. kyotensis	C. acontatalis	AA—-	C5F22030	20210622-1-(11)	00189350	00261325	-	-	-	-
8. Guangxi-Pin.	C. kyotensis	C. acontatalis	AA—-	CSF22657	20210622-1-(12)	00189351	00261326	-	-	-	-
8. GuangXi-Pin.	C. kyotensis	C. aconiaialis	AA—-	CSF22658	20210622-1-(15)	OQ189352	OQ261327	-	-	-	-
8. GuangXi-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22659	20210622-1-(16)	OQ189353	OQ261328	-	-	-	-
8. GuangXi-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22660	20210622-1-(17)	OQ189354	OQ261329	-	-	-	-
8. GuangXi-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22661	20210622-1-(20)	OQ189355	OQ261330	-	-	-	-
8. GuangXi-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22664	20210622-1-(22)	OQ189356	OQ261331	-	-	-	-
8. GuangXi-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22666	20210622-1-(23)	OQ189357	OQ261332	-	-	-	-
8. GuangXi-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22668	20210622-1-(25)	OQ189358	OQ261333	-	-	-	-
GuangXi-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22670	20210622-1-(35)	OQ189359	OQ261334	-	-	-	-
GuangXi-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22671	20210622-1-(43)	OQ189360	OQ261335	-	-	-	-
8. GuangXi-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22672	20210622-1-(44)	OQ189361	OQ261336	-	-	-	-
GuangXi-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22673	20210622-1-(45)	OQ189362	OQ261337	-	-	-	-
8. GuangXi-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22674	20210622-1-(47)	OQ189363	OQ261338	-	-	-	-
8. GuangXi-Pin.	C. kyotensis	C. aconidialis	AA—-	CSF22675	20210622-1-(49)	OÕ189364	OÕ261339	_	-	-	_
8. GuangXi-Pin.	C. kvotensis	C. aconidialis	AA—-	CSF22676	20210622-1-(50)	OÕ189365	OÕ261340	_	-	-	_
8. GuangXi-Pin.	C. kvotensis	C. aconidialis	AA—-	CSF22677	20210622-1-(51)	OÕ189366	OÕ261341	_	_	-	_
8. GuangXi-Pin.	C. kvotensis	C. aconidialis	AA—-	CSF22678	20210622-1-(52)	OÕ189367	OÕ261342	_	_	-	_
8. GuangXi-Pin.	C. kvotensis	C. aconidialis	AA—-	CSF22682	20210622-1-(53)	00189368	00261343	_	_	_	_
8. GuangXi-Pin.	C. kvotensis	C. aconidialis	AA—-	CSF22684	20210622-1-(57)	00189369	00261344	_	_	_	_
8. GuangXi-Pin.	C. kvotensis	C. aconidialis	AA—-	CSF22685	20210622-1-(59)	00189370	00261345	_	_	_	_
8 GuangXi-Pin	C kyotensis	C aconidialis	A A	CSF22686	20210622-1-(61)	00189371	00261346	_	_	_	_
8 GuangXi-Pin	C kyotensis	C aconidialis	AA—-	CSF22687	20210622-1-(63)	00189372	00261347	_	_	_	_
8 GuangXi-Pin	C kyotensis	C aconidialis	A A	CSF22690	20210622-1-(65)	00189373	00261348	_	_	_	_
8 GuangXi-Pin	C kyotensis	C aconidialis	ΔΔ	CSE22692	20210622-1 (03)	00189374	00261349	_	_	_	_
8 GuangXi-Pin	C. kyotensis	C. aconidialis	ΔΔ	CSF22693	20210022-1-(07)	00189375	00261350	_			
8. GuangXi-I III.	C. Ryolensis	C. acomidialio	AA	CSF22093	20210622-1-(09)	00180276	00261350	-	-	-	-
8 CuangXi Pin	C. Kyolensis	C. aconidialic	AA	CSF22094 CSE22605	20210622-1-(02)	00180377	00261351	-	-	-	-
6. GuangAi-Fill.	C. Kyolensis	C. acomidialia	AA	CSF22090	20210622-1-(03)	00100279	00261352	-	-	-	-
o. GuangAI-PIN.	C. Kyotensis	C. acomidialis	AA—-	C5F2209/	20210622-1-(92)	00109378	00201333	-	-	-	-
o. GuangAI-PIN.	C. Kyotensis	C. acontations	A1—-	C5F22003	20210622-1-(96)	00109379	00201334	-	-	-	-
o. GuangAi-Pin.	C. kyotensis	C. acontatatis	AI—-	C5F22009	20210622-1-(123)	00109300	00201335	-	-	-	-
8. GuangXi-Pin.	C. kyotensis	C. nongkongensis	AGBAAA	CSF22662	20210622-1-(21)	00189381	OQ261356	UQ261546	0Q302981	0Q303188	UQ303394
8. GuangXi-Pin.	C. kyotensis	C. ilicicola	AA—-	CSF22679	20210622-1-(54)	00189382	OQ261357	-	-	-	-
8. GuangXi-Pin.	C. kyotensis	C. ilicicola	AA—-	CSF22691	20210622-1-(71)	OQ189383	OQ261358	-	-	-	-

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8. GuangXi-Pin.	C. kyotensis	C. ilicicola	AAAAAA	CSF22680	20210622-1-(55)	OQ189384	OQ261359	OQ261551	OQ302986	OQ303193	OQ303399
GuangXi-Pin.	C. kyotensis	C. kyotensis	CADDAA	CSF22683	20210622-1-(58)	OQ189385	OQ261360	OQ261592	OQ303027	OQ303233	OQ303440
GuangXi-Pin.	C. kvotensis	C. kyotensis	CNDBAA	CSF22646	20210621-3-(21)	OQ189386	OQ261361	OQ261605	OQ303040	OQ303246	OQ303453
8. GuangXi-Pin.	C. kyotensis	C. kyotensis	CODBAA	CSF22665	20210622-1-(24)	OO189387	OO261362	OO261612	OO303047	OO303253	OO303460
8. GuangXi-Pin.	C. kvotensis	C. kvotensis	CODDAA	CSF22698	20210622-1-(129)	OÕ189388	OÕ261363	OÕ261614	OÕ303049	OÕ303255	OÕ303462
8. GuangXi-Pin.	C. kvotensis	C. kvotensis	CSDBAA	CSF22688	20210622-1-(66)	OÕ189389	OÕ261364	OÕ261619	OÕ303054	OÕ303260	OÕ303467
8. GuangXi-Pin.	C. kvotensis	C. kvotensis	CSDBAA	CSF22696	20210622-1-(106)	OÕ189390	OÕ261365	OÕ261620	OÕ303055	OÕ303261	OÕ303468
8. GuangXi-Pin.	C. kvotensis	C. kvotensis	CTDBAA	CSF22669	20210622-1-(38)	OÕ189391	OÕ261366	OÕ261621	OÕ303056	OÕ303262	OÕ303469
8. GuangXi-Pin.	C. kvotensis	C. kvotensis	CUDAAA	CSF22667	20210622-1-(34)	00189392	OÕ261367	00261623	00303058	00303264	00303471
9. GuangXi-Cun.	C. kyotensis	C. aconidialis	AA—-	CSF22618	20210621-4-(38)	00189393	00261368	_	_	_	_
9. GuangXi-Cun	C. kyotensis	C aconidialis	A A	CSF22619	20210623-1-(5)	00189394	00261369	_	_	_	_
9. GuangXi-Cun	C. kyotensis	C aconidialis	AA—-	CSF22621	20210623-1-(31)	00189395	00261370	_	_	_	_
9 GuangXi-Cun	C kyotensis	C aconidialis	A A	CSF22622	20210623-1-(32)	00189396	OO261371	_	_	_	_
9 GuangXi-Cun	C kyotensis	C aconidialis	AA—-	CSF22624	20210623-1-(46)	00189397	OO261372	_	_	_	_
9 GuangXi-Cun	C kyotensis	C aconidialis	AA—-	CSF22625	20210623-1-(48)	00189398	00261373	_	_	_	_
9 GuangXi-Cun	C kyotensis	C. aconidialis	ΔΔ	CSF22628	20210623-1-(40)	00189399	00261374	_	_	_	_
9 GuangXi-Cun	C kyotensis	C. aconidialis	A A	CSF22629	20210623-1-(77)	00189400	OO261375	_	_	_	_
9 GuangXi-Cun	C hydrensis	C aconidialis	ΔΔ	CSF22630	20210623-1-(88)	00189401	00261376	_	_	_	_
9 GuangXi-Cun	C. hydensis	C. aconidialis	ΔΔ	CSF22631	20210623-1-(00)	00189402	OO261377				
9 GuangXi-Cun	C. hydrensis	C. aconidialis	ΔΔ	CSF22633	20210023-1-(75)	00189402	00261378				
9. GuangXi-Cun	C. Kyölensis	C. acomidialia	AA	CSF22000	$20210623 \cdot 1 \cdot (100)$	00189403	00261378	-	-	-	-
9. GuangXi-Cun	C. Kyölensis	C. acomidialia	AA	CSF22033	$20210623 \cdot 1 \cdot (104)$	00109404	00261379	-	—	-	-
9. Guangxi-Cun.	C. Kyölensis	C. aconidialia	AA	CSF22030	20210023 - 1 - (103)	00109405	00201300	-	—	-	-
9. GuangXI-Cun.	C. Kyötensis	C. aconidialis	AA—-	CSF22037	20210625-1-(106)	00189406	00261361	-	-	-	-
9. Guangxi-Cun.	C. Kyötensis	C. acontatalis	AA—-	CSF22039	20210623-1-(120)	00189407	00201302	-	-	-	-
9. Guangxi-Cun.	C. kyotensis	C. aconiaialis	AA—-	CSF22040 CSF22641	20210623 - 1 - (131)	OQ169406	00201303	-	-	-	-
9. Guangxi-Cun.	C. Kyötensis	C. acontatalis	AA—-	CSF22641	20210623-1-(141)	OQ189409	00261384	-	-	-	-
9. Guangxi-Cun.	C. kyotensis	C. ilicicola	AA—-	CSF22620	20210623-1-(27)	OQ189410	00261385	-	-	-	-
9. GuangXi-Cun.	C. kyotensis	C. ilicicola	AA—-	CSF22634	20210623-1-(101)	00189411	OQ261386	-	-	-	-
9. GuangXi-Cun.	C. kyotensis	C. ilicicola	AA—-	CSF22638	20210623-1-(113)	00189412	OQ261387	-	-	-	-
9. GuangXi-Cun.	C. kyotensis	C. ilicicola	AAAA_A	CSF22632	20210623-1-(96)	OQ189413	OQ261388	OQ261552	OQ302987	-	OQ303400
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK—-	CSF22699	20210708-1-(1)	OQ189414	OQ261389	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK	CSF22701	20210708-1-(2)	OQ189415	OQ261390	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK	CSF22703	20210/08-1-(3)	OQ189416	OQ261391	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK—-	CSF22715	20210708-1-(14)	OQ189417	OQ261392	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK	CSF22719	20210/08-1-(16)	OQ189418	OQ261393	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK	CSF22721	20210/08-1-(17)	OQ189419	OQ261394	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK—-	CSF22726	20210/08-1-(20)	OQ189420	OQ261395	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK	CSF22728	20210/08-1-(21)	OQ189421	OQ261396	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK—-	CSF22732	20210708-1-(23)	OQ189422	OQ261397	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK—-	CSF22736	20210708-1-(25)	OQ189423	OQ261398	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK—-	CSF23813	20210708-1-(127)	OQ189424	OQ261399	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK—-	CSF23818	20210708-1-(138)	OQ189425	OQ261400	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK—-	CSF23819	20210708-1-(140)	OQ189426	OQ261401	-	-	-	-
YunNan-Euc.	C. kyotensis	C. aconidialis	AK—-	CSF23820	20210708-1-(141)	OQ189427	OQ261402	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	АК—-	CSF23822	20210708-1-(145)	OQ189428	OQ261403	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK—-	CSF23824	20210708-1-(147)	OQ189429	OQ261404	-	-	-	-
YunNan-Euc.	C. kyotensis	C. aconidialis	AK—-	CSF23834	20210708-1-(202)	OQ189430	OQ261405	-	-	-	-
10. YunNan-Euc.	C. kyotensis	C. aconidialis	AK—-	CSF23836	20210708-1-(204)	OQ189431	OQ261406	-	-	-	-

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10. YunNan-Euc.	C. kvotensis	C. aconidialis	AK—-	CSF23840	20210708-1-(209)	OO189432	OO261407	_	_	_	_
10. YunNan-Euc.	C. kvotensis	C. aconidialis	AK—-	CSF23842	20210708-1-(212)	OÕ189433	OÕ261408	-	_	_	_
10. YunNan-Euc.	C. kvotensis	C. aconidialis	AK—-	CSF23845	20210708-1-(215)	OÕ189434	OÕ261409	-	_	_	_
10. YunNan-Euc.	C. kvotensis	C. aconidialis	АК—-	CSF23849	20210708-1-(222)	OÕ189435	00261410	_	_	_	_
10. YunNan-Euc.	C. kvotensis	C. aconidialis	AK—-	CSF23851	20210708-1-(224)	OÕ189436	OÕ261411	-	_	_	_
10. YunNan-Euc.	C. kvotensis	C. aconidialis	АК—-	CSF23852	20210708-1-(225)	OÕ189437	00261412	_	_	_	_
10. YunNan-Euc.	C. kvotensis	C. aconidialis	AKAAAB	CSF22709	20210708-1-(11)	OÕ189438	OÕ261413	OO261479	OO302914	OO303121	OO303327
10. YunNan-Euc.	C. kvotensis	C. aconidialis	AKAAAB	CSF23815	20210708-1-(133)	OÕ189439	OÕ261414	OÕ261480	OÕ302915	OÕ303122	OÕ303328
10. YunNan-Euc.	C. kvotensis	C. aconidialis	ANAAAA	CSF23811	20210708-1-(103)	00189440	OÕ261415	OÕ261485	00302920	00303127	00303333
10. YunNan-Euc.	C. kvotensis	C. asiatica	AA—-	CSF22705	20210708-1-(6)	OÕ189441	00261416	_	_	_	_
10. YunNan-Euc.	C. kyotensis	C. asiatica	AA—-	CSF22711	20210708-1-(12)	00189442	00261417	_	_	_	_
10. YunNan-Euc.	C. kvotensis	C. asiatica	AA—-	CSF22713	20210708-1-(13)	OÕ189443	00261418	_	_	_	_
10. YunNan-Euc	C. kvotensis	C. asiatica	A A	CSF22717	20210708-1-(15)	00189444	00261419	_	_	_	_
10. YunNan-Euc.	C. kvotensis	C. asiatica	AA—-	CSF22725	20210708-1-(19)	OÕ189445	00261420	_	_	_	_
10. YunNan-Euc.	C kyotensis	C. asiatica	AA—-	CSF22730	20210708-1-(22)	OÕ189446	00261421	_	_	_	_
10. YunNan-Euc	C. kyotensis	C. asiatica	A A	CSF22734	20210708-1-(24)	00189447	00261422	_	_	_	_
10. YunNan-Euc.	C. kyotensis	C. asiatica	AA—-	CSF23799	20210708-1-(34)	OÕ189448	00261423	_	_	_	_
10. YunNan-Euc	C kyotensis	C. asiatica	AA—-	CSF23816	20210708-1-(135)	00189449	00261424	_	_	_	_
10. YunNan-Euc	C. kyotensis	C. asiatica	AA—-	CSF23817	20210708-1-(137)	00189450	00261425	_	_	_	_
10. YunNan-Euc	C kyotensis	C asiatica	AA—-	CSF23838	20210708-1-(207)	00189451	00261426	_	_	_	_
10. YunNan-Euc	C. kyotensis	C. asiatica	AA—-	CSF23839	20210708-1-(208)	00189452	00261427	_	_	_	_
10. YunNan-Euc	C. kyotensis	C. asiatica	AA—-	CSF23841	20210708-1-(211)	00189453	00261428	_	_	_	_
10. YunNan-Euc	C kyotensis	C. asiatica	AA—-	CSF23843	20210708-1-(213)	00189454	00261429	_	_	_	_
10. YunNan-Euc	C. kyotensis	C. asiatica	AA—-	CSF23844	20210708-1-(214)	00189455	00261430	_	_	_	_
10. YunNan-Euc	C kyotensis	C asiatica	AA—-	CSF23846	20210708-1-(217)	00189456	00261431	_	_	_	_
10 YunNan-Fuc	C kyotensis	C asiatica	A A	CSF23847	20210708-1-(220)	00189457	$OO{2}61432$	_	_	_	_
10. YunNan-Euc	C. kyotensis	C. asiatica	AA—-	CSF23848	20210708-1-(221)	00189458	00261433	_	_	_	_
10 YunNan-Fuc	C kyotensis	C asiatica	A A	CSF23850	20210708-1-(223)	00189459	$OO{2}61434$	_	_	_	_
10. YunNan-Fuc	C kyotensis	C asiatica	AAAAAA	CSF22708	20210708-1-(9)	00189460	00261435	00261514	00302949	00303156	00303362
10. YunNan-Euc	C kyotensis	C asiatica	AAAAAA	CSF23833	20210708-1-(201)	00189461	00261436	00261515	00302950	00303157	00303363
10 YunNan-Fuc	C kyotensis	C asiatica	AB—-	CSF22723	20210708-1-(18)	00189462	$OO{2}61437$	-	-	-	-
10. YunNan-Euc	C. kyotensis	C. asiatica	AB—-	CSF23798	20210708-1-(33)	00189463	00261438	_	_	_	_
10 YunNan-Fuc	C kyotensis	C asiatica	AB	CSF23808	20210708-1-(75)	00189464	$OO{2}61439$	_	_	_	_
10. YunNan-Euc	C. kyotensis	C. asiatica	AB—-	CSF23823	20210708-1-(146)	00189465	00261440	_	_	_	_
10. YunNan-Euc	C kyotensis	C asiatica	AB—-	CSF23826	20210708-1-(150)	00189466	00261441	_	_	_	_
10. YunNan-Euc	C. kyotensis	C. asiatica	AB—-	CSF23835	20210708-1-(203)	00189467	00261442	_	_	_	_
10. YunNan-Euc	C. kyotensis	C. asiatica	AB—-	CSF23837	20210708-1-(205)	00189468	00261443	_	_	_	_
10 YunNan-Fuc	C kyotensis	C asiatica	ABAAAA	CSF23796	20210708-1-(28)	00189469	$OO{2}61444$	00261516	00302951	00303158	00303364
10. YunNan-Fuc	C kyotensis	C asiatica	ABAAAB	CSF23830	20210708-1-(180)	00189470	00261445	00261517	00302952	00303159	00303365
10. YunNan-Euc	C kyotensis	C ilicicola	CA—-	CSF23807	20210708-1-(65)	00189471	00261446	-	-	-	-
10 YunNan-Fuc	C kyotensis	C ilicicola	CA—-	CSF23812	20210708-1-(126)	00189472	$OO{2}61447$	_	_	_	_
10. YunNan-Euc	C. kyotensis	C. ilicicola	ČA—-	CSF23853	20210708-1-(232)	00189473	00261448	_	_	_	_
10. YunNan-Euc	C kyotensis	C, ilicicola	CAAABB	CSF23806	20210708-1-(59)	00189474	00261449	00261556	00302991	00303197	00303404
10. YunNan-Euc	C. kyotensis	C. ilicicola	CAAABB	CSF23829	20210708-1-(178)	00189475	00261450	00261557	00302992	00303198	00303405
10. YunNan-Euc	C kyotensis	Cyunnanensis	AAAAAA	CSF23797	20210708-1-(31)	OÕ189476	00261451	00261661	00303096	00303302	00303509
10. YunNan-Euc	C. kyotensis	C. yunnanensis	ABAAAA	CSF23805	20210708-1-(47)	OO189477	00261452	00261662	00303097	00303303	00303510
10. YunNan-Euc.	C. colhounii	Č. eucalypti	AA—-	CSF23825	20210708-1-(148)	OQ189478	OQ261453	-	-	-	-

Site and Tree Species Code ^a	Species Complex	Species	Genotype ^b	Isolate No. ^c	Sample and Isolate Information ^d	GenBank Accession No. ^e					
						tef1	tub2	cmdA	his3	rpb2	act
 YunNan-Euc. YunNan-Cun. 	C. colhounii C. colhounii C. colhounii C. colhounii C. colhounii C. colhounii C. colhounii C. colhounii C. colhounii	C. eucalypti C. eucalypti C. eucalypti C. eucalypti C. eucalypti C. eucalypti C. eucalypti C. eucalypti C. canadiana	АА— АААААА ВААААА ВААААА СААААА DAAAAA DAAAAA AAAAAA	CSF23831 CSF23802 CSF23809 CSF23809 CSF23832 CSF23800 CSF23810 CSF23854 CSF22750	20210708-1-(194) 20210708-1-(41) 20210708-1-(42) 20210708-1-(88) 20210708-1-(197) 20210708-1-(37) 20210708-1-(99) 20210709-1-(224) 20210707-1-(141)	OQ189479 OQ189480 OQ189481 OQ189482 OQ189483 OQ189483 OQ189484 OQ189485 OQ189485 OQ189487	OQ261454 OQ261455 OQ261457 OQ261457 OQ261458 OQ261459 OQ261460 OQ261461 OQ261462	- OQ261663 OQ261664 OQ261665 OQ261667 OQ261668 OQ261668 OQ261518	- OQ303098 OQ303100 OQ303101 OQ303102 OQ303103 OQ303104 OQ302953	- OQ303304 OQ303305 OQ303306 OQ303307 OQ303308 OQ303309 OQ303310 OQ303160	- OQ303511 OQ303512 OQ303513 OQ303514 OQ303515 OQ303516 OQ303517 OQ303366

^a Code of 12 sampling sites connecting to "Site and Tree species code" in Table 1. ^b Genotype within each *Calonectria* species, determined by sequences of the *tef1*, *tub2*, *cmdA*, *his3*, *rpb2* and *act* regions; "-" means not available. ^c CSF: Culture Collection located at Research Institute of Fasting-growing Trees (RIFT), Chinese Academy of Forestry, ZhanJiang, GuangDong Province, China. ^d Information associated with sample point and isolate, for example, "20210527-1-(1)" indicates sample number "20210527-1-(1)" and isolate from this sample. ^e *tef1* = translation elongation factor 1-alpha; *tub2* = β -tubulin; *cmdA* = calmodulin; *his3* = histone H3; *rpb2* = the DNA-directed RNA polymerase II second largest subunit; *act* = actin. ^f "-" represents the relative locus was not amplified in this study.

Appendix B. Isolate Numbers of Each Genotype in The Plantation of Each Tree Species in Each Province for Each Calonectria Species

Calonectria Species	Site Number	Tree Species and Province	Genotype Determined by <i>tef1</i> Gene Sequences	Number of Isolates Based on <i>tef1</i> Genotype	Genotype Determined by <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tub2</i> Genotype	Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tef1</i> and <i>tub2</i> Genotype	Number of Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences of Each Species
C. aconidialis	1	<i>E. urophylla</i> \times <i>E. grandis</i> in FuJian	11	132	11	109	11_11	92	7
			13	16	14	4	11_14	4	
			14	1	17	1	11_17	1	
					19	19	11_19	19	
					31	16	11_31	16	
							13_11	16	
							14_11	1	
	2	P. massoniana in FuJian	11	50	11	44	11_11	37	5
			13	7	19	5	11 19	5	
					26	1	11_26	1	
					31	7	11 31	7	
							13 11	7	
	3	C. lanceolata in Fulian	11	66	11	64	11 11	51	7
		,	13	13	14	1	11 14	1	
					16	1	11 16	1	
					19	5	11_19	5	

Table A2. Isolate numbers of each genotype in the plantation of each tree species in each province for each Calonectria species.

Calonectria Species	Site Number	Tree Species and Province	Genotype Determined by <i>tef1</i> Gene Sequences	Number of Isolates Based on <i>tef1</i> Genotype	Genotype Determined by <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tub2</i> Genotype	Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tef1</i> and <i>tub2</i> Genotype	Number of Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences of Each Species
					27 31	1 7	11_27 11_31 13_11	1 7 13	
	4	<i>E. urophylla</i> \times <i>E. grandis</i> in GuangDong	11	191	11	152	11_11	149	10
		<u>6</u> <u>6</u>	17	5	12 15 23 25 28 29 30	1 3 3 4 1 31	$\begin{array}{c} 11_12\\ 11_15\\ 11_23\\ 11_25\\ 11_28\\ 11_29\\ 11_30\\ 17_11\\ 17_25\\ \end{array}$	$ \begin{array}{c} 1 \\ 1 \\ 3 \\ 1 \\ 4 \\ 1 \\ 31 \\ 3 \\ 2 \end{array} $	
	5	P. massoniana in GuangDong	11 17	131 4	11 12 16 18 20 25 28 29 30	106 2 7 1 1 1 1 1 1 5	11_11 11_12 11_16 11_18 11_20 11_28 11_29 11_30 17_11 17_15	103 2 7 1 1 1 1 1 5 3	10
	6	<i>C. lanceolata</i> in GuangDong	11 16	34 1	11 18 23 30	31 1 1 2	17_25 11_11 11_18 11_23 11_30 16_11	1 30 1 1 2 1	5
	7	E. urophylla \times E. grandis in	11	150	11	134	11_11	130	7
		GualgAi	12 15	1 3	13 22 23 30	3 10 1 6	11_13 11_22 11_23 11_30 12_11	3 10 1 6 1	
	8	P. massoniana in GuangXi	11	34	11	32	15_11 11_11	3 32	2
	9 10	C. lanceolata in GuangXi E. urophylla × E. grandis in YunNan	11 11	17 27	30 11 21 24	17 26	11_{30} 11_{11} 11_{21} 11_{24}	2 17 26	1 2
C. kyotensis	11 12 1	P. massoniana in YunNan C. lanceolata in YunNan E. urophylla × E. grandis in FuJian	- 11 12 13	0 0 12 1 3	24 - - 11 14 16	0 0 2 1 13	11_24 - - 11_11 11_14 11_16	0 0 2 1 5	0 0 14

Calonectria Species	Site Number	Tree Species and Province	Genotype Determined by <i>tef1</i> Gene Sequences	Number of Isolates Based on <i>tef</i> 1 Genotype	Genotype Determined by <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tub2</i> Genotype	Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tef1</i> and <i>tub2</i> Genotype	Number of Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences of Each Species
			14	21	19 21 22 23 27 28	6 7 1 4 1 2	$11_{-19} \\ 11_{-28} \\ 12_{-28} \\ 13_{-16} \\ 13_{-23} \\ 14_{-16} \\ 14_{-19} \\ 14_{-21} \\ 14_{-22} \\ 14_{-23} $	3 1 2 1 6 3 7 1 3	
	2	<i>P. massoniana</i> in FuJian	11 13 14	22 5 37	11 12 14 16 19 20 21 22 23 25	7 1 6 13 16 1 5 6 4 5	$\begin{array}{c} 14_27\\ 14_27\\ 11_11\\ 11_14\\ 11_16\\ 11_19\\ 11_21\\ 11_22\\ 11_25\\ 13_12\\ 13_16\\ 13_19\\ 13_25\\ 14_11\\ 14_14\\ 14_16\\ 14_19\\ 14_20\\ 14_21\\ 14_22\\ 14_23\\ 14_25\\ \end{array}$	1 2 4 7 2 4 1 1 2 1 1 5 4 7 8 1 3 2 4 3	20
	3	<i>C. lanceolata</i> in FuJian	-	0	-	0	-	0	0
	4	GuangDong	11	1	14	1	11_19	1	4
			14	3	19 32	2 1	14_{14} 14_19 14_32	1 1 1	
	5	P. massoniana in GuangDong	11 14 15	11 11 3	11 13 14 17 19 22 25 26 28	4 1 1 3 2 9 1 3	$\begin{array}{c} 11_11\\ 11_14\\ 11_19\\ 11_25\\ 11_26\\ 11_28\\ 14_11\\ 14_13\\ 14_17\\ 14_19\\ 14_22\\ \end{array}$	1 2 5 1 1 2 1 1 1 1 1 1	16

Calonectria Species	Site Number	Tree Species and Province	Genotype Determined by <i>tef1</i> Gene Sequences	Number of Isolates Based on <i>tef1</i> Genotype	Genotype Determined by <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tub2</i> Genotype	Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tef1</i> and <i>tub2</i> Genotype	Number of Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences of Each Species
							14_25 14_28 15_11 15_22 15_25	3 2 1 1 1	
	6	C. lanceolata in GuangDong	13 14	1 4	11 14 22 28	2 1 1 1	13_{28} 14_11 14_14 14_22	1 2 1 1	4
	7	<i>E. urophylla</i> \times <i>E. grandis</i> in	13	22	11	5	13_11	5	9
		GuangAi	14	1	15 18 23 24 25 28 31	3 1 3 1 6 3 1	$\begin{array}{c} 13_15\\ 13_18\\ 13_23\\ 13_24\\ 13_25\\ 13_28\\ 13_31\\ 14_15\\ \end{array}$	2 1 3 1 6 3 1	
	8	P. massoniana in GuangXi	13	8	11 24 25 29 30 31	1 2 2 1	13_11 13_24 13_25 13_29 13_30 13_31	1 1 2 2 1 1	6
	9 10	C. lanceolata in GuangXi E uronhulla \times E grandis in YunNan	-	0	-	0	Ē	0	0
	10	<i>P. massoniana</i> in YunNan	-	0	-	0	-	0	0
C. hongkongensis	12 1	C. lanceolata in YunNan E. urophylla × E. grandis in FuJian	11	0 27	11 12 16 18	0 21 1 3 1	11_11 11_12 11_16 11_18 11_10	0 21 1 3 1	0 5
	2	<i>P. massoniana</i> in FuJian	11	39	19 11 12 14 15 16 17	1 26 2 1 1 7 2	$11_{19} \\ 11_{11} \\ 11_{12} \\ 11_{14} \\ 11_{15} \\ 11_{16} \\ 11_{17} \\ 11_{$	1 26 2 1 1 7 2	6
	3	C. lanceolata in FuJian	11	6	11 14 16	4 1 1	$ \begin{array}{c} 11_1'\\ 1$	4 1 1	3
	4	<i>E. urophylla</i> × <i>E. grandis</i> in GuangDong	11	12	11	6	11_11	6	5
					12 13 14 16	2 2 1 1	11_12 11_13 11_14 11_16	2 2 1 1	

Calonectria Species	Site Number	Tree Species and Province	Genotype Determined by <i>tef1</i> Gene Sequences	Number of Isolates Based on <i>tef1</i> Genotype	Genotype Determined by <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tub2</i> Genotype	Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tef1</i> and <i>tub2</i> Genotype	Number of Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences of Each Species
	5	P. massoniana in GuangDong	11	50	11	35	11_11	35	7
					12	3	11_12	3	
					13	1	11_13	1	
					14	2	11_{14}	2	
					16	5	11_16	5	
					18	1	11_18	1	
	6	C. lanceolata in GuangDong	-	0	-	0	-	0	0
	7	E. urophylla \times E. grandis in	11	1	16	2	11 16	1	2
		GuangXi	12	1			12 16	1	
	8	P massoniana in GuangXi	12	1	17	1	12_10	1	1
	9	<i>C. lanceolata</i> in GuangXi	-	ō	-	Ō	-	Ō	Ō
	10	E. urophylla \times E. grandis in YunNan	-	0	-	0	-	0	0
	11	P. massoniana in YunNan	-	0	-	0	-	0	0
	12	<i>C. lanceolata</i> in YunNan	-	0	-	0	-	0	0
C. ilicicola	1	E. urophylla \times E. grandis in Fulian	11	3	11	3	11_11 11_11	3	1
	23	<i>C</i> lanceolata in Fulian	11	4	11	4	11_11	4	1
	0	<i>E. urophylla</i> \times <i>E. grandis</i> in	11	1	11	1	11_11	1	1
	4	GuangDong	12	1	11	1	12_11	1	1
	5	P. massoniana in GuangDong	12	2	11	2	12_11	2	1
	6	<i>C. lanceolata</i> in GuangDong	11	3	11	3	11_11	3	1
	7	E. urophylla \times E. granais in GuangXi	11	3	11	3	11_11	3	1
	8	P. massoniana in GuangXi	11	3	11	3	11_11	3	1
	9	C. lanceolata in GuangXi	11	4	11	4	11_11	4	1
	10	E. urophylla \times E. grandis in YunNan	13	5	11	5	13_11	5	1
	11	P. massoniana in YunNan	-	0	-	0	-	0	0
C asiatica	12	E uronhulla $\times E$ grandis in Eulian	-	0	-	0	-	0	0
C. usuncu	2	<i>P. massoniana</i> in Fulian	-	Ő	-	Ő	-	0	0
	3	C. lanceolata in FuJian	-	0	-	0	-	0	0
	4	E. urophylla \times E. grandis in GuangDong	-	0	-	0	-	0	0
	5	P. massoniana in GuangDong	-	0	-	0	-	0	0
	6	C. lanceolata in GuangDong	-	0	-	0	-	0	0
	7	<i>E. urophylla</i> \times <i>E. grandis</i> in GuangXi	-	0	-	0	-	0	0
	8	P. massoniana in GuangXi	-	0	-	0	-	0	0
	9	C. lanceolata in GuangXi	-	0	-	0	-	0	0
	10	E. urophylla \times E. grandis in YunNan	11	30	11 12	21 9	11_11 11_12	21 9	2
	11	P. massoniana in YunNan	-	0	-	Ó	-	ó	0
	12	C. lanceolata in YunNan	-	0	-	0	-	0	0

Calonectria Species	Site Number	Tree Species and Province	Genotype Determined by <i>tef1</i> Gene Sequences	Number of Isolates Based on <i>tef1</i> Genotype	Genotype Determined by <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tub2</i> Genotype	Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tef1</i> and <i>tub2</i> Genotype	Number of Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences of Each Species
C. eucalypti	1	<i>E. urophylla</i> \times <i>E. grandis</i> in FuJian	-	0	-	0	-	0	0
	2	P. massoniana in FuJian	-	0	-	0	-	0	0
	3	<i>C. lanceolata</i> in FuJian	-	0	-	0	-	0	0
	4	<i>E. uropnyua</i> \times <i>E. granais</i> in GuangDong	-	0	-	0	-	0	0
	5	P. massoniana in GuangDong	-	0	-	0	-	0	0
	6	<i>C. lanceolata</i> in GuangDong	-	0	-	0	-	0	0
	7	E. urophylla \times E. grandis in GuangXi	-	0	-	0	-	0	0
	8	P. massoniana in GuangXi	-	0	-	0	-	0	0
	9	C. lanceolata in GuangXi	-	0	-	0	-	0	0
	10	<i>E. urophylla</i> × <i>E. grandis</i> in YunNan	11	4	11	8	11_11	4	4
			12	2 1			12_11 13_11	2 1	
			13	1			14 11	1	
	11	P. massoniana in YunNan	14	1	11	1	14 11	1	1
	12	<i>C. lanceolata</i> in YunNan	-	0	-	0	-	0	0
C. curvispora	1	<i>E. urophylla</i> \times <i>E. grandis</i> in FuJian	-	0	-	0	-	0	0
	2	P. massoniana in FuJian	-	0	-	0	-	0	0
	3	<i>C. lanceolata</i> in FuJian	-	0	-	0	-	0	0
	4	E. urophylla \times E. grandis in GuangDong	-	0	-	0	-	0	0
	5	P. massoniana in GuangDong	11	4	11	4	11_11	4	1
	6	<i>C. lanceolata</i> in GuangDong	-	0	-	0	-	0	0
	7	E. urophylia × E. grunuis III GuangXi	-	0	-	0	-	0	0
	8	P. massoniana in GuangXi	-	0	-	0	-	0	0
	9	C. lanceolata in GuangXi	-	0	-	0	-	0	0
	10	E. urophylla \times E. grandis in YunNan	-	0	-	0	-	0	0
	11	P. massoniana in YunNan	-	0	-	0	-	0	0
	12	<i>C. lanceolata</i> in YunNan	-	0	-	0		0	0
C. chinensis	1	E. urophylla \times E. grandis in FuJian	11	1	11	1	11_11	1	1
	2	P. massoniana in Fujian	- 11	0	-	0	- 11 11	0	0
	3 4	C. <i>unceolutu</i> în Fujian	11	1	11	Z	11_11 12_11	1	Z
	5	E. urophylla × E. grandis in GuangDong	-	0	-	0		0	0
	6	P. massoniana in GuangDong	-	0	-	0	-	0	0
	7	C. lanceolata in GuangDong	-	0	-	0	-	0	0
	8	E. urophylla × E. grandis in GuangXi	-	0	-	0	-	0	0
	9	P. massoniana in GuangXi	-	0	-	0	-	0	0
	10	C. lanceolata in GuangXi	-	U	-	0	-	U	U
	11	E. urophylla × E. granais in YunNan	-	U	-	0	-	U	0
	11 12	r. massoniana in Yuniyan Cilanceolata in Yuniyan	-	0	-	0	-	0	0
	12		-	U	-	0	-	U	U

Calonectria Species	Site Number	Tree Species and Province	Genotype Determined by <i>tef1</i> Gene Sequences	Number of Isolates Based on <i>tef1</i> Genotype	Genotype Determined by <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tub2</i> Genotype	Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences	Number of Isolates Based on <i>tef</i> 1 and <i>tub</i> 2 Genotype	Number of Genotype Determined by <i>tef1</i> and <i>tub2</i> Gene Sequences of Each Species
C. pacifica	1	<i>E. urophylla</i> \times <i>E. grandis</i> in FuJian	-	0	-	0	-	0	0
1 5	2	P. massoniana in FuJian	-	0	-	0	-	0	0
	3	<i>C. lanceolata</i> in FuJian	-	0	-	0	-	0	0
	4	<i>E. urophylia</i> \times <i>E. granais</i> in GuangDong	-	0	-	0	-	0	0
	5	P. massoniana in GuangDong	11	1	11	1	11_11	1	2
	6	0 0	12	1	12	1	12_12	1	
	7	<i>C. lanceolata</i> in GuangDong	11	1	13	1	11_13	1	1
	8	E. urophylla \times E. granais in GuangXi	-	0	-	0	-	0	0
	9	P. massoniana in GuangXi	-	0	-	0	-	0	0
	10	C. lanceolata in GuangXi	-	0	-	0	-	0	0
	11	<i>E. urophylla</i> \times <i>E. grandis</i> in YunNan	-	0	-	0	-	0	0
	11	P. massoniana in YunNan	-	0	-	0	-	0	0
C. uunnanensis	12	<i>E. urophylla</i> \times <i>E. grandis</i> in Fulian	-	0	-	0	-	0	0
Ci guinianenene	2	P. massoniana in FuJian	-	ŏ	-	Õ	-	õ	Ő
	3	C. lanceolata in FuJian	-	0	-	0	-	0	0
	4	<i>E. urophylla</i> × <i>E. grandis</i> in GuangDong	-	0	-	0	-	0	0
	5	P. massoniana in GuangDong	-	0	-	0	-	0	0
	6	C. lanceolata in GuangDong	-	0	-	0	-	0	0
	7	<i>E. urophylla</i> \times <i>E. grandis</i> in GuangXi	-	0	-	0	-	0	0
	8	P. massoniana in GuangXi	-	0	-	0	-	0	0
	9	<i>C. lanceolata</i> in GuangXi	- 11	0	- 11	0	- 11 11	0	0
	10	E. urophyliu × E. grunuis III Turinali	11	2	11	1	11_11	1	Z
	11	P. massoniana in YunNan	-	0	-	0	-	Ō	0
	12	C. lanceolata in YunNan	-	0	-	0	-	0	0
C. canadiana	1	E. urophylla \times E. grandis in FuJian	-	0	-	0	-	0	0
	2	P. massoniana in Fujian	-	0	-	0	-	0	0
	4	E. urophylla \times E. grandis in	-	0	-	0	-	0	0
	5	GuangDong	_	0	_	0	_	0	0
	6	<i>C. lanceolata</i> in GuangDong	-	0	-	0	-	0	0
	7	E. urophylla \times E. grandis in GuangXi	-	0	-	0	-	0	0
	8	P. massoniana in GuangXi	-	0	-	0	-	0	0
	9	<i>C. lanceolata</i> in GuangXi	-	0	-	0	-	0	0
	10 11	<i>E. uropnylla</i> \times <i>E. grandis</i> in YunNan	-	U	-	U	-	U	U
	11	<i>C. lanceolata</i> in YunNan	11	1	11	1	11_11	1	1

Appendix C. Number of Shared Genotypes of *Calonectria cconidialis* Determined by *tef1* and *tub2* Gene Sequences between Different Plantation Tree Species × Province

		· 1 · · · 11 · M · 1 · 10	1 4 1.66 4	1 4 42 4 2 2 2 2
Table A3. Number of shared	genotypes of <i>Calonectria</i> aconiaial	is determined by tet I and tub/	gene sequences between different	plantation free species \times province.
	genery peo or emericent in neerman	acterininea z y reji ana rite	gene sequences servicen ameren	prantation nee species // province.

	E. urophylla × E. grandis in FuJian	P. massoniana in FuJian	<i>C. lanceolata</i> in FuJian	E. urophylla × E. grandis in GuangDong	P. massoniana in GuangDong	<i>C. lanceolata</i> in GuangDong	E. urophylla × E. grandis in GuangXi	P. massoniana in GuangXi	<i>C. lanceolata</i> in GuangXi	E. urophylla × E. grandis in YunNan	P. massoniana in YunNan	C. lanceolata in YunNan
<i>E. urophylla</i> \times <i>E. grandis</i> in Fulian		4^{1}	5	1 ²	1 ³	1	1	1	1	0	0	0
P. massoniana in FuJian			4	1	1	1	1	1	1	0	0	0
C. lanceolata in FuJian				1	2	1	1	1	1	0	0	0
<i>E. urophylla</i> \times <i>E. grandis</i> in GuangDong					7	3	3	2	1	0	0	0
P. massoniana in GuangDong						3	2	2	1	0	0	0
C. lanceolata in GuangDong							3	2	1	0	0	0
E. urophylla \times E. grandis in GuangXi								2	1	0	0	0
P. massoniana in GuangXi									1	0	0	0
C. lanceolata in GuangXi										0	0	0
E. urophylla × E. grandis in YunNan											0	0
P. massoniana in YunNan												0
C. lanceolata in YunNan												

¹ Number highlighted in blue indicates number of shared genotypes between different tree species in the same sampled site (province). ² Number highlighted in yellow indicates number of shared genotypes between different sampled sites of the same tree species. ³ Number highlighted in grey indicates number of shared genotypes between different sampled sites of different tree species.

Appendix D. Number of Shared Genotypes of *Calonectria kyotensis* Determined by *tef1* and *tub2* Gene Sequences between Different Plantation Tree Species \times Province

Table A4. Number of shared genotypes of *Calonectria kyotensis* determined by *tef1* and *tub2* gene sequences between different plantation tree species × province.

	E. urophylla × E. grandis in FuJian	P. massoniana in FuJian	C. lanceolata in FuJian	E. urophylla × E. grandis in GuangDong	P. massoniana in GuangDong	C. lanceolata in GuangDong	E. urophylla × E. grandis in GuangXi	P. massoniana in GuangXi	C. lanceolata in GuangXi	E. urophylla × E. grandis in YunNan	P. massoniana in YunNan	C. lanceolata in YunNan
E. urophylla \times E. grandis in Fulian		10 ¹	0	2 ²	6 ³	1	1	0	0	0	0	0
P. massoniana in FuJian			0	3	8	3	1	1	0	0	0	0
C. lanceolata in FuJian				0	0	0	0	0	0	0	0	0
<i>E. urophylla</i> \times <i>E. grandis</i> in GuangDong					2	1	0	0	0	0	0	0
P. massoniana in GuangDong						2	0	0	0	0	0	0
C. lanceolata in GuangDong							1	0	0	0	0	0
E. urophylla \times E. grandis in GuangXi								4	0	0	0	0
P. massoniana in GuangXi									0	0	0	0
C. lanceolata in GuangXi										0	0	0
<i>E. urophylla</i> \times <i>E. grandis</i> in YunNan											0	0
P. massoniana in YunNan												0
C. lanceolata in YunNan												

¹ Number highlighted in blue indicates number of shared genotypes between different tree species in the same sampled site (province). ² Number highlighted in yellow indicates number of shared genotypes between different sampled sites of the same tree species. ³ Number highlighted in grey indicates number of shared genotypes between different sampled sites of different tree species.

Appendix E. Number of Shared Genotypes of *Calonectria hongkongensis* Determined by *tef1* and *tub2* Gene Sequences between Different Plantation Tree Species × Province

Table A5. Number of shared	genoty	pes of Calonectria hon	zkong	<i>gensis</i> determined by	y te	f1 and tub2	gene sec	juences between	different	plantation tree s	pecies \times	province.
	0 1	1	, ,		/	/ (1				

	E. urophylla × E. grandis in FuJian	P. massoniana in FuJian	<i>C. lanceolata</i> in FuJian	E. urophylla × E. grandis in GuangDong	P. massoniana in GuangDong	<i>C. lanceolata</i> in GuangDong	E. urophylla × E. grandis in GuangXi	P. massoniana in GuangXi	<i>C. lanceolata</i> in GuangXi	E. urophylla × E. grandis in YunNan	P. massoniana in YunNan	C. lanceolata in YunNan
<i>E. urophylla</i> \times <i>E. grandis</i> in FuJian <i>P. massoniana</i> in FuJian		3 ¹	2	3 ²	4 ³	0	1	0	0	0	0	0
			3	4	5	0	1	1	0	0	0	0
C. lanceolata in FuJian				3	3	0	1	0	0	0	0	0
<i>E. urophylla</i> \times <i>E. grandis</i> in GuangDong					5	0	1	0	0	0	0	0
P. massoniana in GuangDong						0	1	0	0	0	0	0
C. lanceolata in GuangDong							0	0	0	0	0	0
E. urophylla \times E. grandis in GuangXi								0	0	0	0	0
P. massoniana in GuangXi									0	0	0	0
C. lanceolata in GuangXi										0	0	0
E. urophylla × E. grandis in YunNan											0	0
P. massoniana in YunNan												0
C. lanceolata in YunNan												

¹ Number highlighted in blue indicates number of shared genotypes between different tree species in the same sampled site (province). ² Number highlighted in yellow indicates number of shared genotypes between different sampled sites of the same tree species. ³ Number highlighted in grey indicates number of shared genotypes between different sampled sites of different tree species.



Appendix F. Phylogenetic Tree of *Calonectria* Species Based on Maximum Likelihood (ML) Analysis of the DNA Dataset of *tef1*, *tub2*, *cmdA*, *his3*, *rpb2*, and *act* Gene Sequences

Figure A1. Cont.



0.01

Figure A1. Phylogenetic tree of *Calonectria* species based on maximum likelihood (ML) analysis of the DNA dataset of the *tef1* gene sequences. Bootstrap support values \geq 70% from ML analysis and posterior probabilities values \geq 0.95 obtained from Bayesian inference (BI) are indicated at the nodes as ML/BI. Bootstrap values < 70% or posterior probabilities values < 0.95 are marked with "*", and absent analysis values are marked with "-". "*/*", "*/-", "-/*", and "-/-" are not displayed. Isolates obtained in this study are highlighted in blue and bold. Ex-type isolates are indicated with "T". The "B" species codes are consistent with the recently published results of Liu and co-authors [30]. *Curvicladiella cignea* (CBS 109167 and CBS 109168) was used as the outgroup taxon.



Figure A2. Cont.



Figure A2. Phylogenetic tree of *Calonectria* species based on maximum likelihood (ML) analysis of the DNA dataset of the *tub2* gene sequences. Bootstrap support values \geq 70% from ML analysis and posterior probabilities values \geq 0.95 obtained from Bayesian inference (BI) are indicated at the nodes as ML/BI. Bootstrap values < 70% or posterior probabilities values < 0.95 are marked with "*", and absent analysis values are marked with "-". "*/*", "*/-", "-/*", and "-/-" are not displayed. Isolates obtained in this study are highlighted in blue and bold. Ex-type isolates are indicated with "T". The "B" species codes are consistent with the recently published results of Liu and co-authors [30]. *Curvicladiella cignea* (CBS 109167 and CBS 109168) was used as the outgroup taxon.


Figure A3. Cont.



Figure A3. Phylogenetic tree of *Calonectria* species based on maximum likelihood (ML) analysis of the DNA dataset of the *cmdA* gene sequences. Bootstrap support values \geq 70% from ML analysis and posterior probabilities values \geq 0.95 obtained from Bayesian inference (BI) are indicated at the nodes as ML/BI. Bootstrap values < 70% or posterior probabilities values < 0.95 are marked with "*", and absent analysis values are marked with "-". "*/*", "*/-", "-/*", and "-/-" are not displayed. Isolates obtained in this study are highlighted in blue and bold. Ex-type isolates are indicated with "T". The "B" species codes are consistent with the recently published results of Liu and co-authors [30]. *Curvicladiella cignea* (CBS 109167 and CBS 109168) was used as the outgroup taxon.



Figure A4. Cont.



Figure A4. Phylogenetic tree of *Calonectria* species based on maximum likelihood (ML) analysis of the DNA dataset of the *his3* gene sequences. Bootstrap support values \geq 70% from ML analysis and posterior probabilities values \geq 0.95 obtained from Bayesian inference (BI) are indicated at the nodes as ML/BI. Bootstrap values < 70% or posterior probabilities values < 0.95 are marked with "*", and absent analysis values are marked with "-". "*/*", "*/-", "-/*", and "-/-" are not displayed. Isolates obtained in this study are highlighted in blue and bold. Ex-type isolates are indicated with "T". The "B" species codes are consistent with the recently published results of Liu and co-authors [30]. *Curvicladiella cignea* (CBS 109167 and CBS 109168) was used as the outgroup taxon.



Figure A5. Cont.



0.01

Figure A5. Phylogenetic tree of *Calonectria* species based on maximum likelihood (ML) analyses of the DNA dataset of the *rpb2* gene sequences. Bootstrap support values \geq 70% from ML analysis and posterior probabilities values \geq 0.95 obtained from Bayesian inference (BI) are indicated at the nodes as ML/BI. Bootstrap values < 70% or posterior probabilities values < 0.95 are marked with "*", and absent analysis values are marked with "-". "*/*", "*/-", "-/*", and "-/-" are not displayed. Isolates obtained in this study are highlighted in blue and bold. Ex-type isolates are indicated with "T". The "B" species codes are consistent with the recently published results of Liu and co-authors [30]. *Curvicladiella cignea* (CBS 109167 and CBS 109168) was used as the outgroup taxon.



Figure A6. Cont.



Figure A6. Phylogenetic tree of *Calonectria* species based on maximum likelihood (ML) analysis of the DNA dataset of the *act* gene sequences. Bootstrap support values \geq 70% from ML analyses and posterior probabilities values \geq 0.95 obtained from Bayesian inference (BI) are indicated at the nodes as ML/BI. Bootstrap values < 70% or posterior probabilities values < 0.95 are marked with "*", and absent analysis values are marked with "-". "*/*", "*/-", "-/*", and "-/-" are not displayed. Isolates obtained in this study are highlighted in blue and bold. Ex-type isolates are indicated with "T". The "B" species codes are consistent with the recently published results of Liu and co-authors [30]. *Curvicladiella cignea* (CBS 109167 and CBS 109168) was used as the outgroup taxon.

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