

Table S3. Unique endophytic fungi in different species, different locations, and different tissues. For the unique endophytic fungi of *Acrostichum speciosum* or *A. aureum*, the superscript letters Z, W, and H respectively indicate that the unique endophytic fungi are only distributed in one location (Zhanjiang, Wenchang, or Haikou), and the letters L, P, R, and RS respectively indicate that the unique endophytic fungi are only distributed in one tissue (leaves, petiole, roots, or rhizomes), and if there is no superscript letter, it means that the unique endophytic fungi are distributed in two or more locations or tissues. The unique endophytic fungi of a certain location or tissue exist simultaneously in *A. speciosum* and *A. aureum*.

<i>Acrostichum speciosum</i> Willd. only	<i>Acrostichum aureum</i> L. only	Zhanjiang area only	Wenchang area only	Haikou area only	Leaf only	Petiole only	Root only	Root stock only
Alfaria ^{H,R}	Achroistachys	Coprinellus	Scleroramularia	Verruculina	/	Umbelopsis	/	Pileomyces
Alloconiothyrium ^{Z,RS}	Acrophialophora	Waitea	Phialemonium	Eupenidiella				Deconica
Apiosordaria ^{Z,RS}	Anthracoecystis ^{Z,R}	Gliocladiopsis						Lasionectria
Apodus ^{H,L}	Arthrographis	Septobasidium						Graphium
Beltrania ^L	Ascobolus	Lodderomyces						Exidia
Cabalodontia ^{W,P}	Ascotaiwania ^{H,RS}	Kockovaella						Trematosphaeria
Calonectria ^{Z,R}	Badarisama	Mariannaea						
Conidiobolus ^{Z,L}	Bartalinia ^{Z,R}	Golubevia						
Cordana ^{W,RS}	Basidiobolus	Saitozyma						
Curvibasidium ^{Z,L}	Bionectria ^Z	Paraglomus						
Cystobasidiopsis ^{Z,L}	Bisifusarium ^{Z,RS}	Setophoma						
Debaryomyces ^{W,RS}	Blakeslea ^{Z,RS}	Pseudopestalotio psis						
Endophragmiella ^L	Blastobotrys	Montagnula						
Epulorhiza ^{H,RS}	Brachyphoris ^{Z,RS}	Pileomyces						

Geminibasidium ^R	Bryochiton ^{Z,RS}	Lentinus
Hemileucoglossum ^W	Chaetosphaeronema	Graphium
Hermatomyces	Chalara ^L	Gigaspora
Heterochaete	Choanephora	Clavulina
Knufia ^{Z,P}	Chrysosporium ^{H,RS}	
Kwoniella ^{W,P}	Ciboria	
Leptosphaerulina ^{W,RS}	Claroideoglomus	
Lunulospora ^{W,R}	Clinoconidium ^{Z,L}	
Marasmius ^{Z,P}	Coprinopsis	
Metacordyceps ^W	Cortinarius ^Z	
Microcera ^{Z,RS}	Cyberlindnera ^{Z,RS}	
Monodictys ^{W,P}	Daldinia	
Myriangium ^{Z,L}	Dinomyces ^{Z,RS}	
Myxocephala	Discosia ^{Z,R}	
Myxospora ^{Z,RS}	Diversispora ^{Z,R}	
Panaeolus ^{Z,L}	Duddingtonia	
Phlebiopsis	Entoloma	
Pseudofusicoccum	Funneliformis	
Pyrenula ^{Z,RS}	Gamsia	
Readeriellipsoidis ^{Z,RS}	Gastrum ^{Z,RS}	
Rhodosporidiobolus	Gibellulopsis ^{Z,RS}	
Ruinenia ^{RS}	Golovinomyces ^{Z,L}	
Sistotremastrum ^{W,P}	Grammothele	
Stomiopeltis ^{Z,L}	Halosarpheia	
Sympodiomyces ^{Z,L}	Hansfordia ^{Z,L}	
Tremella	Hemimycena ^{Z,R}	

Volutella ^{Z,RS}

Wickerhamomyces ^{Z,RS}

Hirsutella ^{Z,L}

Hormonema ^{W,P}

Hyalorbilia ^{Z,RS}

Iodophanus ^{W,P}

Issatchenkia

Itersonilia ^{Z,RS}

Lactarius ^{W,P}

Latorua ^{W,P}

Lectera ^{Z,RS}

Lentinula ^{Z,RS}

Leotia ^{Z,L}

Macrophomina

Magnaporthe ^{Z,RS}

Metapochonia ^{RS}

Minimedusa

Monosporascus ^{Z,RS}

Mucor ^Z

Mycoarthris ^{Z,R}

Mycotribulus ^Z

Myrothecium

Neoascochyta

Ochroconis ^Z

Paecilomyces ^Z

Paraphoma

Peniophorella ^{H,L}

Peziza

Phanerochaete^{Z,RS}
Phyllozyma
Poaceascoma^{Z,RS}
Polystigma
Pseudaleuria
Pseudopithomyces
Pseudozyma^Z
Ramariopsis^{Z,R}
Ramicandelaber^{Z,RS}
Recurvomyces^{Z,RS}
Rhexodenticula^Z
Rhizophlyctis
Rhizophydium
Russula^Z
Sagenomella
Savoryella^H
Sclerotinia
Scolecobasidium^{Z,R}
Setophaeosphaeria
^{H,RS}
Sonoraphlyctis^{Z,R}
Sordaria
Sphaeropsis
Spissiomycetes
Stagonospora^{Z,RS}
Striatibotrys^{Z,R}

Tetracladium

Thielavia ^{Z,R}

Trametes ^{H,P}

Trechispora ^{RS}

Tricharina ^{Z,R}

Westerdykella

Wiesneriomyces ^{Z,R}

Xylaria ^{Z,RS}
