



APPENDICES

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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Appendix 1 Sequences used in phylogenetic analysis of *Oxydothis* within Xylariales.

Species	GenBank accession no.	
	ITS nrDNA	28S nrDNA
<i>Amphisphaeria</i> sp.	AF375998	
<i>Arecophila bambusae</i>		AF452038
<i>Arecophila</i> sp.		AF452039
<i>Asordaria arctica</i>	AY681175	
<i>Bartalinia bischofia</i>		AF382367
<i>Bartalinia laurina</i>	AF405302	AF382369
<i>Bartalinia robillardoides</i>	AF405301	
<i>Bertia moriformis</i>		AY695261
<i>Bionectria ochroleuca</i>		AY489716
<i>Bionectria pityrodes</i>		AY489728
<i>Cainia graminis</i>		AF431949
<i>Camarops tubulina</i>		AY346266
<i>Camarops ustulinoides</i>		AY346267
<i>Chaetomium globosum</i>		AF286403
<i>Clypeosphaeria mamillana</i>	AF009808	
<i>Cryptosphaeria pullmanensis</i>	AJ302419	
<i>Cryptosphaeria subcutanea</i>	AJ302420	
<i>Diatrype bullata</i>	DQ006946	

(Table continued)

Species	GenBank accession no.	
	ITS nrDNA	28S nrDNA
<i>Diatrype disciformis</i>		U47829
<i>Diatrype</i> sp.	DQ006957	
<i>Diatrype stigma</i>	AF192323	
<i>Discostroma fuscillum</i>	AF377284	
<i>Discostroma</i> sp.		AF382380
<i>Discostroma tosta</i>	AF009814	
<i>Discostroma tricellulare</i>	AF377285	
<i>Dothidea insculpta</i>		DQ247802
<i>Dothidea sambuci</i>		AY544681
<i>Eutypa armeniaca</i>	DQ006948	
<i>Eutypa lata</i>	DQ006944	
<i>Eutypa</i> sp.		AY346280
<i>Eutypella vitis</i>	DQ006943	
<i>Halorosellinia oceanica</i>		AY083822
<i>Kretzschmaria clavus</i>	AJ390434	
<i>Leupteutypa cupressi</i>		AF382379
<i>Monographella albescens</i>	AJ132506	
<i>Monographella albescens</i>	AJ132509	
<i>Muscodor albus</i>	AY244622	

(Table continued)

Species	GenBank accession no.	
	ITS nrDNA	28S nrDNA
<i>Muscodor albus</i>	AY527044	
<i>Nitschhia grevillei</i>		AY346294
<i>Oxydothis cyrtostachicola</i>	DQ 660334	DQ 660337
<i>Oxydothis daemonoropsicola</i>	DQ 660335	DQ 660338
<i>Oxydothis frondicola</i>	AF009803	AY083835
<i>Oxydothis inaequalis</i>	DQ 660336	DQ 660339
<i>Pestalotiopsis versicolor</i>	DQ334862	AF382357
<i>Pestalotiopsis westerdijkii</i>	DQ137856	
<i>Seiridium cardinale</i>	AF377298	AF382377
<i>Seiridium unicorne</i>	AF377299	
<i>Sordaria fimicola</i>	AY681188	AY780079
<i>Truncatella angustata</i>	DQ093715	
<i>Ustulina deusta</i>	AF201718	
<i>Xylaria acuta</i>		AY544676
<i>Xylaria arbuscula</i>	AY183369	
<i>Xylaria hypoxylon</i>	AY327478	AY544648
<i>Xylaria mali</i>	AF163040	
<i>Xylaria polymorpha</i>	AF163042	
<i>Xylaria</i> sp.	AY315404	

Appendix 2 Sequences used in the phylogenetic analysis of *Cercospora arecacearum* and related species.

No.	GenBank Accession No.	Species
1	AY752140	<i>Cercospora acaciae-mangii</i>
2	AY647237	<i>Cercospora agavicola</i>
3	DQ233319	<i>Cercospora apii</i>
4	DQ233318	<i>Cercospora apii</i>
5	EU581822	<i>Cercospora arecacearum</i>
6	AF297229	<i>Cercospora asparagi</i>
7	EF600954	<i>Cercospora fukushiana</i>
8	AY752137	<i>Cercospora beticola</i>
9	AY266164	<i>Cercospora canescens</i>
10	EF535687	<i>Cercospora capsici</i>
11	AF284388	<i>Cercospora caricis</i>
12	AY266163	<i>Cercospora hayi</i>
13	AY633838	<i>Cercospora kikuchii</i>
14	DQ835072	<i>Cercospora penzigii</i>
15	DQ835073	<i>Cercospora physalidis</i>
16	DQ835075	<i>Cercospora piaropi</i>
17	EF535652	<i>Cercospora polygonacea</i>
18	DQ835082	<i>Cercospora rodmanii</i>

(Table continued)

No.	GenBank Accession No.	Species
19	AF297232	<i>Cercospora sorghi</i> f. <i>maydis</i>
20	AF291709	<i>Cercospora zea-maydis</i>
21	AF393689	<i>Cladosporium cladosporioides</i>
22	AY361959	<i>Davidiella tassiana</i>
23	AF362053	<i>Passalora ampelopsidis</i>
24	AY266154	<i>Passalora arachidicola</i>
25	AF284389	<i>Passalora henningsii</i>
26	EU514280	<i>Passalora loranthi</i>
27	EU514279	<i>Passalora loranthi</i>
28	EF535719	<i>Pseudocercospora abelmoschi</i>
29	EF535677	<i>Pseudocercospora araliae</i>
30	AF309595	<i>Pseudocercospora basiramifera</i>
31	AF309599	<i>Pseudocercospora eucalyptorum</i>
32	EF535713	<i>Pseudocercospora lythri</i>
33	EU514283	<i>Pseudocercospora indonesiana</i>
34	DQ267602	<i>Pseudocercospora paraguayensis</i>
35	EF535714	<i>Pseudocercospora rhoina</i>

Appendix 3 Sequences used in the analysis of *Fusarium sansainensis* and related species.

No.	GenBank Accession No.	Species
1	AF493964	<i>Calonectria kyotensis</i>
2	AF493966	<i>Calonectria morganii</i>
3	AF231959	<i>Calonectria pteridis</i>
4	AY078115	<i>Calonectria pyrochroa</i>
5	AF231971	<i>Calonectria rumohrae</i>
6	AY147190	<i>Calonectria spathiphylli</i>
7	AF231962	<i>Cylindrocladium theae</i>
8	AF231961	<i>Cylindrocladium theae</i>
9	FJ240310	<i>Fusarium aethiopicum</i>
10	FJ240309	<i>Fusarium aethiopicum</i>
11	FJ441006	<i>Fusarium chlamydosporum</i>
12	EU214561	<i>Fusarium chlamydosporum</i>
13	U61680	<i>Fusarium denticulatum</i>
14	FJ459975	<i>Fusarium equiseti</i>
15	FJ459976	<i>Fusarium equiseti</i>
16	AY633745	<i>Fusarium incarnatum</i>
17	FJ459980	<i>Fusarium lateritium</i>

(Table continued)

No.	GenBank Accession No.	Species
18	FJ459982	<i>Fusarium lateritium</i>
19	FJ459977	<i>Fusarium lateritium</i>
20	EF568056	<i>Fusarium nygamai</i>
21	FJ233193	<i>Fusarium oxysporum</i>
22	FJ196767	<i>Fusarium oxysporum</i>
23	EU835477	<i>Fusarium proliferatum</i>
24	EU835478	<i>Fusarium proliferatum</i>
25	FJ441013	<i>Fusarium redolens</i>
26	EU281661	<i>Fusarium redolens</i>
27	Unsubmitted	<i>Fusarium sansainensis</i>
28	FJ460589	<i>Fusarium solani</i>
29	FJ459973	<i>Fusarium solani</i>
30	FJ238109	<i>Fusarium sporotrichioides</i>
31	FJ238107	<i>Fusarium sporotrichioides</i>
32	FJ233196	<i>Fusarium tricinctum</i>
33	FJ459979	<i>Fusarium tricinctum</i>
34	FJ240313	<i>Fusarium vorosii</i>
35	FJ240315	<i>Fusarium vorosii</i>
36	EU401574	<i>Hypocrea orientalis</i>

(Table continued)

No.	GenBank Accession No.	Species
37	AF220979	<i>Glionectria tenua</i>
38	AF220980	<i>Glionectria tenua</i>
39	AF220976	<i>Leuconectria clusiae</i>
40	EF121859	<i>Leuconectria grandis</i>
41	AF150480	<i>Nectria haematococca</i>
42	AF220960	<i>Nectricladiella camelliae</i>
43	AF220955	<i>Nectricladiella infestans</i>
44	AY381142	<i>Neocosmospora vasinfecta</i>
45	AF178412	<i>Neocosmospora africana</i>
46	AF178413	<i>Neocosmospora ornamentata</i>
47	FJ430736	<i>Neonectria lungdunensis</i>
48	FJ205449	<i>Neonectria macrodidyma</i>
49	FJ430731	<i>Neonectria radicolica</i>
50	EF121867	<i>Neonectria</i> sp.
51	EF121866	<i>Neonectria veuillotiana</i>
52	EU401572	<i>Trichoderma longibrachiatum</i>
53	DQ914740	<i>Volutella ciliata</i>
54	AJ301966	<i>Volutella ciliata</i>
55	EF029211	<i>Volutella</i> sp.
56	AF220982	<i>Xenocalonectria serpens</i>
57	AF261744	<i>Xenocylindrocladium serpens</i>

Appendix 4 Sequences used in the phylogenetic analysis of *Dictyochoeta wallichianensis*.

GenBank Accession No.	Name
AY587912	<i>Cercophora sparsa</i>
AF178541	<i>Chaetosphaeria abietis</i>
AF178553	<i>Chaetosphaeria acutata</i>
AF178555	<i>Chaetosphaeria callimorpha</i>
AF178542	<i>Chaetosphaeria chloroconia</i>
AY906944	<i>Chaetosphaeria ellisii</i>
AY906943	<i>Chaetosphaeria ellisii</i>
AF178557	<i>Chaetosphaeria dilabens</i>
AF178562	<i>Chaetosphaeria fennica</i>
AF178554	<i>Chaetosphaeria fusiformis</i>
AY906955	<i>Chaetosphaeria hebetiseta</i>
AF178564	<i>Chaetosphaeria inaequalis</i>
AY906956	<i>Chaetosphaeria innumera</i>
AY906946	<i>Chaetosphaeria lapaziana</i>
AY906947	<i>Chaetosphaeria lapaziana</i>
AY906945	<i>Chaetosphaeria lapaziana</i>
AF178548	<i>Chaetosphaeria lentomita</i>
AF178552	<i>Chaetosphaeria myriocarpa</i>
AY906948	<i>Chaetosphaeria panamensis</i>

(Table continued)

GenBank Accession No.	Name
AF178561	<i>Chaetosphaeria preussii</i>
AF178543	<i>Chaetosphaeria pulviscula</i>
AF178545	<i>Chaetosphaeria pygmaea</i>
AY906952	<i>Chaetosphaeria raciborskii</i>
AY906954	<i>Chaetosphaeria rubricunda</i>
DQ914666	<i>Chaetosphaeria talbotii</i>
AF178547	<i>Chaetosphaeria tulasneorum</i>
AF178550	<i>Chaetosphaeria vermicularioides</i>
AF178544	<i>Chloridium lignicola</i>
EU938675	<i>Chloridium paucisporum</i>
EF029220	<i>Chloridium virescens</i> var. <i>chlamydosporum</i>
AF178556	<i>Codinaeopsis gonytrichoides</i>
AM267269	<i>Custingophora olivacea</i>
AF178560	<i>Cylindrotrichum hennebertii</i>
AF178540	<i>Dictyochaeta fertilis</i>
EF029233	<i>Dictyochaeta simplex</i>
EF029193	<i>Dictyochaeta simplex</i>
Unsubmitted	<i>Dictyochaeta wallichianensis</i>
AY587914	<i>Lasiosphaeria glabrata</i>
AF081478	<i>Melanopsamma pomiformis</i>

(Table continued)

GenBank Accession No.	Name
AF178558	<i>Menispora tortuosa</i>
AF083191	<i>Phialophora phaeophora</i>
AF178563	<i>Porosphaerella cordanophora</i>
EU139244	<i>Porosphaerella cordanophora</i>
AF178546	<i>Striatosphaeria codinaeophora</i>

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Appendix 5 List of all taxa found on fronds of *Wallichia siamensis* are shown with total number recorded, % Occurrence and % Abundance. The first letter of the acronym codes for the pseudo-systematic position of a taxon: A = Ascomycetes, H = Hyphomycetes, C = Coelomycetes.

No.	Acronym	Name	Σ Records	% Occurrence	% Abundance
1	AMOREI	<i>Morenoina palmicola</i> J. Fröhl., K.D. Hyde & Joanne E. Taylor	42	28	3.9
2	AASTRO	<i>Astrosphaeriella fronsicola</i> J. Fröhl. & K.D. Hyde	7	4.7	0.7
3	ALOPHIOS	<i>Lophiostoma macrostomum</i> (Tode) Ces. & De Not.	66	44	6.1
4	AOXYDAEM	<i>Oxydothis daemonoropicola</i> J. Fröhl. & K.D. Hyde	46	30.7	4.3
5	AANTHOPUIG	<i>Anthostomella puiggarii</i> Speg.	15	10	1.4
6	ADIAPOR	<i>Diaporthe palmarum</i> Joanne E. Taylor, K.D. Hyde & E.B.G. Jones	16	10.7	1.5
7	AVENTUR	<i>Apiosporina rhapsicola</i> Hidayat & To-anun, sp. nov.	9	6	0.8
8	APROTO	<i>Protocreopsis pertusa</i> (Pat.) Samuels & Rossman	8	5.3	0.7
9	ABIONEC	<i>Bionectria</i> sp.	7	4.7	0.7
10	ACHAETO	<i>Chaetosphaeria fusiformis</i> W. Gams & Hol.-Jech.	6	4	0.6
11	AGRIPHO	<i>Submersisphaeria suthepensis</i> Hidayat & To-anun, sp. nov.	15	10	1.4
12	AARECO	<i>Areomyces frondicola</i> K.D. Hyde	36	24	3.3
13	ABOTRYO	<i>Botryosphaeria obtusa</i> (Schwein.) Shoemaker	13	8.7	1.2
14	AROSELL	<i>Rosellinia victoriae</i> Syd. & P. Syd.	3	2	0.3
15	ARACHID	<i>Rachidicola obclavatum</i> Hidayat & To-anun, sp. nov.	22	14.7	2
16	APSEUDO	<i>Pseudohalonectria palmicola</i> K. D. Hyde, Joanne E. Taylor & J. Fröhl.	4	2.7	0.4
17	AAPIOS	<i>Apiospora siamicola</i> Hidayat & To-anun, sp. nov.	9	6	0.8
18	ATERRI	<i>Terriera brevis</i> (Berk.) P.R. Johnst.	21	14	2
19	ADIATRY	<i>Diatrype chlorosarca</i> Berk. & Broome	9	6	0.8
20	CCHACAR	<i>Chaetospermum chaetosporum</i> (Pat.) Smith & Ramsbottom	51	34	4.7

(Table continued)

No.	Acronym	Name	Σ Records	% Occurrence	% Abundance
21	CLASDI	<i>Lasiodiplodia theobromae</i> (Pat.) Griffon & Maubl.	28	18.7	2.6
22	CCONIOS	<i>Conioscypha lignicola</i> Höhn.	21	14	2
23	HELLIS	<i>Ellisemia</i> sp.	20	13.3	1.9
24	HHERMA	<i>Hermatomyces tucumanensis</i> Speg.	9	6	0.8
25	HARTHRI	<i>Arthrimum phaeospermum</i> (Corda) M.B. Ellis	29	19.3	2.7
26	HHYPHO	<i>Hyphomycetes</i> sp.1	36	24	3.3
27	HDICTYO	<i>Dictyosporium heptasporum</i> (Garov.) Damon	8	5.3	0.7
28	HACREM	<i>Acremonium alternatum</i> Link	12	8	1.1
29	HPETRAK	<i>Petrakia echinata</i> (Peglion) Syd. & P. Syd.	6	4	0.6
30	HMONOD	<i>Monodictys putredinis</i> (Wallr.) S. Hughes	5	3.3	0.5
31	HACROD	<i>Acrodictys bambusicola</i> M.B. Ellis	7	4.7	0.7
32	HSPORID	<i>Sporidesmium</i> sp.	11	7.3	1
33	HTORHER	<i>Torula herbarum</i> (Pers.) Link	34	22.7	3.2
34	AOPHIO	<i>Ophioceras tenuisporum</i> Shearer, J.L. Crane & W. Chen	38	25.3	3.5
35	AOXYINA	<i>Oxydothis inaequalis</i> Hidayat, To-anun & K.D. Hyde	21	14	2
36	AMYEOS	<i>Myelosperma tumidum</i> Syd. & P. Syd.	52	34.7	4.8
37	CCOLLET	<i>Colletotrichum</i> <i>gloeosporioides</i> (Penz.) Penz. & Sacc.	25	16.7	2.3
38	AROUSS	<i>Roussoëlla palmicola</i> J. Fröhl., K.D. Hyde & Aptroot	19	12.7	1.8
39	ADIDYM	<i>Didymosphaeria calamicola</i> Aptroot, J. Fröhl. & K.D. Hyde	15	10	1.4
40	AOXYWALL	<i>Oxydothis wallichianensis</i> Hidayat, To-Anun & K.D. Hyde	27	18	2.5
41	CPHOMA	<i>Phoma</i> sp.	15	10	1.4
42	AGLOMER	<i>Glomerella cingulata</i> (Stoneman) Spald. & H. Schrenk	19	12.7	1.8
43	AMASSARI	<i>Massarina palmicola</i> K.D. Hyde & Aptroot	15	10	1.4
44	APEMPHI	<i>Pemphidium rattanicola</i> J.Fröhl. & K.D. Hyde	18	12	1.7
45	ALACHPAL	<i>Lachnum palmae</i> (Kanouse) Spooner	10	6.7	0.9

(Table continued)

No.	Acronym	Name	Σ Records	% Occurrence	% Abundance
46	CERIOS	<i>Eriosporella calami</i> (Niessl) Höhn.	7	4.7	0.7
47	AMYCOSPHA	<i>Mycosphaerella wallichiae</i> Hidayat and To-anun, sp. nov.	37	24.7	3.4
48	ATRICHOT	<i>Trichothyria alpestris</i> (Sacc.) Petr.	14	9.3	1.3
49	AGUIG	<i>Guignardia uniappendiculatum</i> Hidayat & To-anun, sp. nov.	16	10.7	1.5
50	APESPHA	<i>Pestalospaeria elaeidis</i> (C. Booth & J.S. Robertson) Aa	8	5.3	0.7
51	CPESTALO	<i>Pestalotiopsis guepinii</i> (Desm.) Steyaert	42	28	3.9
52	CPHOMOP	<i>Phomopsis caryotae-urentis</i> Petr. & Cif.	10	6.7	0.9
53	AANTHOLIM	<i>Anthostomella limitata</i> Sacc.	10	6.7	0.9
54	AFASCIT	<i>Fasciatispora petrakii</i> (Mhaskar & V.G. Rao) K.D. Hyde	24	16	2.2
55	HWIESNER	<i>Wiesneriomyces laurinus</i> (Tassi) P.M. Kirk	3	2	0.3

(Table continued)

No.	Acronym	Name	Microhabitats	Σ Records	% Occurrence	% Recurrence	% Abundance	Site1	Site2	Site3	Site4	Site5
6	ADIAPOR	<i>Diaporthe palmarum</i> Joanne E. Taylor, K.D. Hyde & E.B.G. Jones	Pinna Primary rachis Secondary rachis	16	32	100	3.5	6	0	10	0	0
7	AVENTUR	<i>Apiosporina rhapsisicola</i> Hidayat & To-anun, sp. nov.	Pinna Primary rachis Secondary rachis	9	18	100	2	0	0	1	0	8
8	APROTO	<i>Protocroopsis pertusa</i> (Pat.) Samuels & Rossman	Pinna Primary rachis Secondary rachis	8	16	100	1.8	0	0	0	0	8
9	ABIONEC	<i>Bionectria</i> sp.	Pinna Primary rachis Secondary rachis	7	14	100	1.5	0	0	0	0	7
10	ACHAETO	<i>Chaetosphaeria fusiformis</i> W. Gams & Hol.-Jeck.	Pinna Primary rachis Secondary rachis	6	12	100	1.3	0	0	0	0	6
11	AGRIPOH	<i>Submersisphaeria suthepensis</i> Hidayat & To-anun, sp. nov.	Pinna Primary rachis Secondary rachis	15	30	100	3.3	8	0	0	7	0

(Table continued)

No.	Acronym	Name	Microhabitats	Σ Records	% Occurrence	% Recurrence	% Abundance	Site1	Site2	Site3	Site4	Site5
17	AAPIOS	<i>Apiospora stamicola</i> Hidayat & To-anun, sp. nov.	Pinna	5	10	55.6	1.3	0	0	0	5	0
18	ATERRI	<i>Terriera brevis</i> (Berk.) P.R. Johnst.	Pinna	9	18	42.9	2	0	0	0	0	9
			Primary rachis									
			Secondary rachis	12	24	57.1	5.1	0	0	0	6	6
19	ADIATRY	<i>Diatrype chlorosarca</i> Berk. & Broome	Pinna	9	18	100	2	9	0	0	0	0
			Primary rachis									
			Secondary rachis									
20	CCHACAR	<i>Chaetospermum chaetosporum</i> (Pat.) Smith & Ramsbottom	Pinna	28	56	54.9	6.2	8	5	5	5	5
			Primary rachis									
			Secondary rachis	23	46	45.1	9.7	4	5	5	3	6
21	CLASDI	<i>Lasiodiplodia theobromae</i> (Pat.) Griffon & Maubl.	Pinna	12	24	42.9	2.7	0	6	0	0	6
			Primary rachis									
			Secondary rachis	16	32	57.1	6.8	8	0	8	0	0

(Table continued)

No.	Acronym	Name	Microhabitats	Σ Records	% Occurrence	% Recurrence	% Abundance	Site1	Site2	Site3	Site4	Site5
22	CCONIOS	<i>Conioscypha lignicola</i> Höhn.	Pinna									
			Primary rachis	12	24	57.1	2.7	5	0	0	0	7
			Secondary rachis	9	18	42.9	3.8	0	0	0	0	9
23	HELLIS	<i>Ellisembia</i> sp.	Pinna									
			Primary rachis	20	40	100	4.4	6	2	2	9	1
			Secondary rachis									
24	HHERMA	<i>Hermatomyces tucumanensis</i> Speg.	Pinna									
			Primary rachis	9	18	100	2	5	1	0	0	3
			Secondary rachis									
25	HARTHRI	<i>Arthrinium phaeospermum</i> (Corda) M.B. Ellis	Pinna									
			Primary rachis	10	20	34.5	2.6	0	5	5	0	0
			Secondary rachis	9	18	31	3.8	0	0	3	2	4
26	HHYPHO	Unidentified Hyphomycetes I	Pinna									
			Primary rachis	18	36	50	4.7	5	7	0	6	0
			Secondary rachis	18	36	50	4	5	0	6	0	7

(Table continued)

No.	Acronym	Name	Microhabitats	Σ Records	% Occurrence	% Recurrence	% Abundance	Site1	Site2	Site3	Site4	Site5
27	HDICTYO	<i>Dictyosporium heptasporum</i> (Garov.) Damon	Pinna									
			Primary rachis	8	16	100	1.8	2	2	0	0	4
			Secondary rachis									
28	HACREM	<i>Acremonium alternatum</i> Link	Pinna									
			Primary rachis	12	24	100	2.7	5	0	0	7	0
			Secondary rachis									
29	HPETRAK	<i>Petrakia echinata</i> (Peglion) Syd. & P. Syd.	Pinna									
			Primary rachis	6	12	100	1.3	2	0	4	0	0
			Secondary rachis									
30	HMONOD	<i>Monodictys putredinis</i> (Wallr.) S. Hughes	Pinna									
			Primary rachis	5	10	100	1.1	2	0	0	3	0
			Secondary rachis									
31	HACROD	<i>Acrodictys bambusicola</i> M.B. Ellis	Pinna									
			Primary rachis	7	14	100	1.5	0	3	4	0	0
			Secondary rachis									
32	HSPORID	<i>Sporidesmium</i> sp.	Pinna									
			Primary rachis	5	10	45.5	1.1	0	0	0	0	5
			Secondary rachis	6	12	54.5	2.5	6	0	0	0	0

(Table continued)

No.	Acronym	Name	Microhabitats	Σ Records	% Occurrence	% Recurrence	% Abundance	Site1	Site2	Site3	Site4	Site5
33	HTORHER	<i>Torula herbarum</i> (Pers.) Link	Pinna	12	24	35.3	3.1	6	0	0	0	6
			Primary rachis	15	30	44.1	3.3	8	0	0	0	7
			Secondary rachis	7	14	20.6	3	0	7	0	0	0
34	AOPHIO	<i>Ophioceras tenuisporum</i> Shearer, J.L. Crane & W. Chen	Pinna	20	40	52.6	5.2	8	6	0	6	0
			Primary rachis									
			Secondary rachis	18	36	47.4	7.6	8	0	0	10	0
35	AOXYINA	<i>Oxydothis inaequalis</i> Hidayat, To- anun & K.D. Hyde	Pinna									
			Primary rachis									
			Secondary rachis	21	42	100	8.9	7	5	3	2	4
36	AMYELOS	<i>Myelosperma tumidum</i> Syd. & P. Syd.	Pinna	18	36	34.6	4.7	10	0	0	8	0
			Primary rachis									
			Secondary rachis	34	68	65.4	14.3	9	8	7	0	10
37	CCOLLET	<i>Colletotrichum gloeosporioides</i> (Penz.) Penz. & Sacc.	Pinna	22	44	88	5.7	6	4	8	4	0
			Primary rachis									
			Secondary rachis	3	6	12	1.3	0	3	0	0	0

(Table continued)

No.	Acronym	Name	Microhabitats	Σ Records	% Occurrence	% Recurrence	% Abundance	Site1	Site2	Site3	Site4	Site5
38	AROUSS	<i>Rousoëlla palmicola</i> J. Fröhl., K.D. Hyde & Aptroot	Pinna Primary rachis Secondary rachis	19 38	100	8	6	8	0	0	0	5
39	ADIDYM	<i>Didymosphaeria calamicola</i> Aptroot, J. Fröhl. & K.D. Hyde	Pinna Primary rachis Secondary rachis	15 30	100	6.3	6	0	6	0	0	3
40	AOXYWALL	<i>Oxydothis wallichianensis</i> Hidayat, To-Anun & K.D. Hyde	Pinna Primary rachis Secondary rachis	27 54	100	7	10	9	0	0	0	8
41	CPHOMA	<i>Phoma</i> sp.	Pinna Primary rachis Secondary rachis	15 30	100	3.9	6	0	9	0	0	0
42	AGLOMER	<i>Glomerella cingulata</i> (Stoneman) Spald. & H. Schrenk	Pinna Primary rachis Secondary rachis	19 38	100	5	6	0	0	0	6	7

(Table continued)

No.	Acronym	Name	Microhabitats	Σ Records	% Occurrence	% Recurrence	% Abundance	Site1	Site2	Site3	Site4	Site5
43	AMASSARI	<i>Massarina palmicola</i> K.D. Hyde & Aptroot	Pinna Primary rachis Secondary rachis	15	30	100	3.9	7	0	0	0	8
44	APEMPHI	<i>Pemphidium rattanicola</i> J.Fröhl. & K.D. Hyde	Pinna Primary rachis Secondary rachis	18	36	100	4.7	9	0	9	0	0
45	ALACHPAL	<i>Lachnum palmae</i> (Kamouse) Spooner	Pinna Primary rachis Secondary rachis	10	20	100	2.6	0	10	0	0	0
46	CERIOS	<i>Eriosporella calami</i> (Niessl) Höhn.	Pinna Primary rachis Secondary rachis	7	14	100	1.8	0	0	0	0	7
47	AMYCOSPHA	<i>Mycosphaerella wallichiae</i> Hidayat and To-anun, sp. nov.	Pinna Primary rachis Secondary rachis	37	74	100	10	10	0	10	9	8
48	ATRICHOT	<i>Trichothyria alpestris</i> (Sacc.) Petr.	Pinna Primary rachis Secondary rachis	14	28	100	3.6	0	0	8	0	6

(Table continued)

No.	Acronym	Name	Microhabitats	Σ Records	% Occurrence	% Recurrence	% Abundance	Site1	Site2	Site3	Site4	Site5
49	AGUIG	<i>Guignardia uniappendiculatum</i> Hidayat & To-anun, sp. nov.	Pinna Primary rachis Secondary rachis	16	32	100	4.1	8	0	0	0	8
50	APESPHA	<i>Pestalotphaeria elaeidis</i> (C. Booth & J.S. Robertson) Aa	Pinna Primary rachis Secondary rachis	8	16	100	2.1	8	0	0	0	0
51	CPESTALO	<i>Pestalotiopsis guepinii</i> (Desm.) Steyaert	Pinna Primary rachis Secondary rachis	42	84	100	10.9	8	8	9	8	9
52	CPHOMOP	<i>Phomopsis caryotae-trentis</i> Petr. & Cif.	Pinna Primary rachis Secondary rachis	10	20	100	2.6	6	4	0	0	0
53	AANTHOLIM	<i>Anthostomella limitata</i> Sacc.	Pinna Primary rachis Secondary rachis	10	20	100	2.6	5	0	0	5	0

(Table continued)

No.	Acronym	Name	Microhabitats	Σ Records	% Occurrence	% Recurrence	% Abundance	Site1	Site2	Site3	Site4	Site5
54	AFASCIT	<i>Fasciatispora petrakii</i> (Mhaskar & V.G. Rao) K.D. Hyde	Pinna Primary rachis Secondary rachis	24	48	100	6.2	8	0	8	0	8
55	HWIESNER	<i>Wiesneriomyces laurinus</i> (Tassi) P.M. Kirk	Pinna Primary rachis Secondary rachis	3	6	100	0.8	3	0	0	0	0

Appendix 7 List of all taxa found on fronds of *Wallichia siamensis* are shown with total number recorded and % Abundance. The first letter of the acronym codes for the pseudo-systematic position of a taxon: A = Ascomycetes, H = Hyphomycetes, C = Coelomycetes.

No.	Acronyms	Name	Σ records	% Abundance (Overall)
1	ALOPMAC	<i>Lophiostoma macrostomum</i> (Tode) Ces. & De Not.	25	3.1
2	AGLOCI	<i>Glomerella cingulata</i> (Stoneman) Spauld. & H. Schrenk	2	0.3
3	ADIATCHLO	<i>Diatrype chlorosarca</i> Berk. & Broome	2	0.3
4	HELLIS	<i>Ellisembia</i> sp.	36	4.5
5	HNIGORYZ	<i>Nigrospora oryzae</i> (Berk. & Broome) Petch	1	0.1
6	HCLADCLA	<i>Cladosporium cladosporioides</i> (Fresen.) G.A. de Vries	6	0.8
7	CLASTHE	<i>Lasiodiplodia theobromae</i> (Pat.) Griffon & Maubl.	42	5.2
8	HTORHER	<i>Torula herbarum</i> (Pers.) Link	35	4.3
9	CCOLLGLO	<i>Colletotrichum gloeosporioides</i> (Penz.) Penz. & Sacc.	3	0.4
10	CCHACAR	<i>Chaetospermum chaetosporum</i> Tassi	63	7.7
11	ABIONEC	<i>Bionectria</i> sp.	14	1.7
12	ADIAPAL	<i>Diaporthe palmarum</i> Joanne E. Taylor, K.D. Hyde & E.B.G. Jones	68	8.5
13	ACHAET	<i>Chaetosphaeria fusiformis</i> W. Gams & Hol.-Jech.	1	0.1
14	CCONILIG	<i>Conioscypha lignicola</i> Höhn.	12	1.5
15	HACROBAM	<i>Acrodictys bambusicola</i> M.B. Ellis	2	0.3
16	HSPIRO	<i>Spiropes penicillium</i> (Speg.) M.B. Ellis	32	4
17	HVERTIC	<i>Verticillium</i> sp.	5	0.6
18	HGYRCIR	<i>Gyothyrix circinata</i> (Berk. & M.A. Curtis) S. Hughes	6	0.8
19	HHERTUC	<i>Hermatomyces tucumanensis</i> Speg.	2	0.3
20	HDICHEP	<i>Dictyosporium heptasporum</i> (Garov.) Damon	7	0.9
21	CPHOM	<i>Phomopsis caryotae-urentis</i> Petr. & Cif.	54	6.7
22	HMONODIC	<i>Monodictys putredinis</i> (Wallr.) S. Hughes	6	0.8
23	HDICTPLOV	<i>Dictyochaeta wallichianensis</i> Hidayat & To-anun, sp. nov.	67	8.2

(Table continued)

No.	Acronyms	Name	Σ records	% Abundance (Overall)
24	AAREFRON	<i>Arecomyces frondicola</i> K.D. Hyde	6	0.8
25	ADIDYM	<i>Didymosphaeria calamicola</i> Aptroot, J. Fröhl. & K.D. Hyde	8	1
26	HCAMPOS	<i>Camposporium antennatum</i> Harkn.	1	0.1
27	ABITUNI	Unidentified Microthyriaceae	3	0.4
28	AOPHITEN	<i>Ophioceras tenuisporum</i> Shearer, J.L. Crane & W. Chen	24	3
29	AOXYDAEM	<i>Oxydothis daemonoropsicola</i> J. Fröhl. & K.D. Hyde	29	3.6
30	HWIESLA	<i>Wiesneriomyces laurinus</i> (Tassi) P.M. Kirk	3	0.4
31	ATERBREV	<i>Terriera brevis</i> (Berk.) P.R. Johnst.	6	0.8
32	HPLEURO	<i>Pleurophragmium</i> sp.	24	3
33	AASTRO	<i>Astrosphaeriella fronsicola</i> J. Fröhl. & K.D. Hyde	5	0.6
34	ABOTRYO	<i>Botryosphaeria obtusa</i> (Schwein.) Shoemaker	5	0.6
35	AMONTAG	<i>Montagnula</i> sp.	26	3.2
36	HARPHA	<i>Arthrinium phaeospermum</i> (Corda) M.B. Ellis	3	0.4
37	AMYETUM	<i>Myelosperma tumidum</i> Syd. & P. Syd.	23	2.9
38	ASPORMIN	<i>Sporormiella minimoides</i> S.I. Ahmed & Cain	4	0.5
39	AUNITUNI	Unidentified unitunicate ascomycetes	2	0.3
40	ARACHI	<i>Rachidicola obclavatum</i> Hidayat & To-anun, sp. nov.	3	0.4
41	AANTHOS	<i>Anthostomella limitata</i> Sacc.	5	0.6
42	HHELICLI	<i>Helicomycetes lilliputeus</i> R.T. Moore	16	2
43	CCOSTROM	Unidentified Coelomycetes 2	8	1
44	CDINEMA	<i>Dinemasporium graminum</i> Lév.	3	0.4
45	CCHALCYL	<i>Chalara cylindrosperma</i> (Corda) S. Hughes	3	0.4
46	CCOESSET	Unidentified Coelomycetes 1	22	2.7
47	HBELPOR	<i>Beltraniella portoricensis</i> (F. Stevens) Piroz. & S.D. Patil	47	5.8
48	HBELRHO	<i>Beltrania rhombica</i> Penz.	29	3.6

(Table continued)

No.	Acronyms	Name	Σ records	% Abundance (Overall)
49	APHEMRAT	<i>Pemphidium rattanicola</i> J. Fröhl. & K.D. Hyde	7	0.9
50	AROUSS	<i>Roussoëlla palmicola</i> J. Fröhl., K.D. Hyde & Aptroot	4	0.5
51	CCEUTH	<i>Ceuthospora palmicola</i> Joanne E. Taylor, K.D. Hyde & E.B.G. Jones	4	0.5
52	HDICISIS	<i>Dictyochaetopsis apicalis</i> (Berk. & M.A. Curtis) Aramb. & Cabello	2	0.3
Total			816	

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Appendix 8 List of taxa recorded on *Wallichia siamensis* with Σ records, % Occurrence, % Recurrence and % Abundance at each microhabitat, treatment and site. The first letter of the acronym codes for the pseudo-systematic position of a taxon: A = Ascomycetes, H = Hyphomycetes, C = Coelomycetes.

No.	Acronym	Name	Location	Σ Records	% Recurrence	% Abundance	% Occurrence									
							Site1	Site2	Site3	Site4	Site5	Site6	Site7	Site8	Site9	Site10
1	ALOPMAC	<i>Lophiostoma macrostromum</i> (Tode) Ces. & De Not.	Hanging Fallen	14 11	56 44	3.3 2.9	50 40	30 30	30 30	20 20	10 20	10 20	10 20	10 20		
2	AGLOCI	<i>Glomerella cingulata</i> (Stoneman) Spauld. & H. Schrenk	Hanging Fallen	2	100	0.5	10			10						
3	ADIATCHLO	<i>Diatrype chlorosarca</i> Berk. & Broome	Hanging Fallen	2	100	0.5	20									
4	HELLIS	<i>Ellisembia</i> sp.	Hanging Fallen	30 6	83.3 16.7	7 1.6	50 20	70 40	30 40	20 20	40 40	40 60	60 60	60 60		
5	HNIGORYZ	<i>Nigrospora oryzae</i> (Berk. & Broome) Petch	Hanging Fallen	1	100	0.2	10									
6	HCLADCLA	<i>Cladosporium cladosporioides</i> (Fresen.) G.A. de Vries	Hanging Fallen	6	100	1.4	20	20		20						
7	CLASTHE	<i>Lasiodiplodia theobromae</i> (Pat.) Griffon & Maubl.	Hanging Fallen	30 12	71.4 28.6	7 3.1	40 40	40 40	80 40	30 40	70 40	40 40	40 40	40 40		
8	HTORHER	<i>Torula herbarum</i> (Pers.) Link	Hanging Fallen	24 11	68.6 31.4	5.6 2.9	100 30	40 40	80 40	80 40	80 40	40 40	40 40	40 40		

(Table continued)

No.	Acronym	Name	Location	Σ Records	% Recurrence	% Abundance	% Occurrence										
							Site1	Site2	Site3	Site4	Site5	Site6	Site7	Site8	Site9	Site10	
49	APHEMRAT	<i>Pemphidium rattanicola</i> J. Fröhl. & K.D. Hyde	Hanging Fallen	7	100	1.8			20		30						20
50	ARO USS	<i>Roussoëlla palmicola</i> J. Fröhl., K.D. Hyde & Aptroot	Hanging Fallen	4	100	1											40
51	CCEUTH	<i>Ceuthospora palmicola</i> Joanne E. Taylor, K.D. Hyde & E.B.G. Jones	Hanging Fallen	4	100	1											40
52	HDICISIS	<i>Dictyochaetopsis apicalis</i> (Berk. & M.A. Curtis) Aramb. & Cabello	Hanging Fallen	2	100	0.5				20							

Appendix 9 Frequency occurrence of all taxa recorded is represented based on various grouping of microhabitat.

No.	Acronym	Name	HPR	HSR	FPR	FSR	OVERALL	PR	SR	HF	FF
1	ALOPMAC	<i>Lophiostoma macrostomum</i> (Tode) Ces. & De Not.	28			22	12.5	14	11	14	11
2	AGLOCI	<i>Glomerella cingulata</i> (Stoneman) Spauld. & H. Schrenk	4				1	2		2	
3	ADIATCHLO	<i>Diatrype chlorosarca</i> Berk. & Broome	4				1	2		2	
4	HELLIS	<i>Ellisembia</i> sp.	34	26	12		18	23	13	30	6
5	HNIGORYZ	<i>Nigrospora oryzae</i> (Berk. & Broome) Petch	2				0.5	1		1	
6	HCLADCLA	<i>Cladosporium cladosporioides</i> (Fresen.) G.A. de Vries	12				3	6		6	
7	CLASTHE	<i>Lasiotiplodia theobromae</i> (Pat.) Griffon & Maubl.	34	26		24	21	17	25	30	12
8	HTORHER	<i>Torula herbarum</i> (Pers.) Link	22	26	22		17.5	22	13	24	11
9	CCOLLGLO	<i>Colletotrichum gloeosporioides</i> (Penz.) Penz. & Sacc.	6				1.5	3		3	
10	CCHACAR	<i>Chaetospermum chaetosporum</i> Tassi	50	44	14	18	31.5	32	31	47	16
11	ABIONEC	<i>Bionectria</i> sp.	28				7	14		14	
12	ADIAPAL	<i>Diaporthe palmarum</i> Joanne E. Taylor, K.D. Hyde & E.B.G. Jones	58	28	32	18	34	45	23	43	25

(Table continued)

No.	Acronym	Name	HPR	HSR	FPR	FSR	OVERALL	PR	SR	HF	FF
13	ACHAET	<i>Chaetosphaeria fusiformis</i> W. Gams & Hol.-Jeck.	2				0.5	1		1	
14	CCONILIG	<i>Conioscypha lignicola</i> Höhn.	12	12			6	6	6	12	
15	HACROBAM	<i>Acrodactys bambusicola</i> M.B. Ellis	4				1	2		2	
16	HSPIRO	<i>Spiropes penicillium</i> (Speg.) M.B. Ellis	18	24	22		16	20	12	21	11
17	HVERTIC	<i>Verticillium</i> sp.	6		4		2.5	5		3	2
18	HGYRCIR	<i>Gyrodactylopsis circinata</i> (Berk. & M.A. Curtis) S. Hughes	8			4	3	4	2	4	2
19	HHERTUC	<i>Hermatomyces lucumanensis</i> Speg.	4				1	2		2	
20	HDICHEP	<i>Dictyosporium heptasporum</i> (Garov.) Damon	6		2	6	3.5	4	3	3	4
21	CPHOM	<i>Phomopsis caryotae-arentis</i> Petr. & Cif.	18	54	14	22	27	16	38	36	18
22	HMONODIC	<i>Monodictys putredinis</i> (Wallr.) S. Hughes	2		10		3	6		1	5
23	HDICTPLOV	<i>Dictyochaeta wallichanensis</i> Hidayat & To-anun, sp. nov.	20		50	64	33.5	35	32	10	57
24	AAREFRON	<i>Arecomyces frondicola</i> K.D. Hyde	12				3	6		6	
25	ADIDYM	<i>Didymosphaeria calamicola</i> Aptroot, J. Fröhl. & K.D. Hyde	2	14			4	1	7	8	
26	HCAMPOS	<i>Camposporium antennatum</i> Harkn.	2				0.5	1		1	
27	ABITUNI	Unidentified bitunicate ascomycetes	6				1.5	3		3	

(Table continued)

No.	Acronym	Name	HPR	HSR	FPR	FSR	OVERALL	PR	SR	HF	FF
28	AOPHITEN	<i>Ophioceras tenuisporum</i> Shearer, J.L. Crane & W. Chen	22		26		12	24		11	13
29	AOXYDAEM	<i>Oxydothis daemonoropiscicola</i> J. Fröhl. & K.D. Hyde	32		26		14.5	29		16	13
30	HWIESLA	<i>Wiesneromyces laurinus</i> (Tassi) P.M. Kirk	6			1.5		3		3	
31	ATERBREV	<i>Terriera brevis</i> (Berk.) P.R. Johnst.	4			8	3	2	4	2	4
32	HPLEURO	<i>Pleurophragmium</i> sp.	8	16	10	14	12	9	15	12	12
33	AASTRO	<i>Astrosphaeriella fronsicola</i> J. Fröhl. & K.D. Hyde		10			2.5		5		5
34	ABOTRYO	<i>Botryosphaeria obtusa</i> (Schwein.) Shoemaker		8	2		2.5	1	4	4	1
35	AMONTAG	<i>Montagnula</i> sp.		32		20	13		26	16	10
36	HARPHA	<i>Arthrinium phaeospermum</i> (Corda) M.B. Ellis		6			1.5		3		3
37	AMYETUM	<i>Myelosperma tumidum</i> Syd. & P. Syd.		20		26	11.5		23	10	13
38	ASFORMIN	<i>Sporormiella minimoides</i> S.I. Ahmed & Cain		8			2		4		4
39	AUNITUNI	Unidentified unitunicate ascomycetes		4			1		2		2
40	ARACHI	<i>Rachidicola obclavatum</i> Hidayat & To-anun, sp. nov.		6			1.5		3		3
41	AANTHOS	<i>Anthostomella limitata</i> Sacc.		10			2.5		5		5
42	HHELICLI	<i>Helicomyces liliputeus</i> R.T. Moore			14	18	8	7	9		16

Appendix 10 List of all taxa found on fronds of *Wallichia siamensis* are shown with total number recorded, % Abundance and % Occurrence. The first letter of the acronym codes for the pseudo-systematic position of a taxon: A = Ascomycetes, H = Hyphomycetes, C = Coelomycetes, Z = Zygomycetes.

No.	Acronyms	Fungi	Σ Records	% Abundance	% Occurrence
1	HHYPHO2	Unidentified Hyphomycetes 2	2	0.5	1.3
2	CPHOM	<i>Phoma</i> sp.	10	2.6	6.7
3	HNIGRO	<i>Nigrospora oryzae</i> (Berk. & Broome) Petch	9	2.3	6
4	HGLIO	<i>Gliocladium penicillioides</i> Corda	59	15.3	39.3
5	HACRE	<i>Acremonium alternatum</i> Link	31	8	20.7
6	AHYPOCRE	Unidentified Hypocreales	1	0.3	0.7
7	AANTHOS	<i>Anthostomella</i> sp.	2	0.5	1.3
8	HARTHRI	<i>Arthrimum phaeospermum</i> (Corda) M.B. Ellis	24	6.2	16
9	CCOLLET	<i>Colletotrichum gloeosporioides</i> (Penz.) Penz. & Sacc.	35	9	23.3
10	AOPHIO	<i>Ophioceras tenuisporum</i> Shearer, J.L. Crane & W. Chen	8	2.1	5.3
11	HPENI	<i>Penicillium</i> sp.	6	1.6	4
12	ZMUCOR	<i>Mucor</i> sp.	6	1.6	4
13	HDACTY	<i>Dactylaria</i> sp.	11	2.8	7.3
14	HZYGO	<i>Zygosporium oscheoides</i> Mont.	3	0.8	2

(Table continued)

No.	Acronyms	Fungi	Σ Records	% Abundance	% Occurrence
15	CPESTALOT	<i>Pestalotiopsis guepinii</i> (Desm.) Steyaert	18	4.6	12
16	HNODULI	<i>Nodulisporium acervatum</i> (Masse) Deighton	1	0.3	0.7
17	HCURVU	<i>Curvularia lunata</i> (Wakker) Boedijn	6	1.6	4
18	CPHOMOS	<i>Phomopsis caryotae- urentis</i> Petr. & Cif.	2	0.5	1.3
19	HHYPHO3	Unidentified Hyphomycetes 3	4	1	2.7
20	CLEPTO	<i>Leptodochiella</i> sp.	8	2.1	5.3
21	HVERONA2	<i>Veronaea</i> sp.2	2	0.5	1.3
22	HPERICO	<i>Periconia byssoides</i> Pers.	12	3.1	8
23	HFUSAR	<i>Fusarium</i> sp.	19	4.9	12.7
24	CDIPLOD	<i>Diplodia</i> sp.	4	1	2.7
25	HCLADO	<i>Cladosporium cladosporioides</i> (Fresen.) G.A. de Vries	17	4.4	11.3
26	HHYPHO1	Unidentified Hyphomycetes 1	1	0.3	0.7
27	HMONOD	<i>Monodictys putredinis</i> (Wallr.) S. Hughes	16	4.1	10.7
28	HPITHO	<i>Pithomyces sacchari</i> (Speg.) M.B. Ellis	10	2.6	6.7
29	AGLOMER	<i>Glomerella cingulata</i> (Stoneman) Spald. & H. Schrenk	1	0.3	0.7
30	HVERONA1	<i>Veronaea botryosa</i> Cif. & Montemart.	8	2.1	5.3
31	HSTILBE2	<i>Stilbella</i> sp.2	2	0.5	1.3
32	HELLIS	<i>Ellisembia</i> sp.	4	1	2.7

(Table continued)

No.	Acronyms	Fungi	Σ Records	% Abundance	% Occurrence
33	ACHAETO	<i>Chaetomium</i> sp.	6	1.6	4
34	HPAECILO	<i>Paecilomyces variotii</i> Bainier	1	0.3	0.7
35	HTORULA	<i>Torula herbarum</i> (Pers.) Link	7	1.8	4.7
36	HSTILBE1	<i>Stilbella</i> sp.1	4	1	2.7
37	HSTACHI	<i>Stachybotrys</i> <i>kampalensis</i> Hansf.	5	1.3	3.3
38	HACROGEN	<i>Acrogenospora</i> <i>sphaerocephala</i> (Berk. & Broome) M.B. Ellis	4	1	2.7
39	APESTALOSPHA	<i>Pestalosphaeria</i> <i>elaeidis</i> (C. Booth & J.S. Robertson) Aa	2	0.5	1.3
40	ZRHIZO	<i>Rhizopus</i> sp.	1	0.3	0.7
41	HBOTRYO	<i>Botryotrichum</i> sp.	6	1.6	4
42	HDICTYOS	<i>Dictyosporium</i> <i>heptasporum</i> (Garov.) Damon	2	0.5	1.3
43	HDICTYOAR	<i>Dictyoarthrinium</i> sp.	1	0.3	0.7
44	HMITTER	<i>Mitteriella zizyphina</i> Syd.	3	0.8	2
45	HSPOROS	<i>Sporoschisma</i> <i>saccardoi</i> E.W. Mason & S. Hughes	1	0.3	0.7
46	ABIONEC	<i>Bionectria</i> sp.	1	0.3	0.7
47	HPERICONIEL	<i>Periconiella cocoës</i> M.B. Ellis	1	0.3	0.7
Total isolates			387		
Total specimens			150		

Appendix 11 List of taxa recorded on *Wallichia siamensis* with Σ records, % Occurrence (% Occ.), % Recurrence (%Rec.) and % Abundance (%Ab.) at each microhabitat and site. The first letter of the acronym codes for the pseudo-systematic position of a taxon: A = Ascomycetes, H = Hyphomycetes, C = Coelomycetes.

No.	Acronyms	Fungi	Microhabitat	Method	% Occ.	% Ab.	Σ Records
1	HHYPHO2	Unidentified Hyphomycetes 2	Pinna	Disinfection	4	2	1
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	4	1.9	1
				Non-disinfection	0	0	0
2	CPHOM	<i>Phoma</i> sp.	Pinna	Disinfection	8	4	2
				Non-disinfection	24	7	6
			Secondary rachis	Disinfection	4	3	1
				Non-disinfection	4	1	1
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
3	HNIGRO	<i>Nigrospora oryzae</i> (Berk. & Broome) Petch	Pinna	Disinfection	12	6	3
				Non-disinfection	8	2	2
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	4	1	1
			Primary rachis	Disinfection	8	3.7	2
				Non-disinfection	4	1.4	1
4	HGLIO	<i>Gliocladium penicillioides</i> Corda	Pinna	Disinfection	40	20	10
				Non-disinfection	56	15	14
			Secondary rachis	Disinfection	20	13	5
				Non-disinfection	20	9	7
			Primary rachis	Disinfection	32	15	8
				Non-disinfection	60	21.43	15

(Table continued)

No.	Acronyms	Fungi	Microhabitat	Method	% Occ.	% Ab.	Σ Records
5	HACRE	<i>Acremonium alternatum</i> Link	Pinna	Disinfection	20	10	5
				Non-disinfection	32	9	8
			Secondary rachis	Disinfection	28	18	7
				Non-disinfection	12	4	3
			Primary rachis	Disinfection	12	5.6	3
				Non-disinfection	20	7.1	5
6	AHYPOCRE	Unidentified Hypocreales	Pinna	Disinfection	4	2	1
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
7	AANTHOS	<i>Anthostomella</i> sp.	Pinna	Disinfection	4	2	1
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	4	3	1
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
8	HARTHRI	<i>Arthrinium phaeospermum</i> (Corda) M.B. Ellis	Pinna	Disinfection	8	4	2
				Non-disinfection	32	9	8
			Secondary rachis	Disinfection	4	3	1
				Non-disinfection	24	7	6
			Primary rachis	Disinfection	20	9.3	5
				Non-disinfection	8	2.9	2
9	CCOLLET	<i>Colletotrichum gloeosporioides</i> (Penz.) Penz. & Sacc.	Pinna	Disinfection	40	20	10
				Non-disinfection	8	2	2
			Secondary rachis	Disinfection	24	15	6
				Non-disinfection	24	7	6
			Primary rachis	Disinfection	32	15	8
				Non-disinfection	12	4.3	3

(Table continued)

No.	Acronyms	Fungi	Microhabitat	Method	% Occ.	% Ab.	Σ Records
10	AOPHIO	<i>Ophioceras tenuisporum</i> Shearer, J.L. Crane & W. Chen	Pinna	Disinfection	12	6	3
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	12	8	3
				Non-disinfection	4	1	1
			Primary rachis	Disinfection	4	1.9	1
				Non-disinfection	0	0	0
11	HPENI	<i>Penicillium</i> sp.	Pinna	Disinfection	8	4	2
				Non-disinfection	16	4	4
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
12	ZMUCOR	<i>Mucor</i> sp.	Pinna	Disinfection	4	2	1
				Non-disinfection	12	3	3
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	8	2	2
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
13	HDACTY	<i>Dactylaria</i> sp.	Pinna	Disinfection	4	2	1
				Non-disinfection	12	3	3
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	8	3.7	2
				Non-disinfection	20	7.2	5
14	HZYGO	<i>Zygosporium oscheoides</i> Mont.	Pinna	Disinfection	12	6	3
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0

(Table continued)

No.	Acronyms	Fungi	Microhabitat	Method	% Occ.	% Ab.	Σ Records
15	CPESTALOT	<i>Pestalotiopsis guelpinii</i> (Desm.) Steyaert	Pinna	Disinfection	8	4	2
				Non-disinfection	12	3	3
			Secondary rachis	Disinfection	4	3	1
				Non-disinfection	20	6	5
			Primary rachis	Disinfection	20	9.3	5
				Non-disinfection	8	2.9	2
16	HNODULI	<i>Nodulisporium acervatum</i> (Masse) Deighton	Pinna	Disinfection	4	2	1
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
17	HCURVU	<i>Curvularia lunata</i> (Wakker) Boedijn	Pinna	Disinfection	4	2	1
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	20	6	5
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
18	CPHOMOS	<i>Phomopsis caryotae-urentis</i> Petr. & Cif.	Pinna	Disinfection	8	4	2
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
19	HHYPHO3	Unidentified Hyphomycetes 3	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	4	3	1
				Non-disinfection	12	4	3
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0

(Table continued)

No.	Acronyms	Fungi	Microhabitat	Method	% Occ.	% Ab.	Σ Records
20	CLEPTO	<i>Leptodathiorella</i> sp.	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	16	10	4
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	12	5.6	3
				Non-disinfection	4	1.4	1
21	HVERONA2	<i>Veronaea</i> sp.2	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	8	5	2
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
22	HPERICO	<i>Periconia byssoides</i> Pers.	Pinna	Disinfection	0	0	0
				Non-disinfection	20	5	5
			Secondary rachis	Disinfection	12	8	3
				Non-disinfection	16	5	4
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
23	HFUSAR	<i>Fusarium</i> sp.	Pinna	Disinfection	0	0	0
				Non-disinfection	12	3	3
			Secondary rachis	Disinfection	8	5	2
				Non-disinfection	20	9	7
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	20	10	7
24	CDIPLD	<i>Diplodia</i> sp.	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	4	3	1
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	12	5.6	3
				Non-disinfection	0	0	0

(Table continued)

No.	Acronyms	Fungi	Microhabitat	Method	% Occ.	% Ab.	Σ Records
25	HCLADO	<i>Cladosporium cladosporioides</i> (Fresen.) G.A. de Vries	Pinna	Disinfection	0	0	0
				Non-disinfection	32	9	8
			Secondary rachis	Disinfection	4	3	1
				Non-disinfection	20	9	7
			Primary rachis	Disinfection	4	1.9	1
				Non-disinfection	0	0	0
26	HHYPHO1	Unidentified Hyphomycetes 1	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	4	1.9	1
				Non-disinfection	0	0	0
27	HMONOD	<i>Monodictys putredinis</i> (Wallr.) S. Hughes	Pinna	Disinfection	0	0	0
				Non-disinfection	8	2	2
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	20	6	5
			Primary rachis	Disinfection	4	1.9	1
				Non-disinfection	32	11.4	8
28	HPITHO	<i>Pithomyces sacchari</i> (Speg.) M.B. Ellis	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	20	9	7
			Primary rachis	Disinfection	8	3.7	2
				Non-disinfection	4	1.4	1
29	AGLOMER	<i>Glomerella cingulata</i> (Stoneman) Spald. & H. Schrenk	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	4	1.9	1
				Non-disinfection	0	0	0

(Table continued)

No.	Acronyms	Fungi	Microhabitat	Method	% Occ.	% Ab.	Σ Records
30	HVERONA1	<i>Veronaea botryosa</i> Cif. & Montemart.	Pinna	Disinfection	0	0	0
				Non-disinfection	24	7	6
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	4	1	1
			Primary rachis	Disinfection	4	1.9	1
				Non-disinfection	0	0	0
31	HSTILBE2	<i>Stilbella</i> sp.2	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	4	1.9	1
				Non-disinfection	4	1.4	1
32	HELLIS	<i>Ellisembia</i> sp.	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	4	1	1
			Primary rachis	Disinfection	4	1.85	1
				Non-disinfection	8	2.86	2
33	ACHAETO	<i>Chaetomium</i> sp.	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	4	1	1
			Primary rachis	Disinfection	12	5.6	3
				Non-disinfection	8	2.9	2
34	HPAECILO	<i>Paecilomyces</i> <i>variottii</i> Bainier	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	4	1.9	1
				Non-disinfection	0	0	0

(Table continued)

No.	Acronyms	Fungi	Microhabitat	Method	% Occ.	% Ab.	Σ Records
35	HTORULA	<i>Torula herbarum</i> (Pers.) Link	Pinna	Disinfection	0	0	0
				Non-disinfection	16	4	4
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	8	2	2
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	4	1.4	1
36	HSTILBEI	<i>Stilbella</i> sp.1	Pinna	Disinfection	0	0	0
				Non-disinfection	12	3	3
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	4	1.4	1
37	HSTACHI	<i>Stachybotrys</i> <i>kampalensis</i> Hansf.	Pinna	Disinfection	0	0	0
				Non-disinfection	12	3	3
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	4	1	1
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	4	1.4	1
38	HACROGEN	<i>Acrogenospora</i> <i>sphaerocephala</i> (Berk. & Broome) M.B. Ellis	Pinna	Disinfection	0	0	0
				Non-disinfection	4	1	1
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	4	1	1
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	8	2.9	2
39	APESTALOSPHA	<i>Pestalosphaeria</i> <i>elaedis</i> (C. Booth & J.S. Robertson) Aa	Pinna	Disinfection	0	0	0
				Non-disinfection	4	1	1
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	4	1	1
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0

(Table continued)

No.	Acronyms	Fungi	Microhabitat	Method	% Occ.	% Ab.	Σ Records			
40	ZRHIZO	<i>Rhizophus</i> sp.	Pinna	Disinfection	0	0	0			
				Non-disinfection	4	1	1			
			Secondary rachis	Disinfection	0	0	0			
				Non-disinfection	0	0	0			
			Primary rachis	Disinfection	0	0	0			
				Non-disinfection	0	0	0			
			41	HBOTRYO	<i>Botryotrichum</i> sp.	Pinna	Disinfection	0	0	0
							Non-disinfection	8	2	2
Secondary rachis	Disinfection	0				0	0			
	Non-disinfection	0				0	0			
Primary rachis	Disinfection	0				0	0			
	Non-disinfection	16				5.7	4			
42	HDICTYOS	<i>Dictyosporium heptasporum</i> (Garov.) Damon				Pinna	Disinfection	0	0	0
							Non-disinfection	8	2	2
			Secondary rachis	Disinfection	0	0	0			
				Non-disinfection	0	0	0			
			Primary rachis	Disinfection	0	0	0			
				Non-disinfection	0	0	0			
			43	HDICTYOAR	<i>Dictyoarthrinium</i> sp.	Pinna	Disinfection	0	0	0
							Non-disinfection	0	0	0
Secondary rachis	Disinfection	0				0	0			
	Non-disinfection	4				1	1			
Primary rachis	Disinfection	0				0	0			
	Non-disinfection	0				0	0			
44	HMITTER	<i>Mitteriella zizyphina</i> Syd.				Pinna	Disinfection	0	0	0
							Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0			
				Non-disinfection	0	0	0			
			Primary rachis	Disinfection	0	0	0			
				Non-disinfection	12	4.3	3			

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(Table continued)

No.	Acronyms	Fungi	Microhabitat	Method	% Occ.	% Ab.	Σ Records
45	HSPOROS	<i>Sporoschisma saccardoï</i> E.W. Mason & S. Hughes	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	4	1.4	1
46	ABIONEC	<i>Bionectria</i> sp.	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	4	1.4	1
47	HPERICONIEL	<i>Periconiella cocoës</i> M.B. Ellis	Pinna	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Secondary rachis	Disinfection	0	0	0
				Non-disinfection	0	0	0
			Primary rachis	Disinfection	0	0	0
				Non-disinfection	4	1.4	1



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CURRICULUM VITAE

Personal Information

Name: Mr. Iman Hidayat
Birth Date: January 19, 1978
Birth Place: Bandung, West Java
Nationality: Indonesia
Address: Cihampelas 34/25, Bandung,
 West java 40116, Indonesia

Education

Elementary School SDN Cipaganti II, Bandung, West Java,
 Indonesia (1984-1990)
Junior High School SMPN 1 Bandung, West Java, Indonesia
 (1990-1993)
Senior High School SMAN 2 Bandung, West Jav, Indonesia
 (1993-1996)

University Bachelor of Science in Biology, Faculty of
 Mathematics and Natural Sciences, Padjadjaran
 University, West Java, Indonesia
 (1996-2002)

ACHIEVEMENTS

Publications

1. **Hidayat, I.**, Jeewoon, R., To-anun, C., and Hyde, K. D. (2006) The genus *Oxydothis*: new palmicolous taxa and phylogenetic relationship within *Xylariales*. *Fungal Diversity* **23**: 159-179.
2. Meeboon, J., **Hidayat, I.**, Nakashima, C. and To-anun, C. (2007) *Cercospora habenariicola* sp. nov. and some new records of cercosporoid fungi from Thailand. *Mycotaxon* **99**: 117-121.
3. Meeboon, J., **Hidayat, I.**, and To-anun, C. (2007) Cercosporoid fungi from Thailand I. An annotated list of cercosporoid fungi in Northern Thailand. *Agricultural Technology* **3**: 51-63.
4. Meeboon, J., **Hidayat, I.**, and To-anun, C. (2007). Cercosporoid fungi from Thailand 3. Two new species of *Passalora* and six new records of *Cercospora*. *Mycotaxon* **102**: 139–145.
5. **Hidayat, I.**, Meeboon, J., and To-anun, C. (2007). *Anthostomella* and *Fasciatispora* species (Xylariaceae) from palms including *F. ujungkulonensis* sp. nov. *Mycotaxon* **102**: 347–354.
6. Meeboon, J., **Hidayat, I.**, and To-anun, C. (2007). Diversity and taxonomy of Cercosporoid fungi in Thailand. In: *Proceedings of the International Conference on 'Integration of Science and Technology for Sustainable Development* (Eds. Soyong, K. and Hyde K. D.), KMITL, Ladkrabang, Bangkok, Thailand, 26-27 April 2007. p. 273-278.

7. **Hidayat, I.**, Meeboon, J., K.D. Hyde, and C. To-anun. (2007). A study on microfungi associated with necrotic leaves of palms. In: *Proceedings of the International Conference on 'Integration of Science and Technology for Sustainable Development* (Eds. Soyong, K. and Hyde K. D.), KMITL, Ladkrabang, Bangkok, Thailand, 26-27 April 2007. p. 279-285
8. Meeboon, J., **Hidayat, I.**, To-anun, C. and C. Nakashima (2008) Cercosporoid fungi from Thailand II. New species of *Cercospora* and *Passalora*. *Sydowia* **60**: 253-260.
9. To-anun, C., Nguenhom, J., Meeboon, J., and **Hidayat, I.** (2009). Two fungi associated with necrotic leaflets of areca palms (*Areca catechu*). *Mycological Progress* **8**: 115-121.

Oral Presentation

1. **Hidayat, I.**, To-anun, C., and K.D. Hyde. 2006. Microfungi on *Wallichia siamensis* Becc., a native plant from Northern Thailand. In: *The First Annual Meeting of Thai Mycological Association (TMA) and Mycology Conference in Thailand*. October 28-29. Bangkok, Thailand.
2. **Hidayat, I.**, Meeboon, J., Hyde, K., and C. To-anun. 2007. A study on microfungi associated with necrotic leaves of palms. In: *Proceedings of International Conference on Integration of Science & Technology for Sustainable Development* (Eds. Soyong, K., & K.D. Hyde). April 26-27. Bangkok, Thailand.

3. **Hidayat, I.**, To-anun, C., and K.D. Hyde. 2007. The genus *Oxydothis* from palms in Chiang Mai with notes on its phylogeny. In: *The Second Annual Meeting of Thai Mycological Association (TMA) and Mycology Conference in Thailand*. June 23-24. Chiang Mai, Thailand.
4. **Hidayat, I.** and C. To-anun. 2007. Promoting the development of plant disease culture collections in Indonesia. In: *The 1st International Meeting for Development of IPM in Asia*. November 26-28. Chiang Mai, Thailand.
5. **Hidayat, I.** 2008. Agrochemical use in Indonesia. In: *The 1st International Meeting for Development of International Network for Reduction of Agrochemical Use*. January 30. Chiang Mai, Thailand.
6. **Hidayat, I.** and To-anun, C. (2008). Microfungi associated with Thai Dwarf Fishtail Palm after one year decomposition. In: *The 3rd Annual Meeting of Thai Mycological Association (TMA) and Mycology Conference in Thailand*, Khon Kaen University, Khon Kaen, Thailand, 11 October 2008.

Poster Presentation

1. Takaew, T., Meeboon, J., **Hidayat, I.**, and C. To-anun. 2006. Ascomycetes associated with leaf spot on palms in Northern Thailand. In: *The First Annual Meeting of Thai Mycological Association (TMA) and Mycology Conference in Thailand*. October 28-29. Bangkok, Thailand.
2. Meeboon, J., **Hidayat, I.**, and To-anun, C. (2008). Diversity and taxonomy of *Pseudocercospora* in Thailand. In: *The 3rd Annual Meeting of Thai Mycological Association (TMA) and Mycology Conference in Thailand*,

Khon Kaen University, Khon Kaen, Thailand, 11 October 2008. TMA_08_P-45.

Conferences/Workshops

1. **Certificate of Teaching:** Ascomycetes Taxonomy. In: *The IV Mycological Taxonomy Workshop*, Mushroom Research Centre Foundation, Chiang Mai, Thailand, 10-19 July, 2006.
2. **Certificate of Teaching:** The Importance of Taxonomy to Plant Quarantine. *The 1st EASIANET Workshop*, Mushroom Research Centre Foundation, Chiang Mai, Thailand, 14-23 November 2005.
3. **Certificate of Teaching:** The Importance of Taxonomy to Plant Quarantine. *The 2nd EASIANET Workshop*, Mushroom Research Centre Foundation, Chiang Mai, Thailand, 6-15 November 2006.



PUBLICATIONS

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