

## Supplementary Material

# Molecular Networking-Based Metabolome and Bioactivity Analyses of Marine-Adapted Fungi Co-Cultivated with Phytopathogens

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**Supplementary Figure 4.** Pictures acquired after 21 days of cultivation of all 5 selected marine-adapted fungal isolates, phytopathogens and the co-cultures in different media. **(A)** 5 marine-adapted fungal isolates, **(B)** 3 phytopathogens used as challengers in the 9 co-cultures, **(C)** 9 co-cultures.

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**Supplementary Figure 19.** Base peak chromatograms of whole agar extracts of *Alternaria* sp. mono-culture (**A**), *P. syringae* mono-culture (**C**) and their co-culture in PDA medium (**B**) showing putatively identified peak ions. Chromatogram of blank PDA medium is also displayed (**D**). Numbers correspond to metabolites listed in dereplication table (**Supplementary Table 2**). Identical peak ions identified in both marine-adapted fungal isolate and co-culture were annotated in chromatogram of marine-adapted fungus only.

**Supplementary Figure 20.** Base peak chromatograms of whole agar extracts of *Acremonium* sp. mono-culture (**A**), *P. syringae* mono-culture (**C**) and their co-culture in PDA medium (**B**) showing putatively identified peak ions. Chromatogram of blank PDA medium is also displayed (**D**). Number corresponds to metabolites listed in dereplication table (**Supplementary Table 2**). Identical peak ions identified in both marine-adapted fungal isolate and co-culture were annotated in chromatogram of marine-adapted fungus only. Peak ions induced in co-culture are additionally annotated in co-culture chromatogram.

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**Supplementary Figure 22.** Base peak chromatograms of whole agar extracts of *Acremonium* sp. mono-culture (**A**), *B. cinerea* mono-culture (**C**) and their co-culture in PDA medium (**B**) showing putatively identified peak ions. Chromatogram of blank PDA medium is also displayed (**D**). Numbers correspond to metabolites listed in dereplication table (**Supplementary Table 2**). Identical peak ions identified in both marine-adapted fungal isolate and co-culture were annotated in chromatogram of marine-adapted fungus only. Peak ions induced in co-culture are additionally annotated in co-culture chromatogram.

**Supplementary Figure 23.** Annotated MS/MS spectrum of emerimicin IV ( $m/z$  [M+H]<sup>+</sup> 1573.8994 based on MS/MS spectrum acquired in positive mode from 50 to 1600 Da). Each fragment is equivalent to an amino acid. Phe - phenylalanine, Aib - alpha-aminoisobutyric acid, Val - valine, Gly - glycine, Leu - leucine, Hyp - hydroxyproline, Gln - glutamine, Ala - alanine, Pheol - phenylalaninol

**Supplementary Figure 24.** Annotated MS/MS spectrum of a putatively new peptide of the Emerimycin family ( $m/z$  [M+H]<sup>+</sup> 1204.7736 based on MS/MS spectrum acquired in positive mode from 50 to 1600 Da). XX- unknown amino acid with  $m/z$  [M+H]<sup>+</sup> 110.0354 corresponding to a molecular formula of C<sub>4</sub>H<sub>4</sub>N<sub>3</sub>O, AHV- 3-amino-2-hydroxyvaline, Aib- alpha- aminoisobutyric acid, Val- valine, Leu- leucine, Gly- glycine, Ala- alanine, AMO2- 2 amino- N,4-dimethyl-8-oxodecanoic acid

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**Supplementary Table 1.** Identification of 123 strains isolated from Windebyer Noor (Nov, 2015) according to sequence comparison with the NCBI nucleotide database using BLASTn. The 3 first BLAST hits incl. respective accession numbers are given. WO: twigs, F: Foam, SC: driftwood scrapings, L: leaves, WA: water, SE: sediment, SD: seeds. Media: GPY: Glucose Peptone Yeast, PCA: Potato Carrot agar, WSP: modified Wickerham medium and HS: Hastings medium.

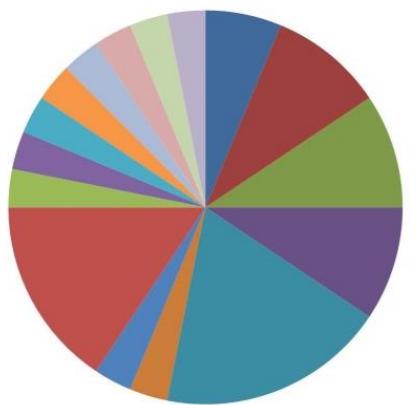
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## 1.1 Supplementary Figures



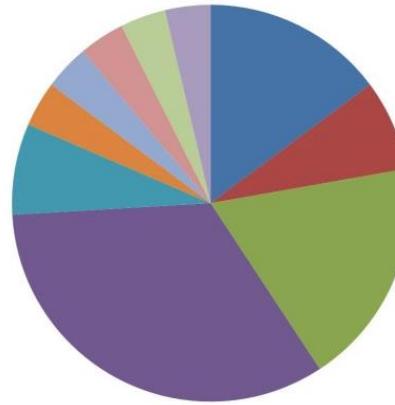
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(A)



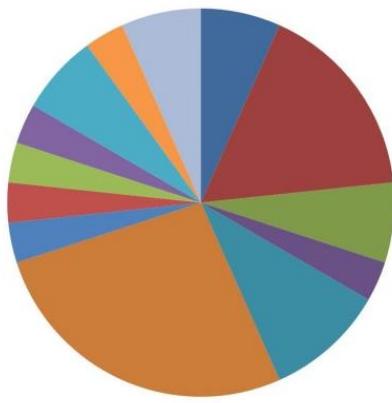
- *Acremonium*
- *Pyrenopeziza*
- *Cladosporium*
- *Fusarium*
- *Penicillium*
- *Psilopeltis*
- *Alternaria*
- *Phoma*
- *Phialemonium*
- *Emerichellopsis*
- *Pseudohalonectria*
- *Lindgomycetaceae*
- *Aspergillus*
- *Cadophora*
- *Leptosphaeria*
- *Cosmospora*

(B)



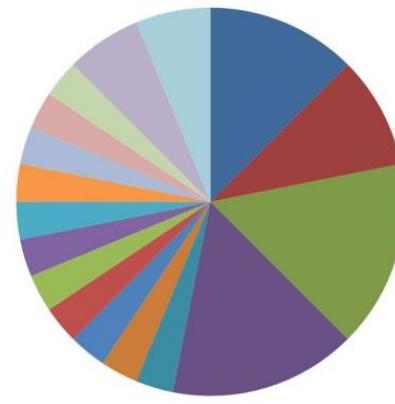
- *Plectosphaerella*
- *Microdochium*
- *Cladosporium*
- *Penicillium*
- *Fusarium*
- *Hypocreales*
- *Acremonium*
- *Plenodomus*
- *Phoma*
- *Aspergillus*

(C)



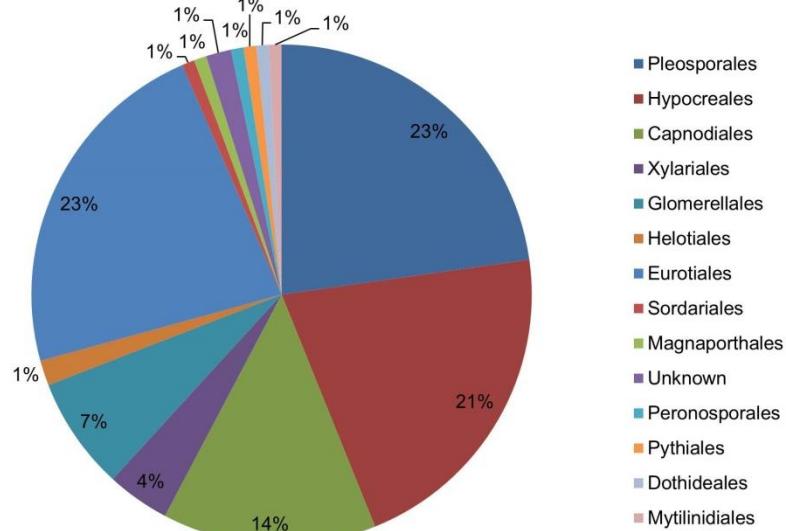
- *Acremonium*
- *Cladosporium*
- *Plectosphaerella*
- *Aureobasidium*
- *Phoma*
- *Penicillium*
- *Gibberella*
- *Alternaria*
- *Fusarium*
- *Emerichellopsis*
- *Leptosphaeria*
- *Pleosporales*
- *Epicoccum*

(D)

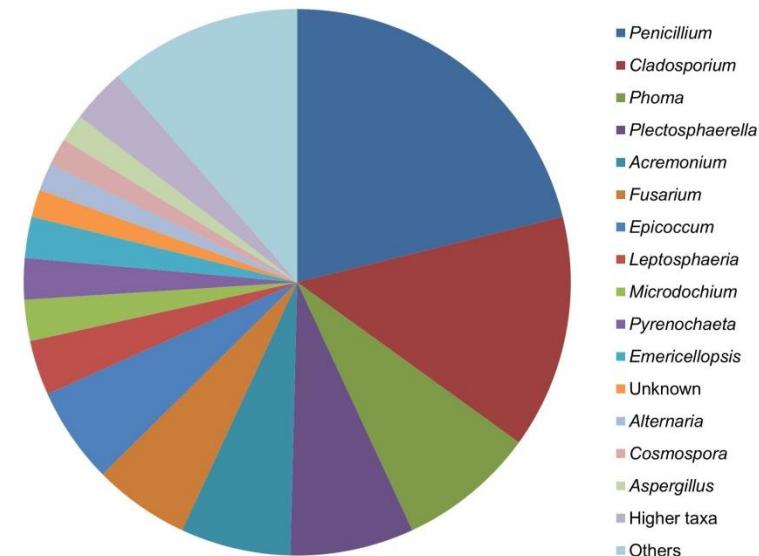


- *Cladosporium*
- *Penicillium*
- *Acremonium*
- *Epicoccum*
- *Sarocladium*
- *Michrodochium*
- *Fusarium*
- *Cosmospora*
- *Helotiales*
- *Phoma*
- *Leptosphaeria*
- *Gibellulopsis*
- *Pleosporales*
- *Phytophthora*
- *Hypoxyton*
- *Plectosphaerella*
- *unidentified*

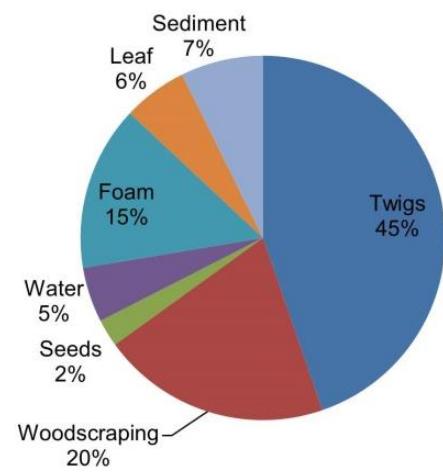
(E)



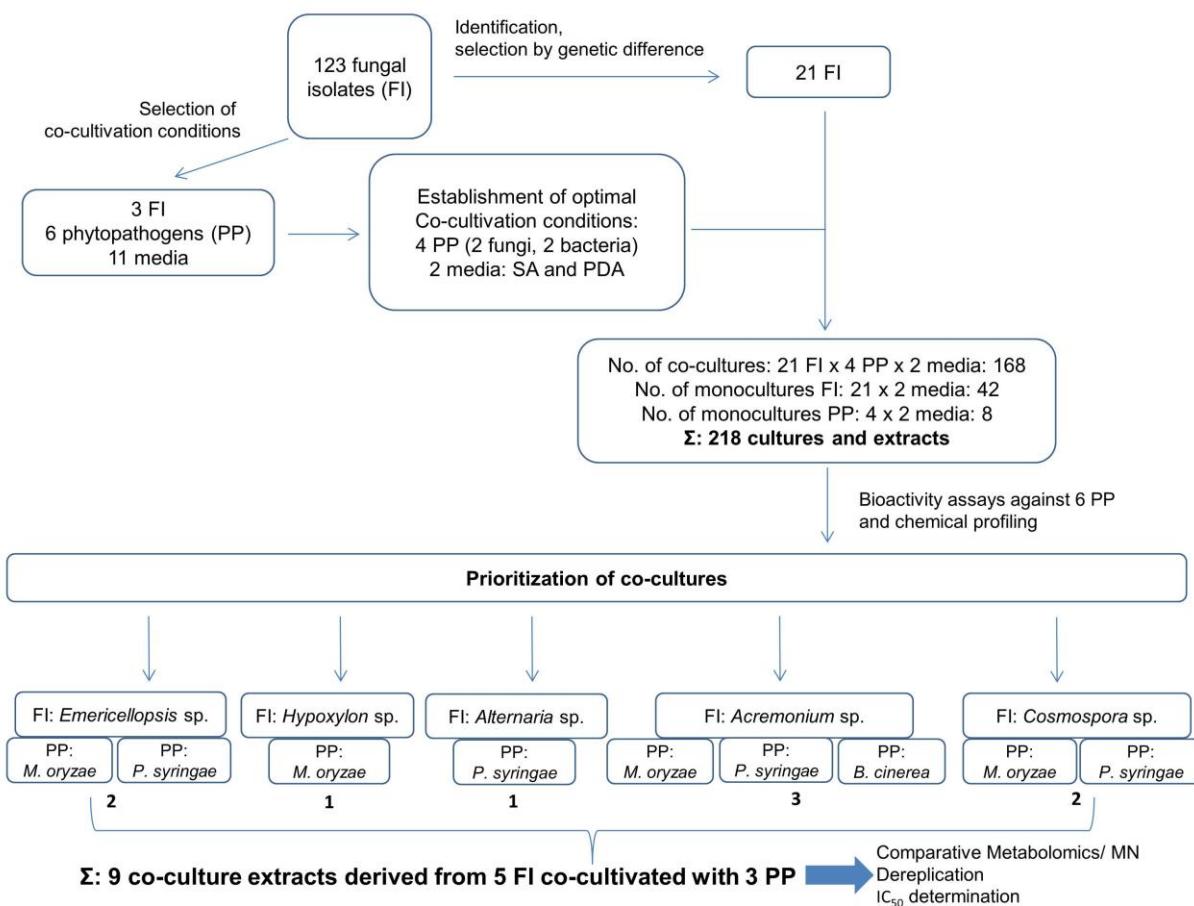
(F)



(G)



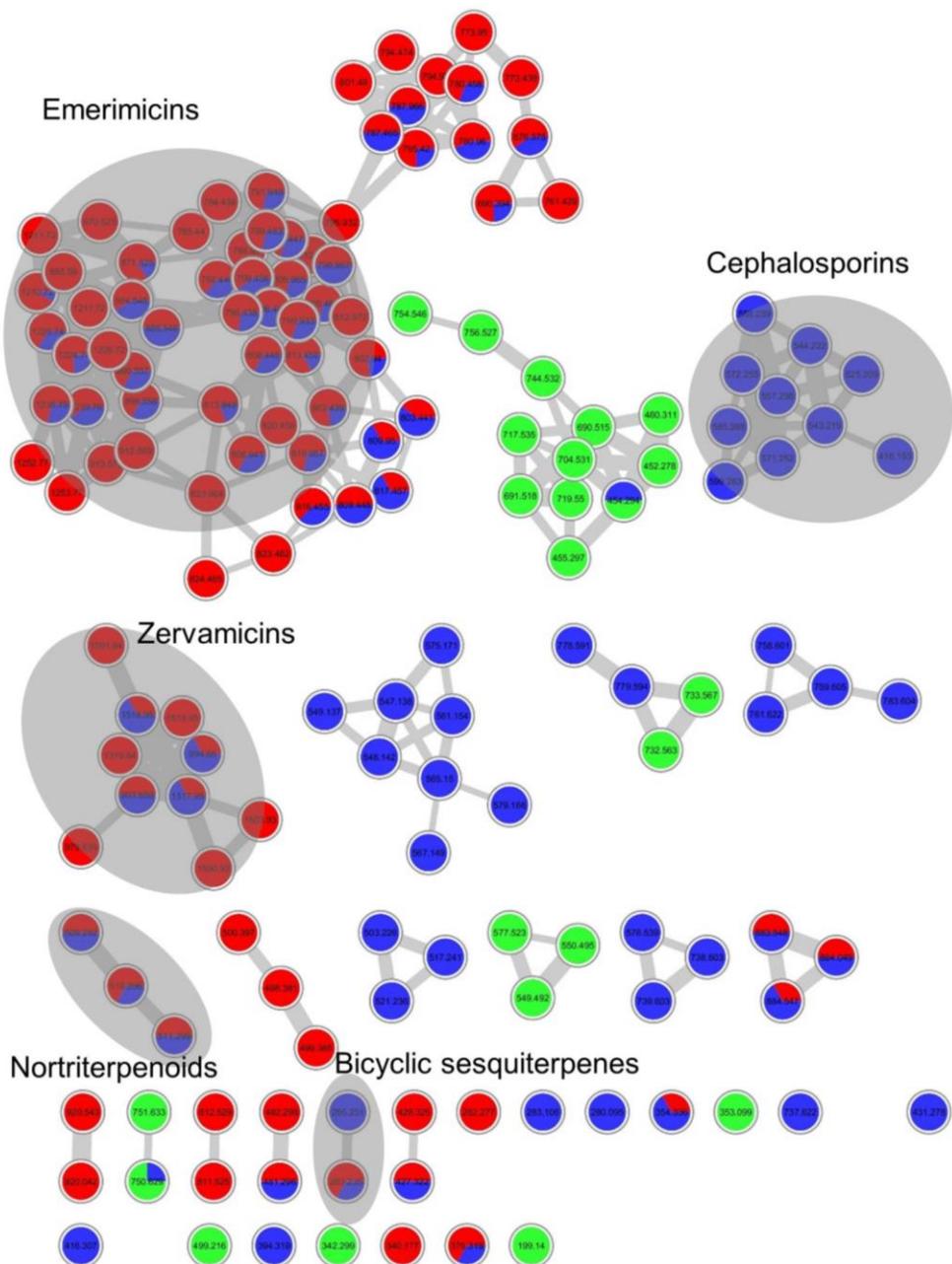
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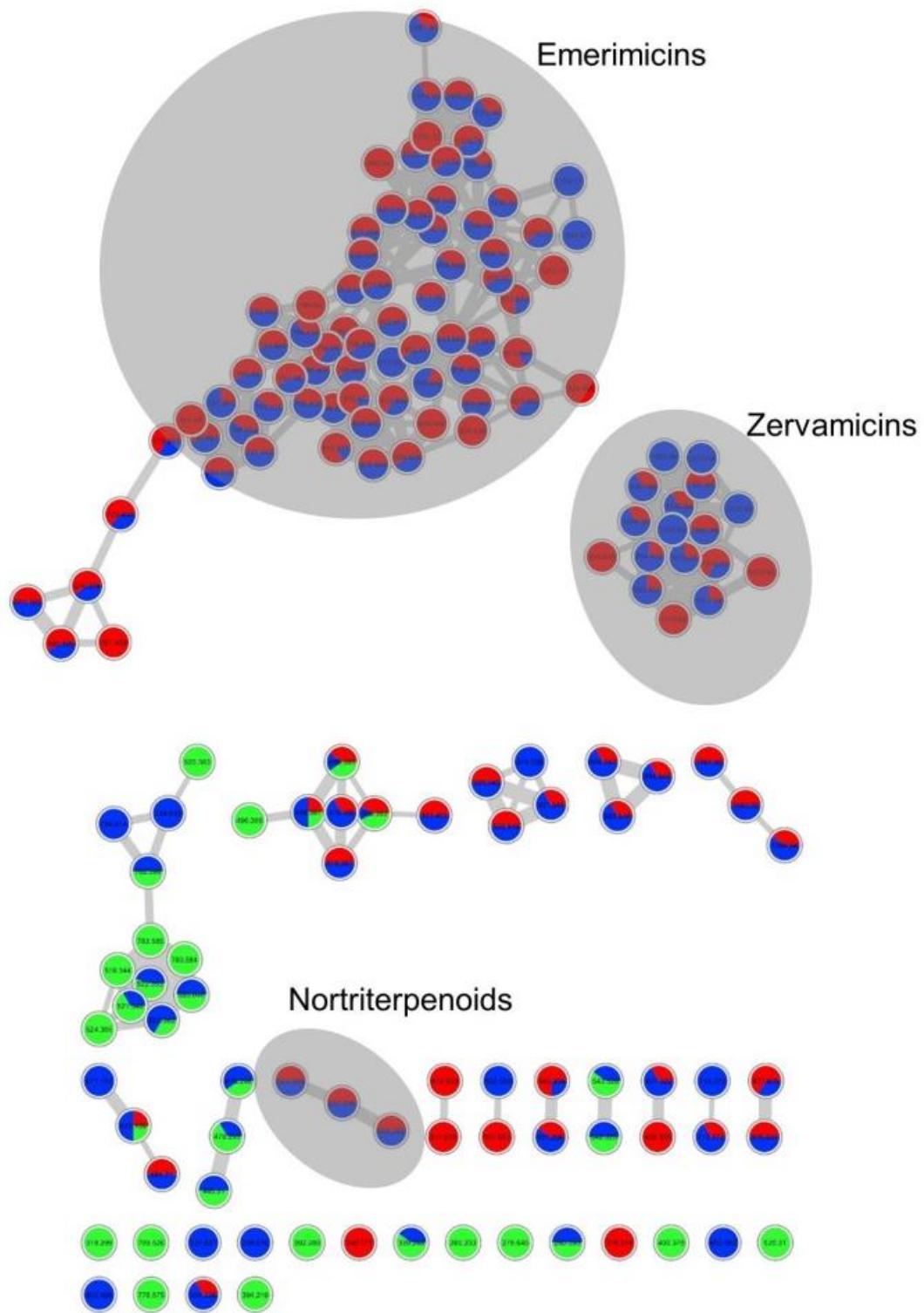
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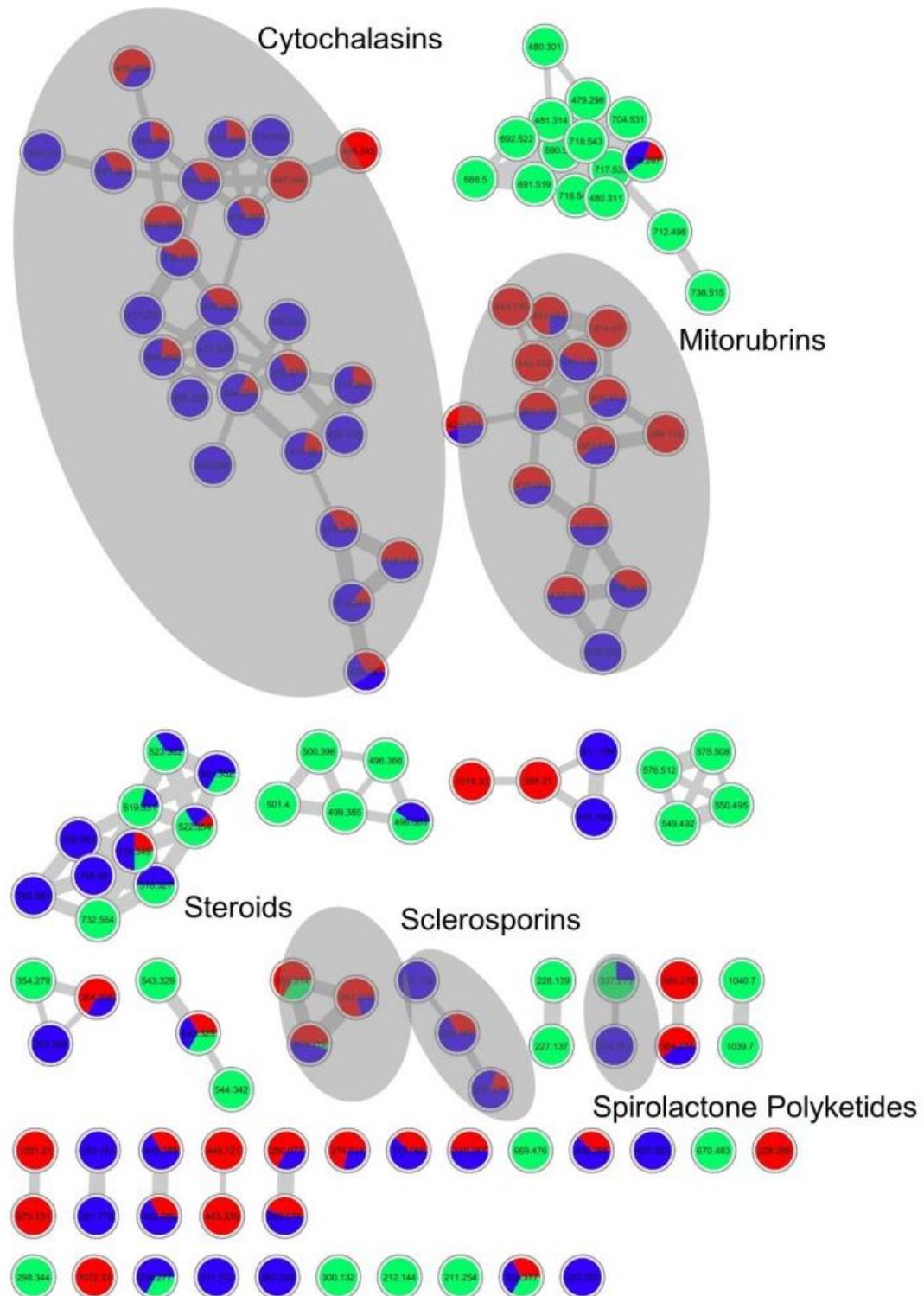
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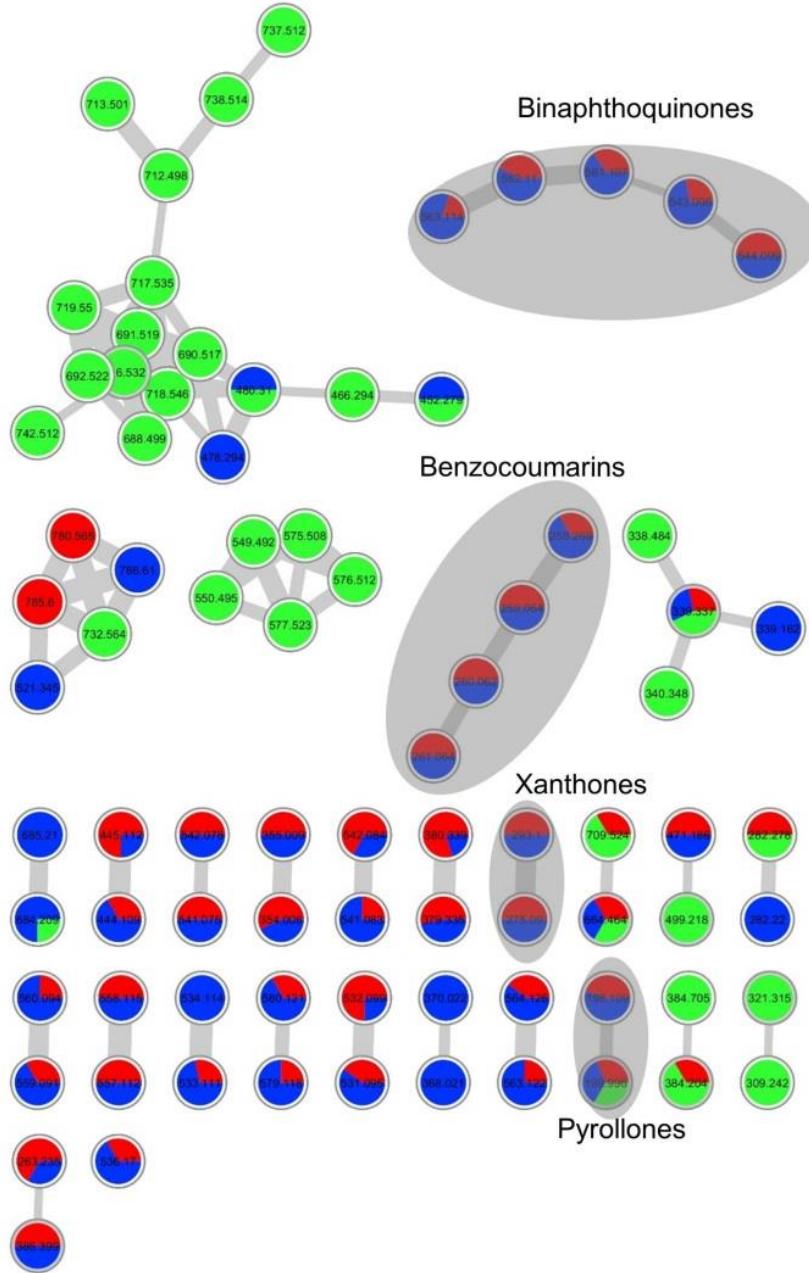
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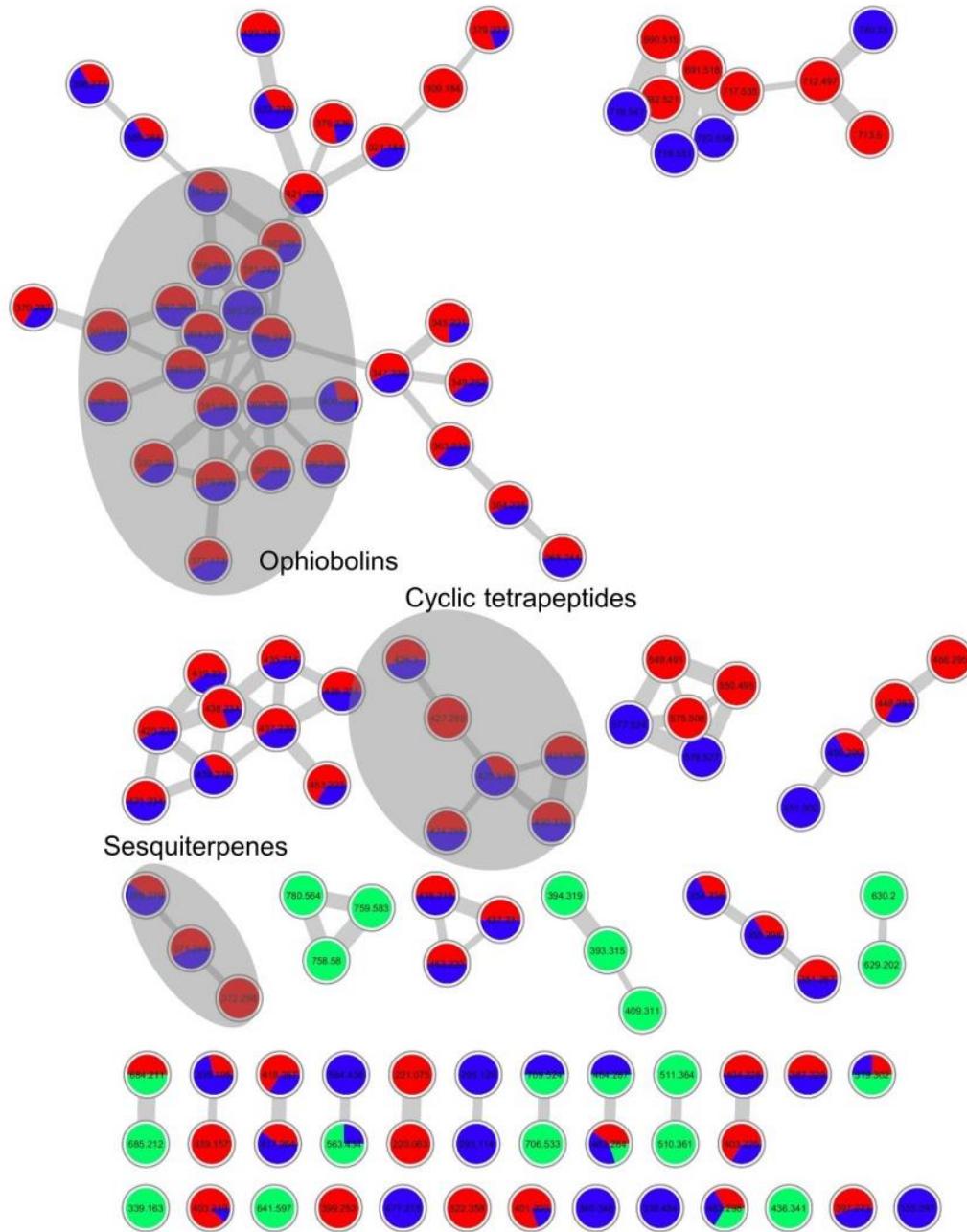
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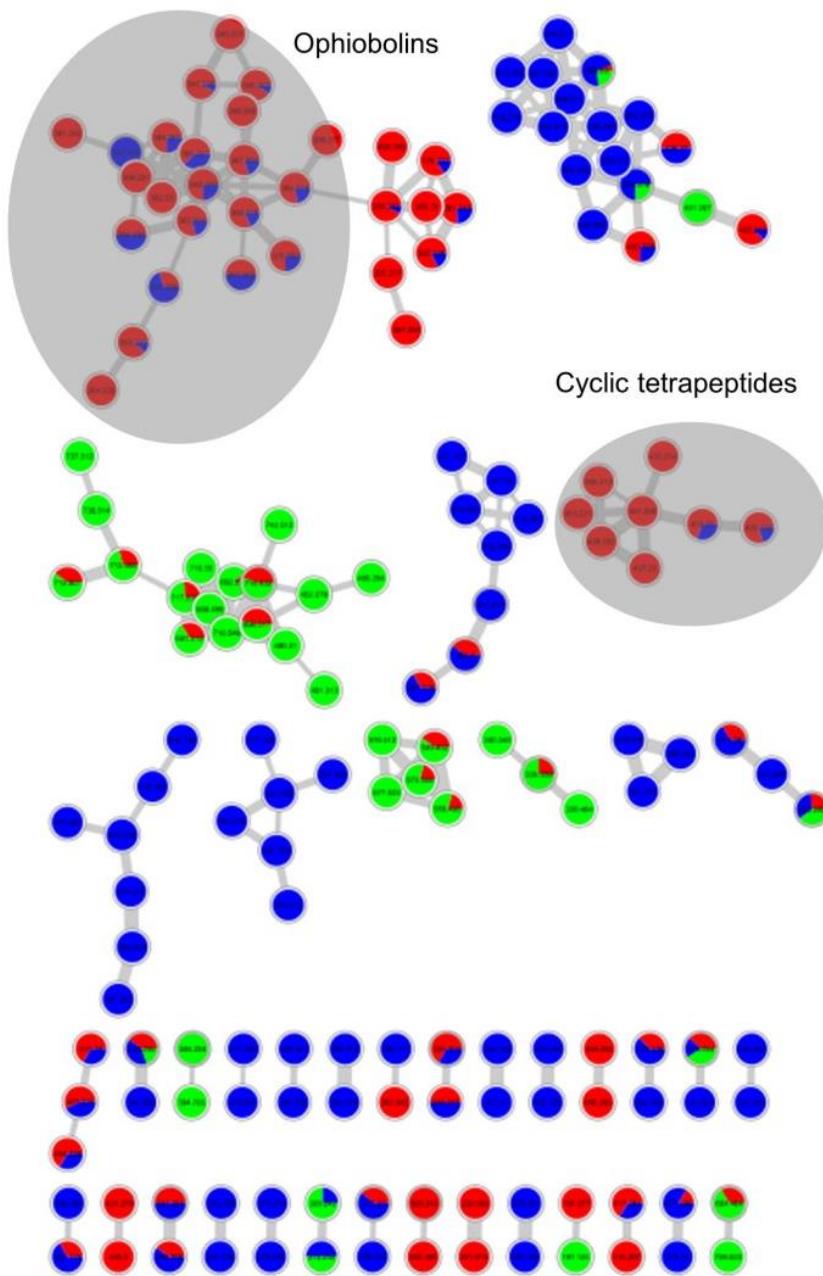
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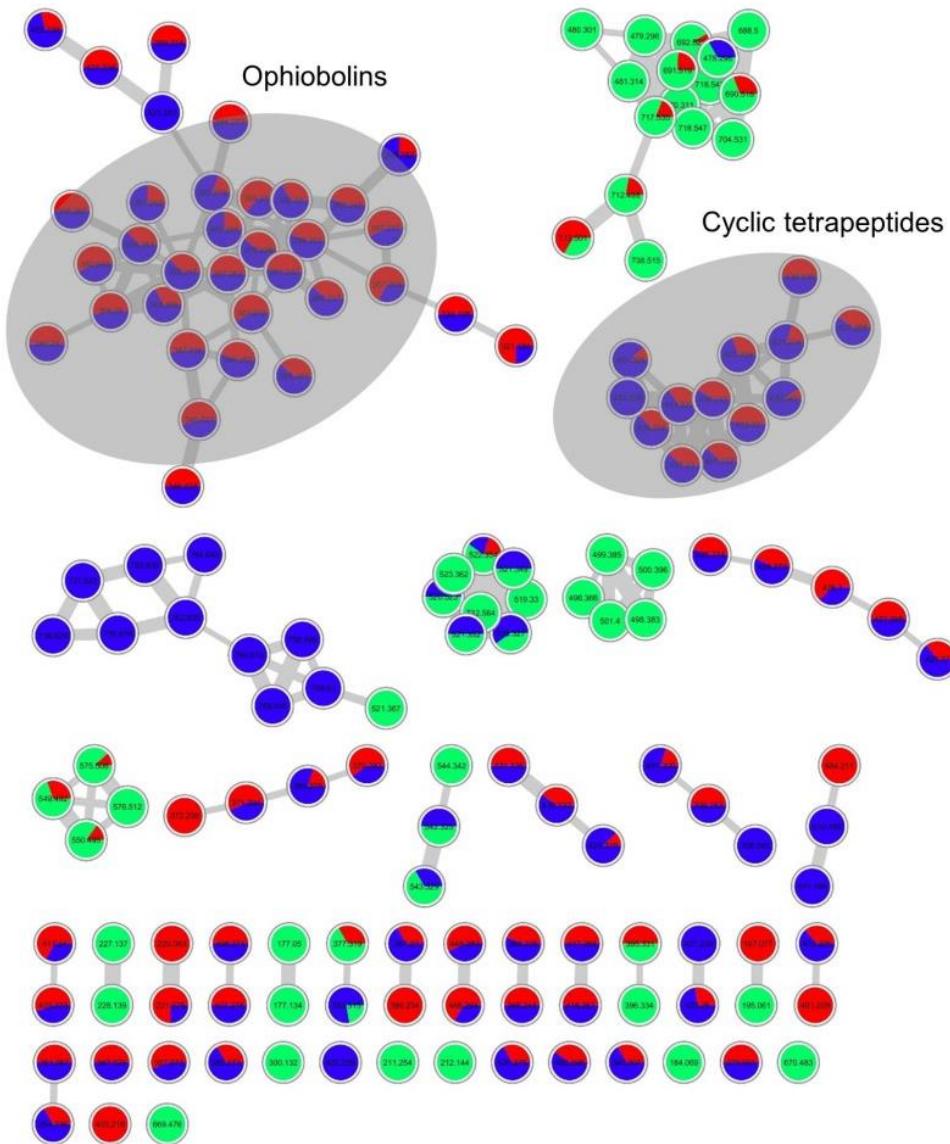
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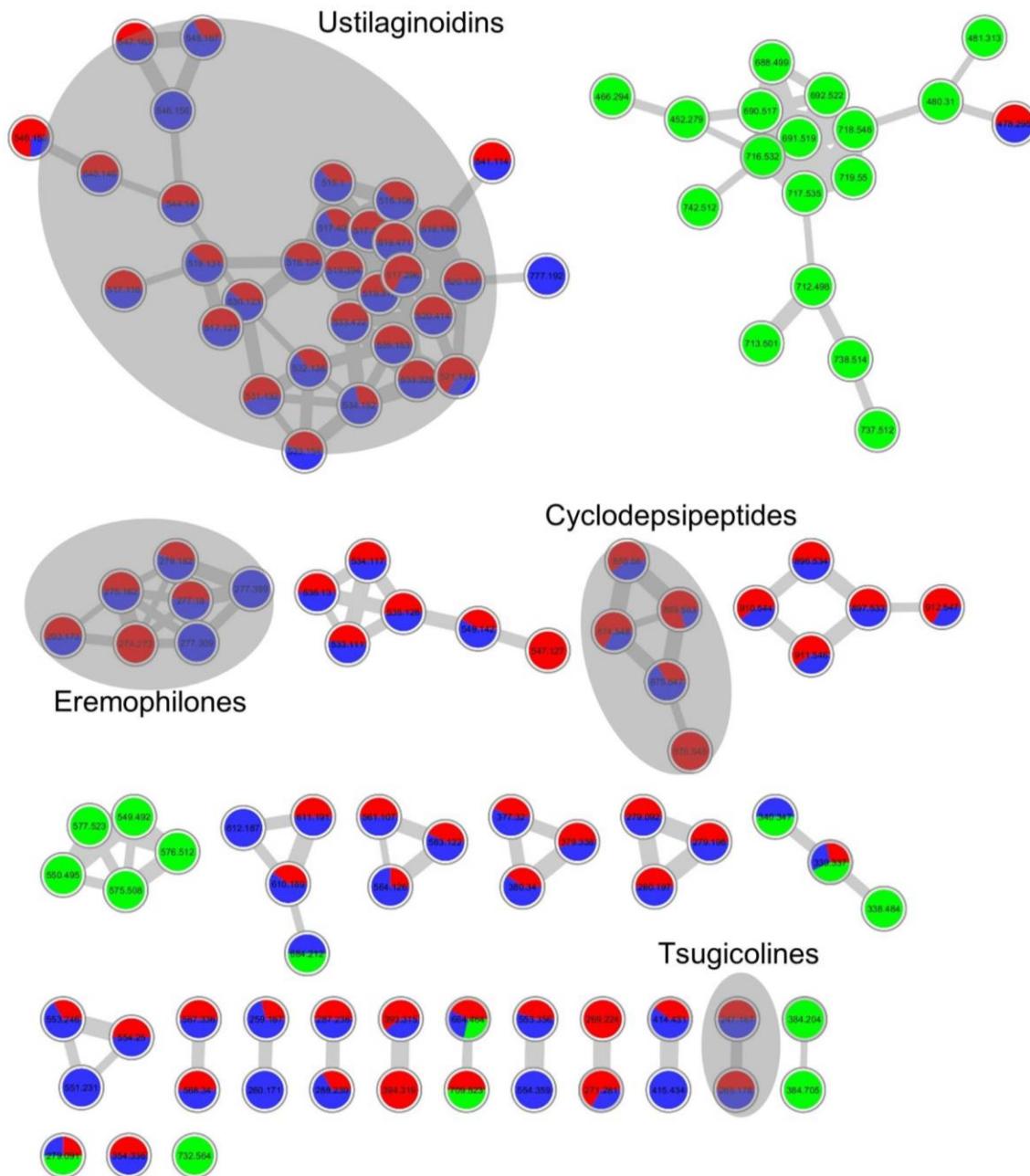
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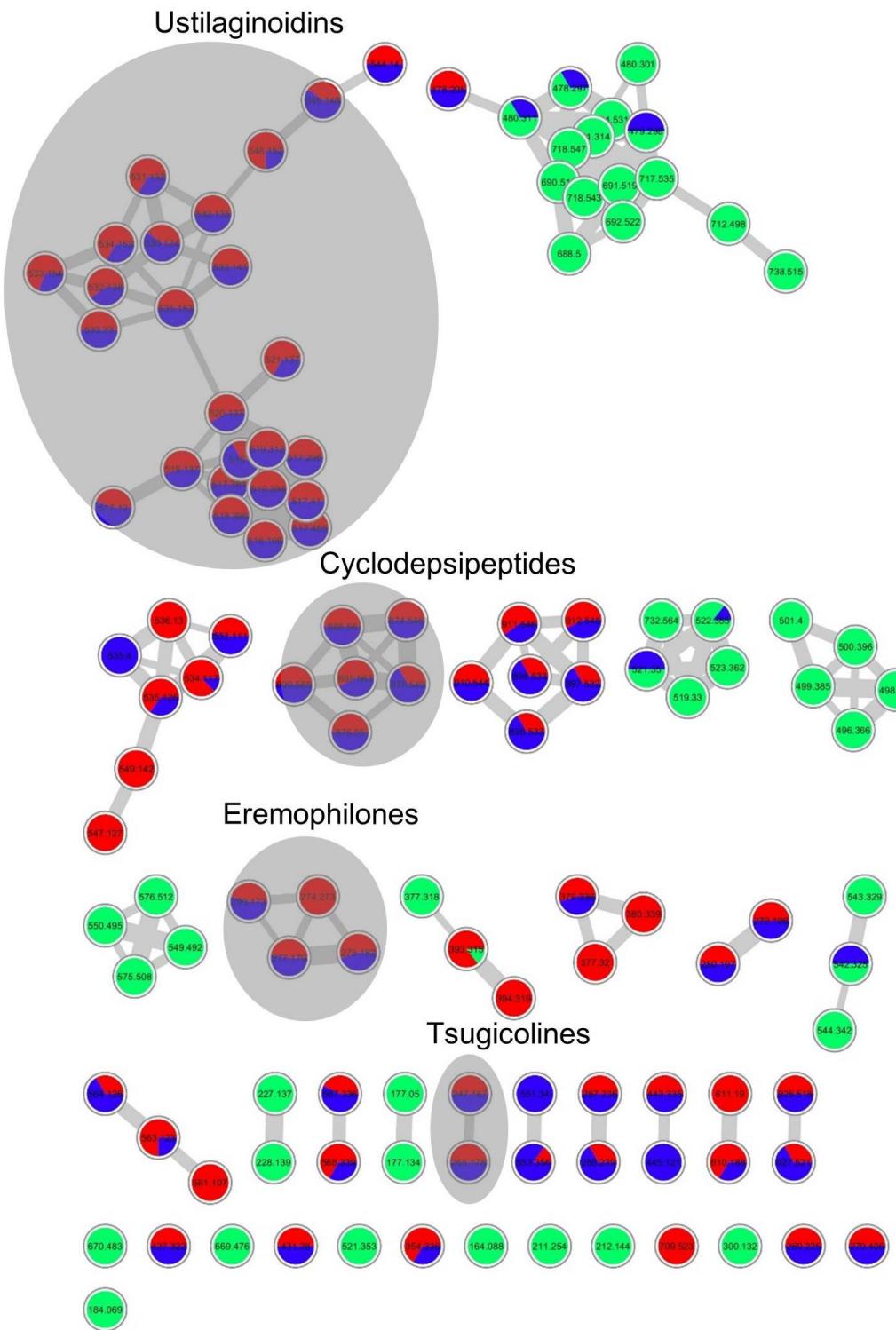
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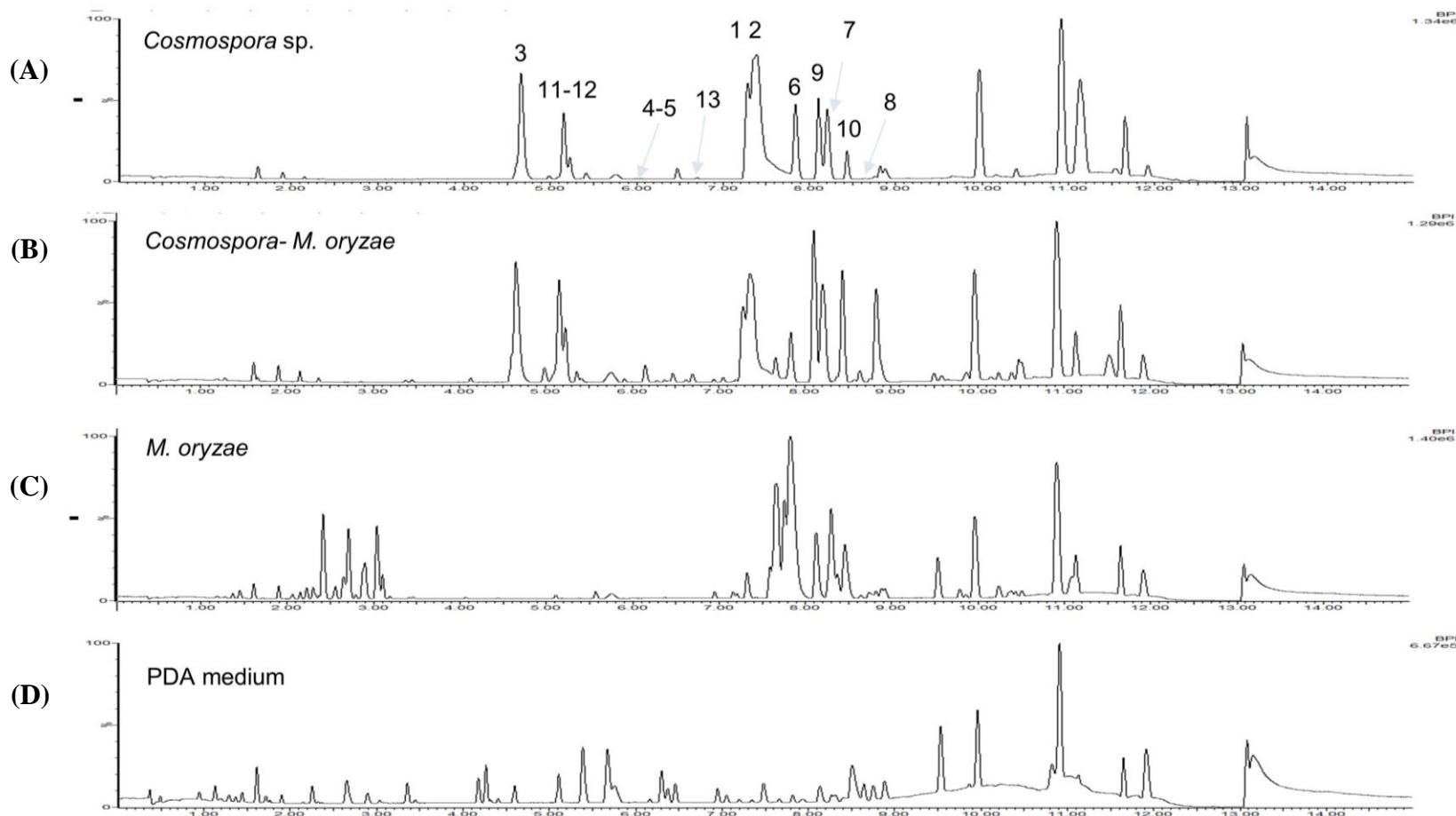
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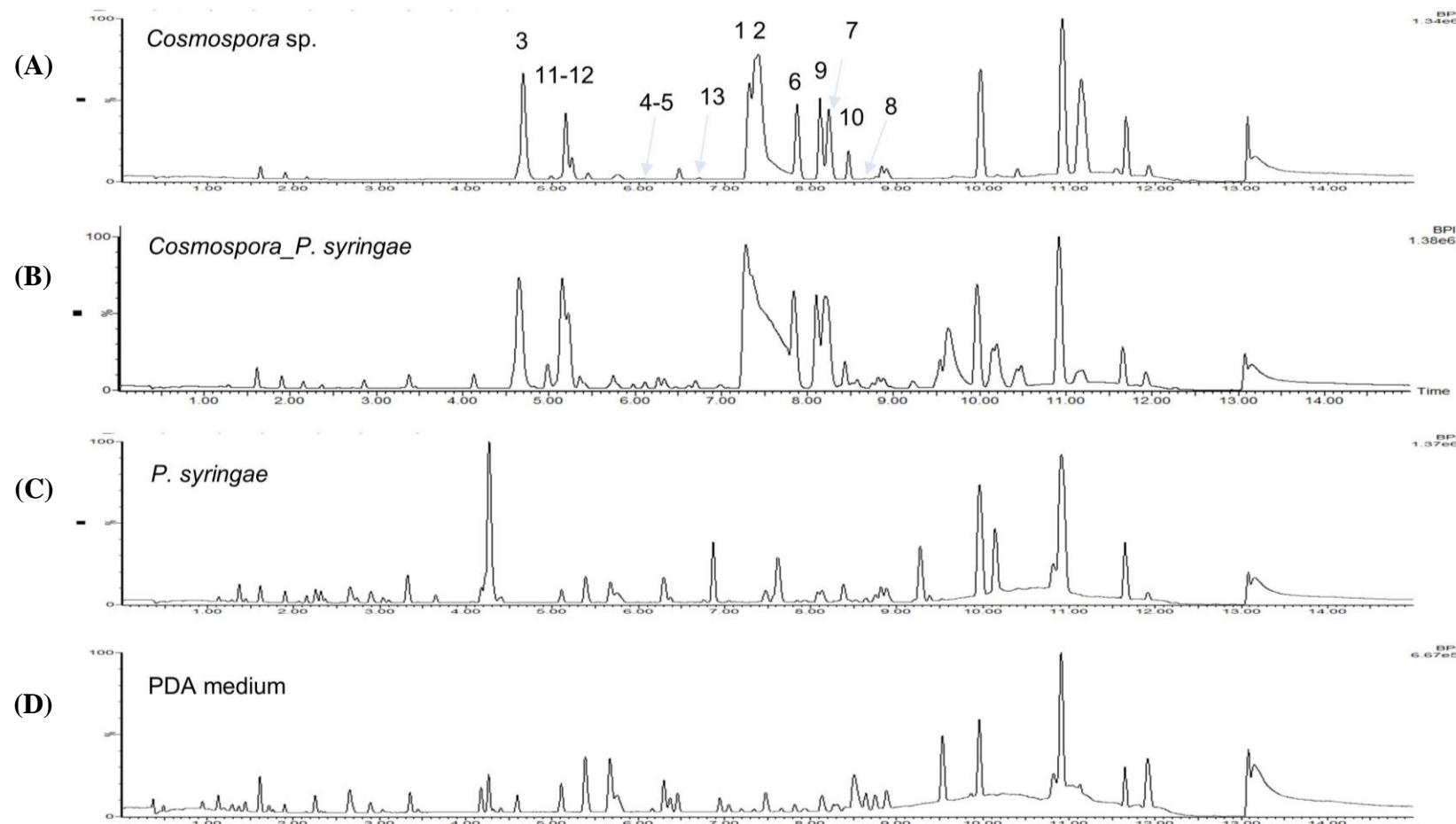
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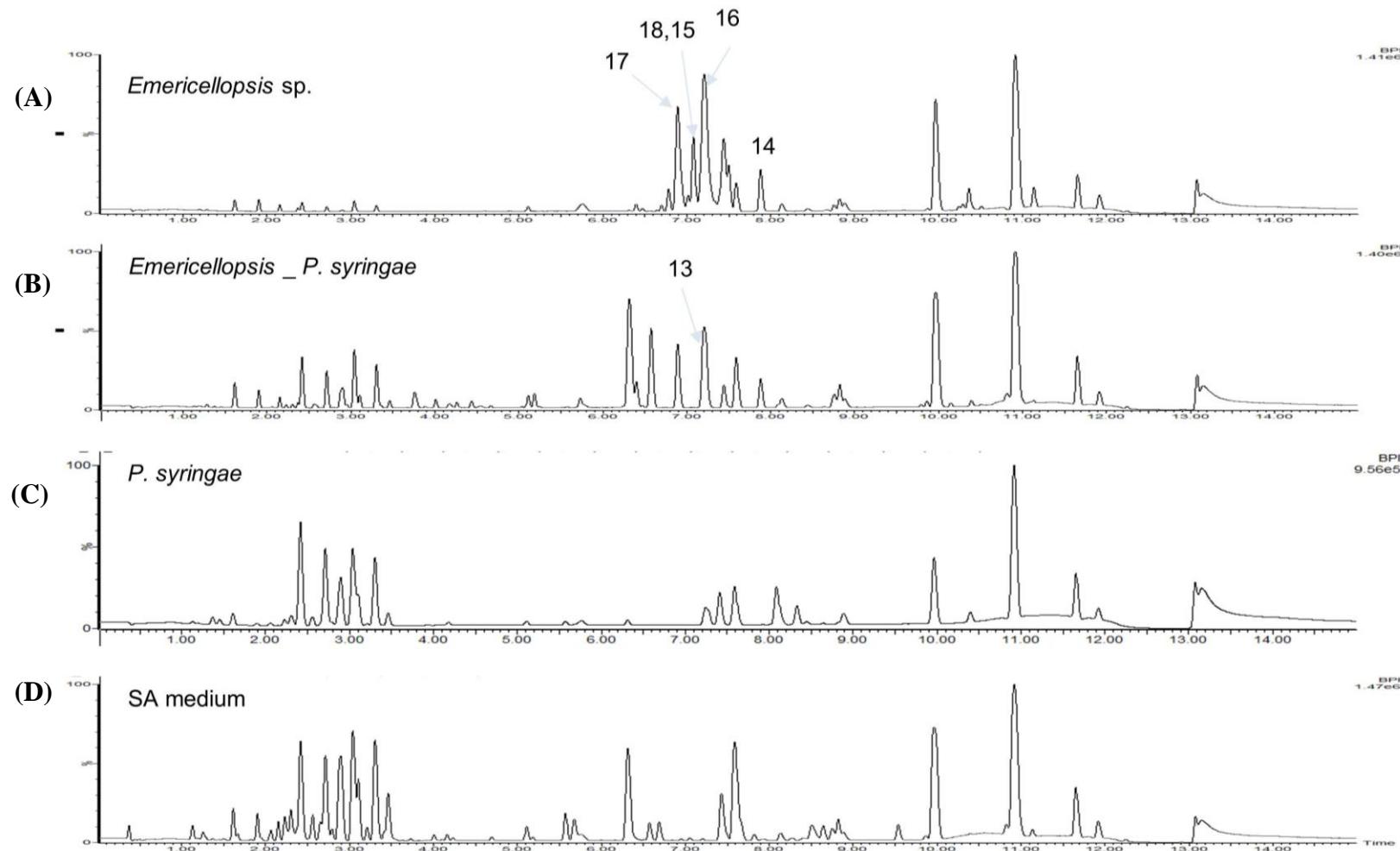
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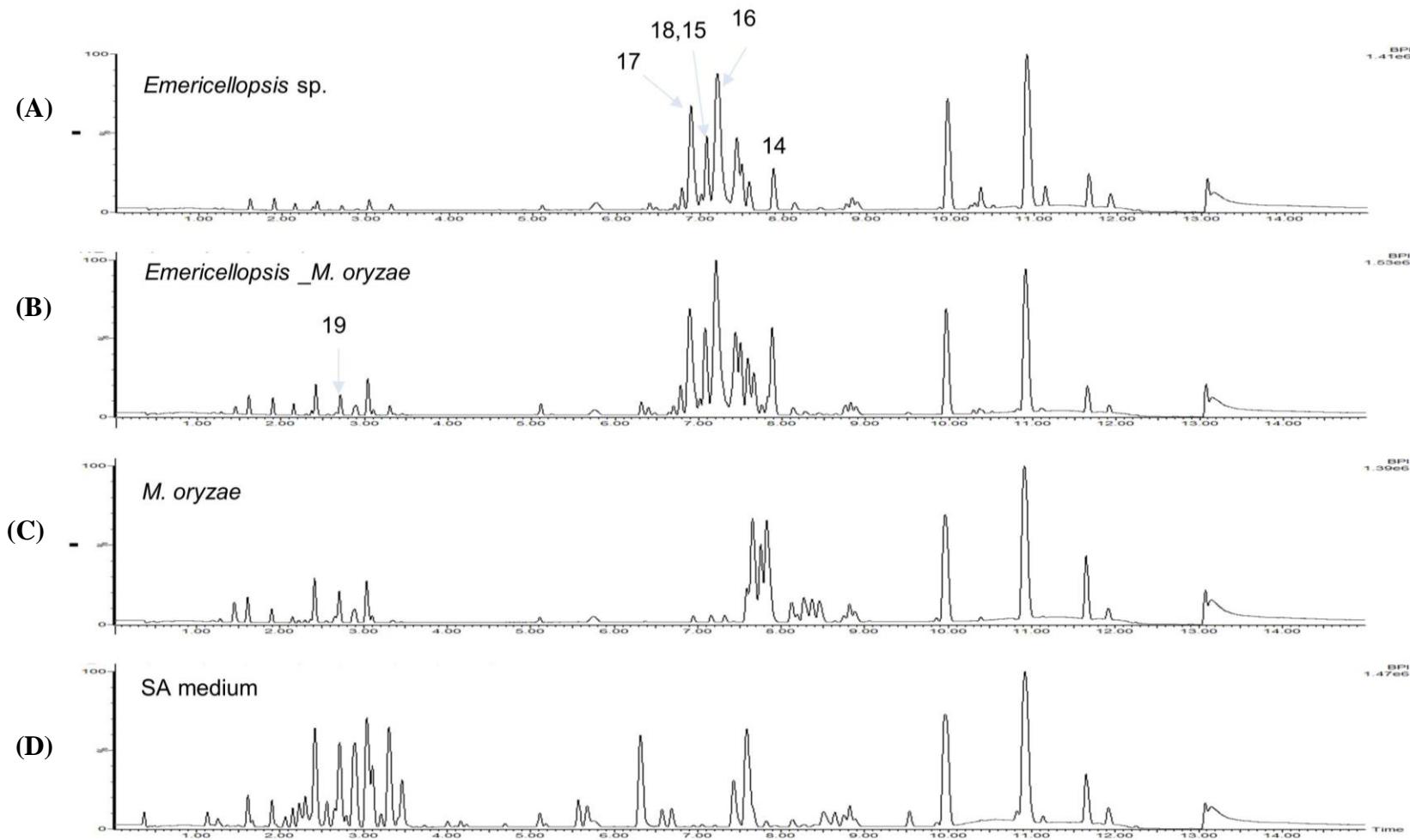
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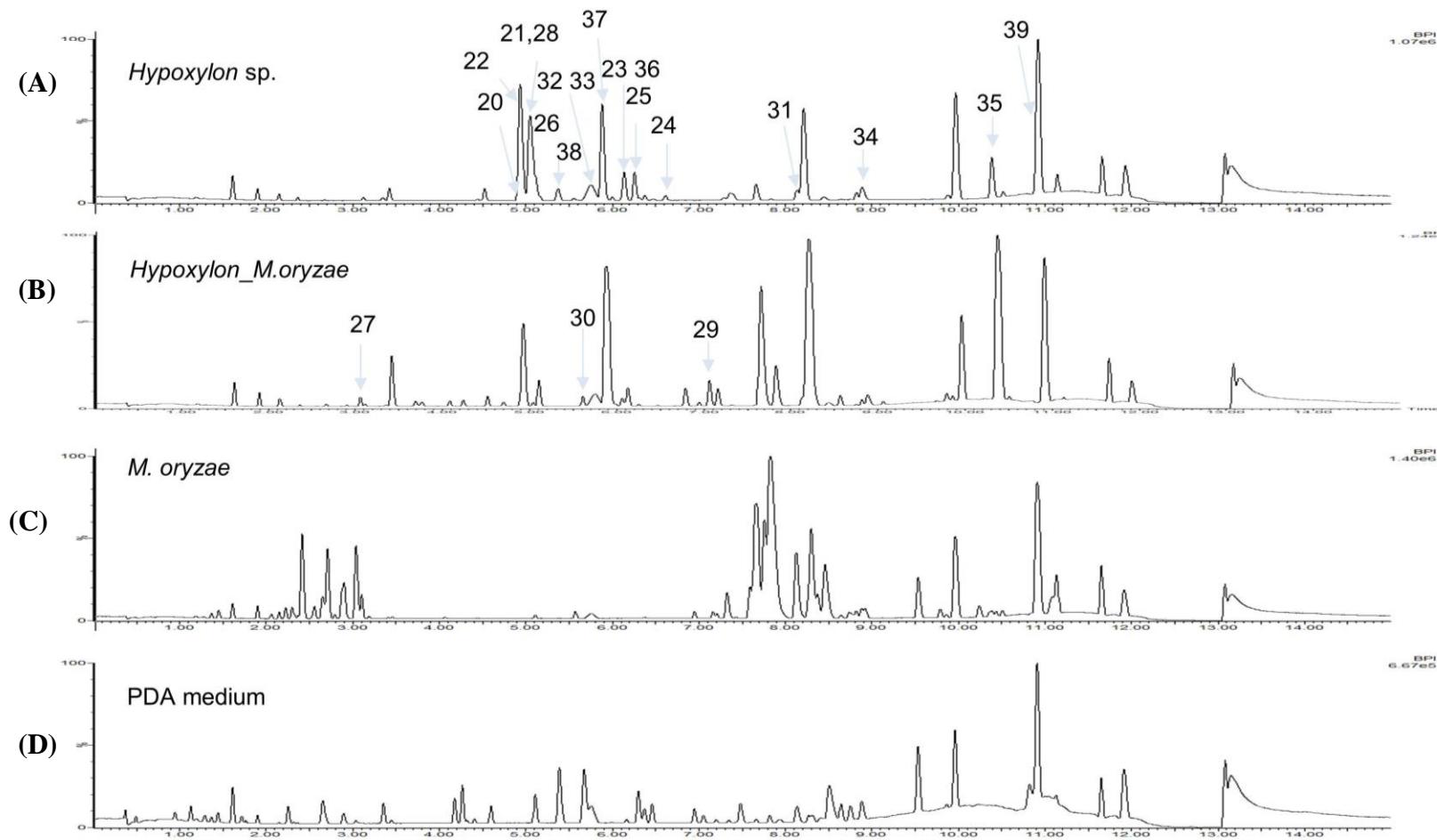
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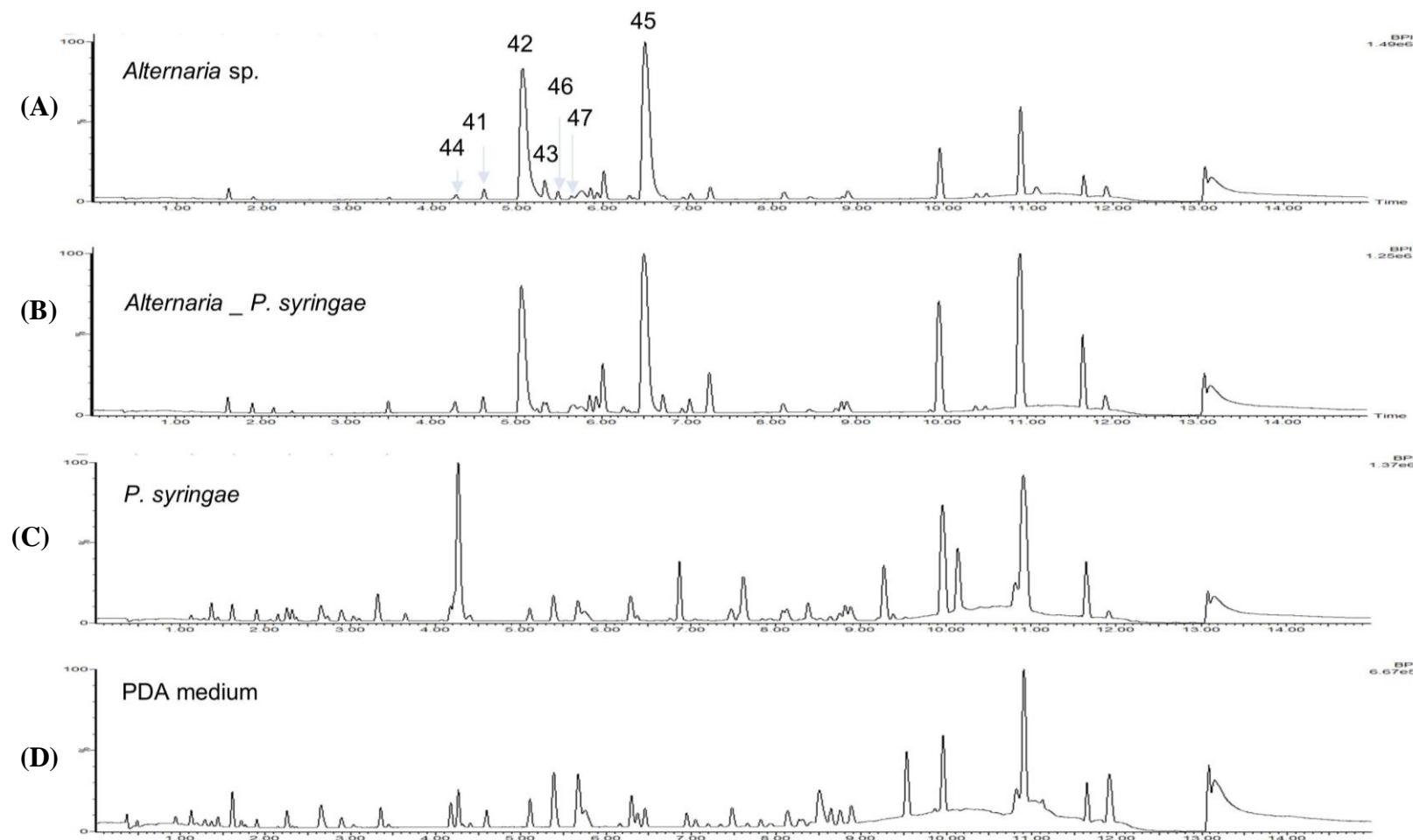
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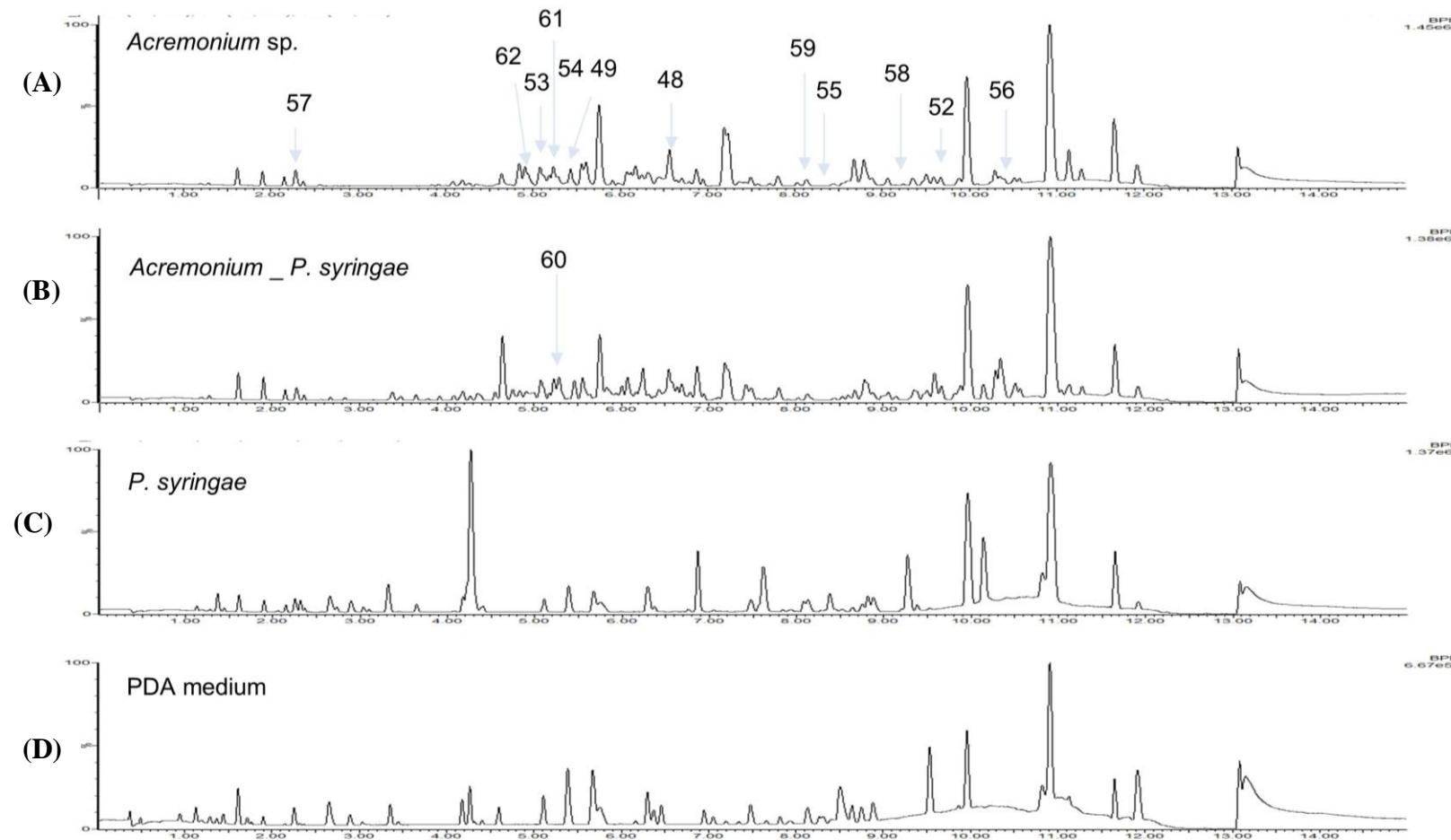
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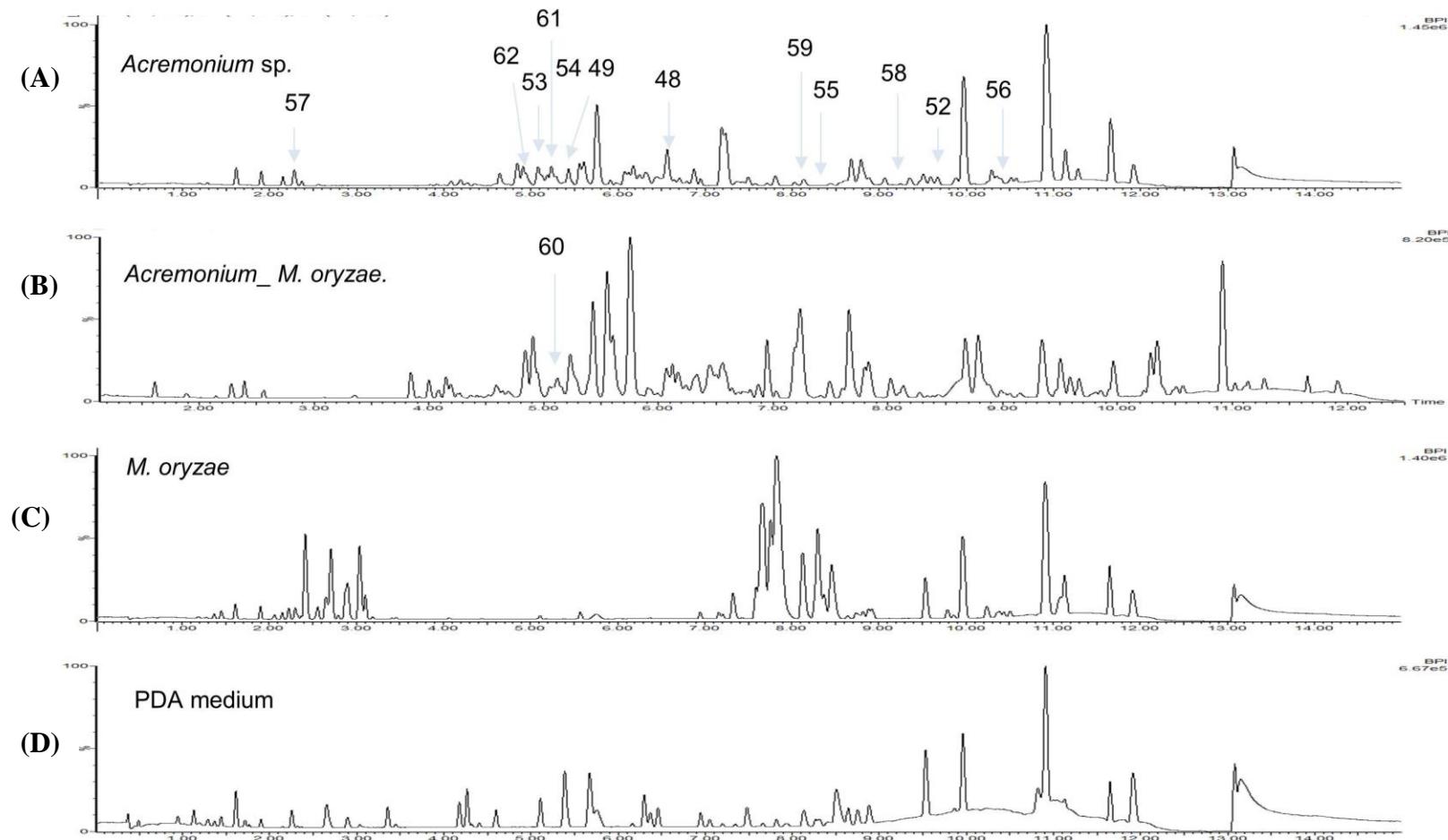
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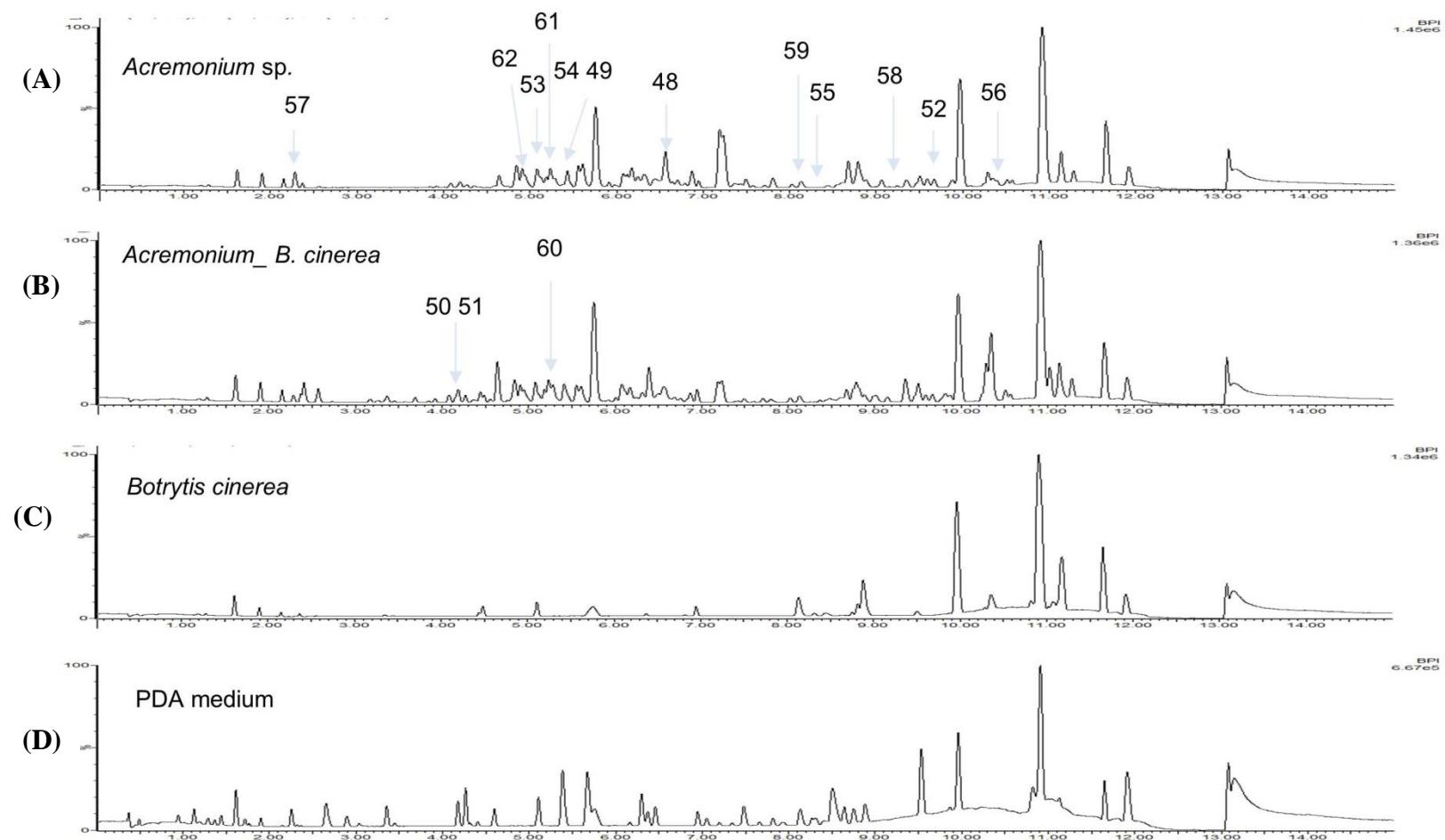
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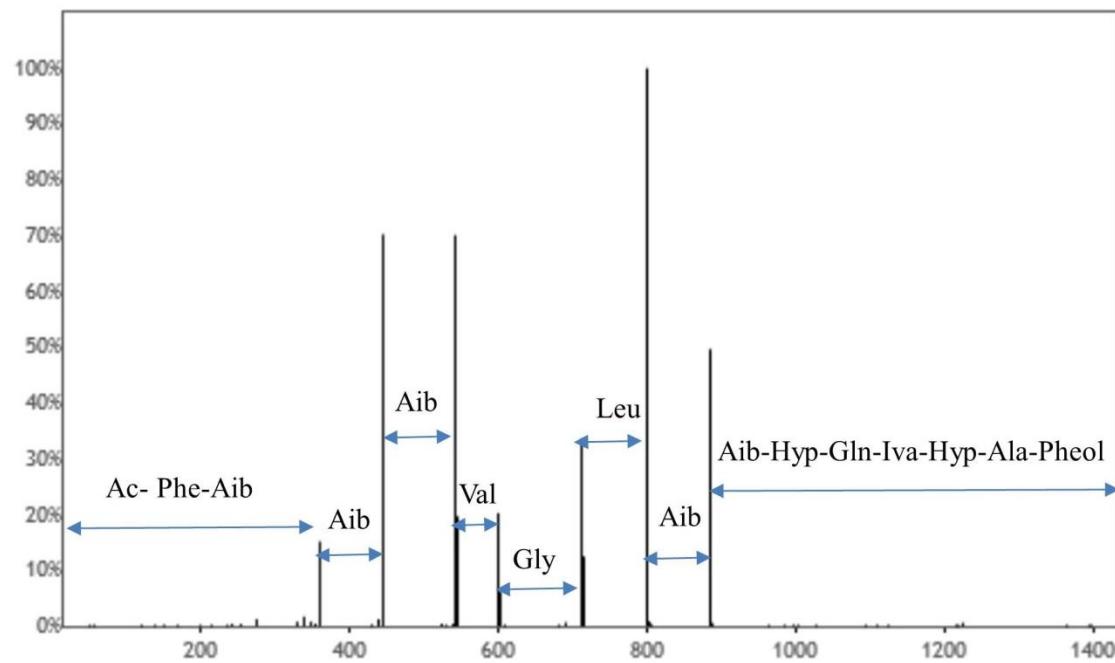
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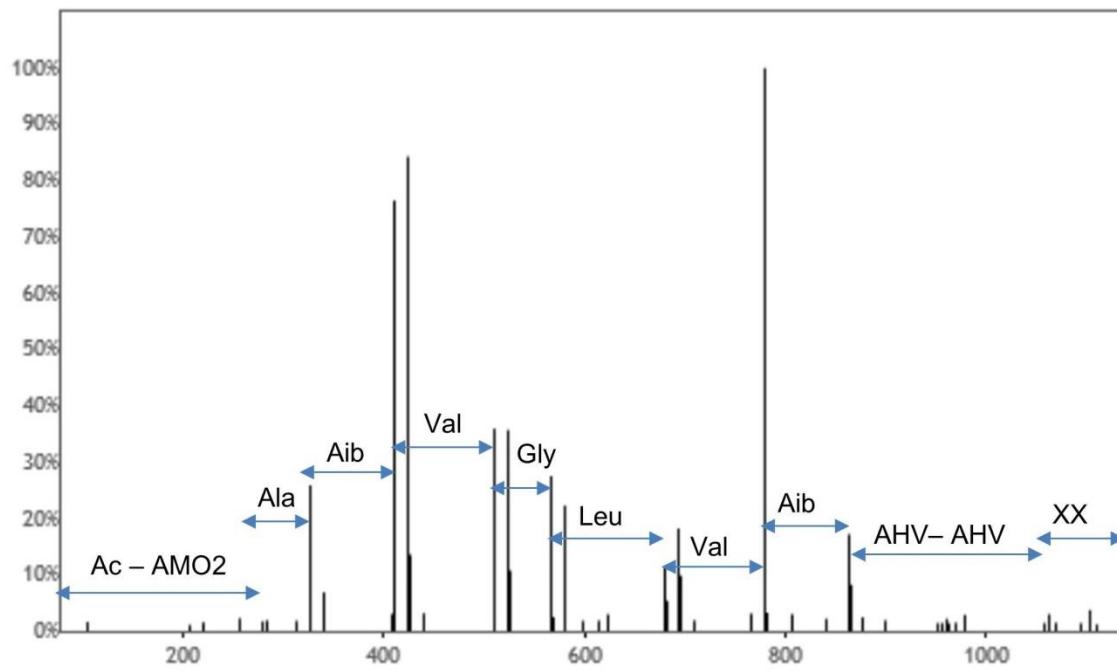
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## 1.2 Supplementary Tables

**Supplementary Table 1.** Identification of 123 strains isolated from Windebyer Noor (Nov, 2015) according to sequence comparison with the NCBI nucleotide database using BLASTn (incl. respective assigned Genbank accession numbers). The 3 first BLAST hits incl. respective accession numbers are given. WO: twigs, F: Foam, SC: driftwood scrapings, L: leaves, WA: water, SE: sediment, SD: seeds. Media: GPY: Glucose Peptone Yeast, PCA: Potato Carrot agar, WSP: modified Wickerham medium and HS: Hastings medium.

No.	Strain I.D.	Sample material	Medium	Ampli-con	Sequence length	Blast result	% similarity	Accession number	Fungal Order	Accession number
1	31WA1A	WO	GPY	ITS	416	<i>Pythium</i> sp. isolate Pc36-1C <i>Pythium</i> sp. isolate Pc70-1W <i>Pythium rhizo-oryzae</i> strain 2015-F-272	100	KY785405.1 KY785393.1 KU751877.1	Pythiales	MH791195
2	12WE1B	WO	PCA	ITS	236	<i>Acremonium breve</i> culture MUT<ITA>:4975 <i>Acremonium</i> sp. L17_BA <i>Acremonium</i> sp. AT10	96 95 95	KY081463.1 KX098313.1 KT377204.1	Hypocreales	MH791196
3	25WA1B	WO	HS	ITS	439	Uncultured fungus clone ITS_S1_clon18 <i>Plectosphaerella</i> sp. 198 OA-2013 <i>Plectosphaerella</i> sp. 193 OA-2013	99	HQ873336.1 JX535155.1 JX535151.1	Glomerellales	MH791197
4	54WS1D	WO	PCA	ITS	400	<i>Cladosporium</i> sp. strain Vp-1 <i>Cladosporium herbarum</i> <i>Davidiella tassiana</i> clone 104o	99	KY305291.1 LC317547.1 EU343348.1	Capnodiales	MH791198
5	30H1A	WA	HS	ITS	456	<i>Microdochium phragmitis</i> CBS 285.71 <i>Microdochium phragmitis</i> strain CBS 423.78 Uncultured <i>Microdochium</i> clone IIN5F29	100	NR_132916.1 KP859012.1 FJ197870.1	Xylariales	MH791199
6	33WB1C	WO	WSP	ITS	267	<i>Cladosporium</i> sp. strain NR47 <i>Cladosporium</i> sp. strain NR38 <i>Cladosporium</i> sp. strain NR37	100	MG845222.1 MG845218.1 MG845217.1	Capnodiales	MH791200
7	35WB1C	WO	HS	ITS	496	<i>Plectosphaerella oligotrophica</i> strain AUMC 11010 Uncultured <i>Plectosphaerella</i> , clone 09D50C59 (MOTU71) Uncultured <i>Plectosphaerella</i> , clone 09D10C71 (MOTU71)	99	KX446769.1 HG936781.1 HG936780.1	Glomerellales	MH791249
8	62WD1D	WO	PCA	18S	1526	<i>Plectosphaerella</i> sp. MH727 <i>Plectosphaerella</i> sp. CCF3811 Fungal sp. isolate nussu_31	99	FJ430715.1 FJ430714.1 KT714157.1	Glomerellales	MH791178
9	56WS1D	SC	PCA	ITS	351	<i>Aureobasidium</i> sp. strain NR88 <i>Aureobasidium pullulans</i> culture MUT<ITA>:2186 <i>Aureobasidium pullulans</i> strain YLAC-4	99	MG845226.1 MG807338.1 KY552634.1	Dothideales	MH791201
10	55WS1D	SC	PCA	ITS	312	<i>Phoma eupyrena</i> isolate F260 <i>Phoma eupyrena</i> isolate F224 <i>Phoma eupyrena</i> isolate F223	100	LT821518.1 LT821490.1 LT821489.1	Pleosporales	MH791202
11	8WE1B	WO	PCA	ITS	488	<i>Cladosporium cladosporioides</i> M47 <i>Cladosporium cladosporioides</i> <i>Cladosporium pseudocladosporioides</i> AY812	100	MG748632.1 MG572365.1 MG250413.1	Capnodiales	MH791203

12	80F1C	F	WSP	ITS	454	<i>Penicillium bialowiezense</i> strain KAS5860 <i>Penicillium brevicompactum</i> strain 82 <i>Penicillium brevicompactum</i> strain IHBF 2254	100	KY469051.1 KY401133.1 MF326601.1	Eurotiales	MH791250
13	78F1C	F	WSP	-	-	-	100	-	-	-
14	66L1B	L	HS	ITS	403	<i>Cladosporium</i> sp. strain NR38 <i>Cladosporium</i> sp. strain NR37 <i>Cladosporium</i> sp. strain NR32 <i>Cladosporium</i> sp. strain NR38 <i>Cladosporium</i> sp. strain NR37 <i>Cladosporium</i> sp. strain NR32	100	MG845218.1 MG845217.1 MG845214.1 MG845218.1 MG845217.1 MG845214.1	Capnodiales	MH791204
15	52WS1D	SC	HS	ITS	401	<i>Cladosporium</i> sp. strain NR47 <i>Cladosporium</i> sp. strain NR38 <i>Cladosporium</i> sp. strain NR37 <i>Cladosporium</i> sp. strain NR32	99	MG845222.1 MG845218.1 MG845217.1 MG845214.1	Capnodiales	MH791205
16	64L1C	L	HS	ITS	327	<i>Cladosporium</i> sp. strain NR47 <i>Cladosporium</i> sp. strain NR38 <i>Cladosporium</i> sp. strain NR37	100	MG845222.1 MG845218.1 MG845217.1	Capnodiales	MH791206
17	22WA1B	WO	GPY	18S	763	<i>Chordomyces antarcticum</i> strain V213 <i>Chordomyces antarcticum</i> strain A135 <i>Chordomyces antarcticum</i> strain A134	99	KJ443101.1 KJ443060.1 KJ443059.1	Glomerellales	MH791189
18	61WD1D	WO	HS	ITS	459	<i>Plectosphaerella cucumerina</i> isolate E-429 <i>Plectosphaerella cucumerina</i> isolate E-371 <i>Plectosphaerella cucumerina</i> isolate E-370	98	KY582156.1 KY582117.1 KY582116.1	Glomerellales	MH791251
19	84F1B	F	HS	18S	1547	<i>Penicillium expansum</i> strain HDJZ-ZWM-17 <i>Penicillium</i> sp. strain OUCMDZ-4754 <i>Penicillium</i> sp. 52	100	GU227344.1 MG736296.1 KU350746.1	Eurotiales	MH791177
20	95S1A	SE	GPY	ITS	317	<i>Acremonium</i> sp. 195 OA-2013 <i>Acremonium</i> sp. 86 OA-2013 <i>Acremonium</i> sp. 28 OA-2013	99	JX535153.1 JX535094.1 JX535052.1	Hypocreales	MH791207
21	29H1A	WA	GPY	18S	1539	<i>Pyrenophaeta nobilis</i> strain CBS 407.76 <i>Pyrenophaeta nobilis</i> strain CBS 407.76 <i>Cucurbitaria berberidis</i> strain	98	MF795792.1 DQ898287.1 U42481.1	Pleosporales	MH791187
22	19WE1C	WO	PCA	ITS	249	<i>Cladosporium</i> sp. strain NR47 <i>Cladosporium</i> sp. strain NR38 <i>Cladosporium</i> sp. strain NR37	100	MG845222.1 MG845218.1 MG845217.1	Capnodiales	MH791208
23	23WA1B	WO	PCA	ITS	494	<i>Cladosporium</i> sp. isolate 39_40_43 <i>Cladosporium asperulatum</i> strain KG_10 <i>Cladosporium</i> sp. isolate 1066	96	KX034368.1 MG647842.1 KT826661.1	Capnodiales	MH791208
24	26WA1B	WO	HS	ITS	283	<i>Penicillium bialowiezense</i> strain KAS5860 <i>Penicillium brevicompactum</i> strain 82 <i>Penicillium brevicompactum</i> strain IHBF 2254	99	KY469051.1 KY401133.1 MF326601.1	Eurotiales	MH791210
25	9WE1B	WO	PCA	18S	801	<i>Penicillium</i> sp. strain OUCMDZ-4754 <i>Penicillium spinulosum</i> strain 092 <i>Penicillium spinulosum</i> strain 087	99	MG736296.1 MF072608.1 MF072607.1	Eurotiales	MH791173
26	13WE1B	WO	PCA	18S	851	<i>Penicillium</i> sp. strain OUCMDZ-4754 <i>Penicillium</i> sp. strain NSY15 <i>Penicillium</i> sp. 52	100	MG736296.1 KX906964.1 KU350746.1	Eurotiales	MH791194
27	39.27WA1B	WO	WSP	ITS	446	<i>Acremonium</i> sp. 195 OA-2013 <i>Acremonium</i> sp. 86 OA-2013 <i>Acremonium</i> sp. 28 OA-2013	99	JX535153.1 JX535094.1 JX535052.1	Hypocreales	MH791252
28	48.21WA1B	WO	GPY	18S	1528	<i>Cladosporium</i> sp. Y19-1 <i>Cladosporium</i> sp. MF528 <i>Cladosporium</i> sp. MF456	99	KP872512.1 KM096331.1 KM096275.1	Capnodiales	MH791181
29	33.81F1B	F	HS	ITS	352	<i>Fusarium culmorum</i> isolate 5761 <i>Fusarium culmorum</i> isolate 5763	99	MG736106.1 MG736104.1	Eurotiales	MH791277

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30	63WD1A	WO	GPY	ITS	303	<i>Fusarium culmorum</i> isolate 9712 <i>Fusarium graminearum</i> strain FSHG <i>Fusarium graminearum</i> isolate WF1 <i>Fusarium</i> sp. isolate 5643 <i>Fusarium culmorum</i> isolate 5761 <i>Fusarium culmorum</i> isolate 5763 <i>Fusarium culmorum</i> isolate 9712	100	MG274304.1 KU939070.1 KY985465.1 MG736188.1 MG736106.1 MG736104.1 MG274304.1	Hypocreales	MH791211
31	7.6WE1B	WO	HS	ITS	316	<i>Fusarium culmorum</i> isolate 5761 <i>Fusarium culmorum</i> isolate 5763 <i>Fusarium culmorum</i> isolate 9712	99	MG736106.1 MG736104.1 MG274304.1	Hypocreales	MH791212
32	42.99S1B	SE	WSP	ITS	454	<i>Penicillium bialowiezense</i> strain KAS5860 <i>Penicillium brevicompactum</i> strain 82 <i>Penicillium brevicompactum</i> strain IHBF 2254	100	KY469051.1 KY401133.1 MF326601.1	Eurotiales	MH791253
33	2.58WC1A	WO	WSP	ITS	223	Uncultured endophytic fungus clone 13-11-11 <i>Epicoccum nigrum</i> isolate MFLUCC 17-1162 <i>Epicoccum nigrum</i> isolate MFLUCC 17-1153	99	EF505272.1 MG807029.1 MG807028.1	Hypocreales	MH791278
34	56.47WS1A	SC	WSP	ITS	313	<i>Epicoccum nigrum</i> isolate MFLUCC 17-1162 <i>Epicoccum nigrum</i> isolate MFLUCC 17-1153 <i>Epicoccum nigrum</i> isolate MFLUCC 17-1214	100	MG807029.1 MG807028.1 MG807027.1	Hypocreales	MH791213
35	53.50WS1B	SC	HS	ITS	311	<i>Fusarium graminearum</i> strain FSHG <i>Fusarium graminearum</i> isolate WF1	100	KU939070.1 KY985465.1	Hypocreales	MH791214
36	43.100S1B	SE	WSP	ITS	447	<i>Fusarium</i> sp. isolate 5643 <i>Sarocladium</i> sp. strain MAC1 <i>Sarocladium strictum</i> isolate VGSS16-1 <i>Sarocladium strictum</i> isolate UWR_109	99	MG649462.1 MF671820.1 KY465763.1	Hypocreales	MH791254
37	10.45WS1A	SC	PCA	ITS	321	<i>Fusarium</i> sp. isolate 5662 <i>Fusarium</i> sp. isolate 5664 <i>Fusarium culmorum</i> isolate 5761	100	MG736185.1 MG736184.1 MG736106.1	Hypocreales	MH791279
38	4.32WB1C	WO	WSP	ITS	404	<i>Microdochium bolleyi</i> strain RFA7P <i>Microdochium bolleyi</i> strain Q6-3 <i>Microdochium bolleyi</i> strain NQ5-4	99	KY305060.1 KY365584.1 KY365578.1	Xylariales	MH791255
39	61.60WC1B	WO	WSP	ITS	261	<i>Acremonium</i> sp. 195 OA-2013 <i>Acremonium</i> sp. 86 OA-2013 <i>Acremonium</i> sp. 28 OA-2013	99	JX535153.1 JX535094.1	Hypocreales	MH791215
40	57.47WS1A	SC	PCA	ITS	270	<i>Alternaria alternata</i> isolate ET57 <i>Alternaria alternata</i> isolate ET58 <i>Alternaria alternata</i> strain Alt008	100	KY774665.1 KY774664.1 MG827243.1	Pleosporales	MH791216
41	46.51WS1C	SC	WSP	ITS	305	<i>Epicoccum nigrum</i> isolate MFLUCC 17-1162 <i>Epicoccum nigrum</i> isolate MFLUCC 17-1153 <i>Epicoccum nigrum</i> isolate MFLUCC 17-1214	100	MG807029.1 MG807028.1 MG807027.1	Pleosporales	MH791217
42	12.1WE1B	WO	GPY	ITS	305	<i>Fusarium graminearum</i> isolate WF1 <i>Fusarium</i> sp. isolate 5643 <i>Fusarium</i> sp. isolate 5662	100	KY985465.1 MG736188.1 MG736185.1	Hypocreales	MH791218
43	29.36WB1C	WO	HS	ITS	331	<i>Hypoconea</i> sp. S68 <i>Hypoconea</i> sp. SE51 <i>Acremonium</i> breve culture MUT<ITA>:4975	98 97 96	HQ596921.1 HQ596914.1 KY081463.1	Hypocreales	MH791219
44	6.96S1C	SE	GPY	ITS	376	<i>Pyrenopeziza cava</i> strain SO1_T23_L3B <i>Pyrenopeziza cava</i> isolate HL <i>Pyrenopeziza cava</i> Gall_31	100	KY367517.1 KR909135.1 KT823796.1	Pleosporales	MH791292
45	27.87F1B	F	GPY	18S	1538	<i>Penicillium brevicompactum</i> strain ALI 318 <i>Penicillium brevicompactum</i> strain CB10 <i>Penicillium brevicompactum</i> strain ALI 319	98	AF548082.1 KM222211.1 AF548083.1	Eurotiales	MH791188
46	38.42FS	SD	PCA	18S	1533	<i>Penicillium freii</i> (IBT 3464) Fungal sp. ZJ50	97	AJ005446.1 KT582238.1	Eurotiales	MH791182

47	36.97F1C	F	PCA	18S	1122	<i>Penicillium</i> sp. MF523 <i>Penicillium</i> sp. FA6-2 <i>Penicillium</i> sp. FA9 <i>Penicillium brevicompactum</i> isolate PenC <i>Emericellopsis</i> sp. s012 <i>Acremonium</i> sp.195OA-2013 <i>Acremonium</i> sp.86OA-2013	98	KM096327.1 KF776918.1 KF776917.1 FJ717699.1 HQ649988.1 JX535153.1 JX535094.1	Eurotiales	MH791183
48	25.88F1C	F	WSP	ITS	308	<i>Fusarium culmorum</i> isolate 5761 <i>Fusarium culmorum</i> isolate 5763 <i>Fusarium culmorum</i> isolate 9712 <i>Acremonium</i> sp.195OA-2013 <i>Acremonium</i> sp. 86OA-2013 <i>Acremonium</i> sp.28OA-2013	100	MG736106.1 MG736104.1 MG274304.1	Hypocreales	MH791220
49	11.45WS1A	SC	WSP	ITS	305	<i>Fusarium culmorum</i> isolate 5761 <i>Fusarium culmorum</i> isolate 5763 <i>Fusarium culmorum</i> isolate 9712 <i>Acremonium</i> sp.195OA-2013 <i>Acremonium</i> sp. 86OA-2013 <i>Acremonium</i> sp.28OA-2013	99	JX535153.1 JX535094.1 JX535052.1	Hypocreales	MH791221
50	WA1D3	WO	HS	ITS	324	<i>Cladosporium</i> sp. strain NR47 <i>Cladosporium</i> sp. strain NR38 <i>Cladosporium</i> sp. strain NR37	100	MG845222.1 MG845218.1 MG845217.1	Capnodiaceae	MH791222
51	47.57WS1D	SC	HS	ITS	315	<i>Cosmospora stegonsporii</i> strain UASWS1262 <i>Cosmospora stegonsporii</i> strain A.R.4385 <i>Nectria flavoviridis</i> strain IMI338173	99	KP114076.1 KC291718.1 KC291747.1	Hypocreales	MH791291
52	41.20WA1B	WO	WSP	ITS	313	<i>Cladosporium</i> sp. strain NR47 <i>Cladosporium</i> sp. strain NR38 <i>Cladosporium</i> sp. strain NR37	100	MG845222.1 MG845218.1 MG845217.1	Capnodiaceae	MH791223
53	44.38FS	SD	GPY	ITS	266	<i>Phoma eupyrena</i> isolate F260 <i>Phoma eupyrena</i> isolate F224 <i>Phoma eupyrena</i> isolate F223	100	LT821518.1 LT821490.1 LT821489.1	Mytilinidiales	MH791224
54	49.49WS1B	SC	GPY	ITS	313	<i>Fusarium avenaceum</i> isolate F70 <i>Fusarium avenaceum</i> isolate F39 <i>Fusarium avenaceum</i> isolate F33	100	LT821457.1 LT821425.1 LT821419.1	Hypocreales	MH791225
55	9.59WC1B	WO	PCA	ITS	308	<i>Alternaria alternata</i> isolate ET57 <i>Alternaria alternata</i> isolate ET58 <i>Alternaria alternata</i> strain Alt008	100	KY774665.1 KY774664.1 MG827243.1	Pleosporales	MH791226
56	45.53WS1C	SC	GPY	ITS	457	<i>Fusarium graminearum</i> isolate WF1 <i>Fusarium</i> sp. isolate 5643 <i>Fusarium</i> sp. isolate 5662	100	KY985465.1 MG736188.1 MG736185.1	Hypocreales	MH791227
57	13.1WE1B	WO	GPY	ITS	344	<i>Cladosporium</i> sp. strain NR47 <i>Cladosporium</i> sp. strain NR38 <i>Cladosporium</i> sp. strain NR37	99	MG845222.1 MG845218.1 MG845217.1	Capnodiaceae	MH791228
58	28.65L1C	L	GPY	ITS	383	<i>Microdochium phragmitis</i> CBS285.71 <i>Microdochium phragmitis</i> strain CBS423.78 <i>Monographella</i> sp.GW_OTU50	99	NR_132916.1 KP859012.1 KP714578.1	Xylariales	MH791229
59	40.24WA1B	WO	HS	ITS	295	<i>Plectosphaerella cucumerina</i> isolate NIHHS403 <i>Fungal</i> sp. isolate ZY-58 <i>Plectosphaerella oligotrophica</i> OA2S1-48	100	KY555004.1 KY040255.1 MG214595.1	Glomerellales	MH791256
60	WB1D	WO	PCA	ITS	381	<i>Lentitrichiaceae</i> sp. MUT4420 <i>Pleosporales</i> sp. CBS193.87 <i>Phomasp.</i> CJL-2014 strainRc-R-42	94	KF636770.1 KY940785.1 KJ542231.1	Pleosporales	MH791230
61	WA1C	WO	WSP	ITS	320	<i>Acremonium</i> sp.195OA-2013 <i>Acremonium</i> sp. 86OA-2013 <i>Acremonium</i> sp.28OA-2013	99	JX535153.1 JX535094.1 JX535052.1	Hypocreales	MH791231
62	58WC1A	WO	WSP	ITS	413	<i>Epicoccum nigrum</i> isolate MFLUCC17-1162 <i>Epicoccum nigrum</i> isolate MFLUCC17-1153 <i>Epicoccum nigrum</i> isolate MFLUCC17-1214	100	MG807029.1 MG807028.1 MG807027.1	Pleosporales	MH791257

Supplementary Material

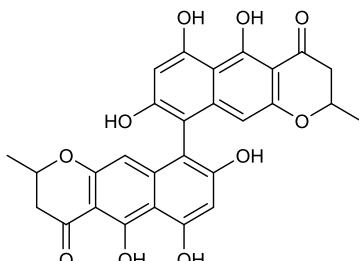
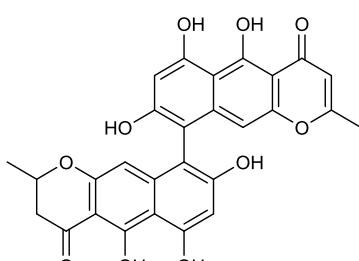
64	S1DA	SE	WSP	ITS	507	Fungal sp. strain OTU53 Helotiales sp. 203OA-2013 Helotiales sp.104OA-2013	99	KT923227.1 JX507714.1 JX507688.1	Helotiales	MH791258
65	1EWE2	WO	WSP	ITS	453	<i>Cladosporium</i> sp. isolate UCD160913G3_16UCDE10 <i>Cladosporium</i> sp. isolatePCR39 <i>Cladosporium</i> sp. isolatePCR35	100	MG686514.1 KY436105.1 KY436103.1	Capnodiales	MH791267
66	86F1C	F	WSP	ITS	482	<i>Cladosporium cladosporioides</i> isolate M47 <i>Cladosporium cladosporioides</i> isolate stone isolate15 <i>Cladosporium pseudocladosporioides</i> strain AY812	100	MG748632.1 MG572365.1 MG250413.1	Capnodiales	MH791259
67	S1CB	SE	GPY	18s	1478	<i>Pyrenophaeta nobilis</i> strain CBS407.76 <i>Pyrenophaeta nobilis</i> strain CBS407.76 <i>Pyrenophaeta</i> sp. 14009	98	MF795792.1 DQ898287.1 EU710832.1	Pleosporales	MH791174
68	WE1CA	WO	WSP	ITS	176	<i>Phoma</i> sp. MUT5442 <i>Phoma</i> sp.MUT5380 <i>Phoma</i> sp. MUT5378	100	KU314970.1 KU314957.1 KU314955.1	Pleosporales	MH791232
69	S1DB	SE	HS	ITS	265	<i>Plenodomus influorescens</i> strain CBS143.84 <i>Plenodomus lindquistii</i> strain P47 <i>Plenodomus lindquistii</i> strain P46	100	JF740228.1 KU361380.1 KU361379.1	Pleosporales	MH791233
70	5.32WB1C	WO	WSP	ITS	444	<i>Penicillium bialowiezense</i> strain KAS5860 <i>Penicillium brevicompactum</i> strain 82 <i>Penicillium brevicompactum</i> strain IHBF2254	100	KY469051.1 KY401133.1 MF326601.1	Eurotiales	MH791260
71	59.47WS1A	SC	PCA	18S	965	<i>Acremonium</i> sp. CSPC Betsoh <i>Plectosphaerella</i> sp. MH727 <i>Plectosphaerella</i> sp. CCF3811	99	KJ867227.1 FJ430715.1 FJ430714.1	Hypocreales	MH791179
72	7F1B	F	HS	ITS	326	<i>Penicillium</i> sp. CCN25 <i>Penicillium brevicompactum</i> strain KAS5871 <i>Penicillium brevicompactum</i> strain KAS5811	99	DQ993646.1 KY469055.1 KY469040.1	Eurotiales	MH791234
73	3.75F1C	F	GPY	18S	1529	<i>Penicillium expansum</i> strain HDJZ-ZWM-17 <i>Penicillium</i> sp. strain OUCMDZ-4754 <i>Penicillium</i> sp.52	100	GU227344.1 MG736296.1 KU350746.1	Eurotiales	MH791185
74	30.36WB1D	WO	HS	ITS	325	<i>Penicillium bialowiezense</i> strain KAS5860 <i>Penicillium brevicompactum</i> strain 82 <i>Penicillium brevicompactum</i> strain IHBF2254	100	KY469051.1 KY401133.1 MF326601.1	Eurotiales	MH791235
75	31.68F1B	F	HS	ITS	324	<i>Penicillium bialowiezense</i> strain KAS5860 <i>Penicillium brevicompactum</i> strain 82 <i>Penicillium brevicompactum</i> strain IHBF2254	100	KY469051.1 KY401133.1 MF326601.1	Eurotiales	MH791236
76	50.82F1B	F	HS	ITS	327	<i>Penicillium brevicompactum</i> strain KAS5871 <i>Penicillium brevicompactum</i> strain KAS5811 <i>Penicillium brevicompactum</i> strain KAS5773	100	KY469055.1 KY469040.1 KY469035.1	Eurotiales	MH791237
77	H1BR	WA	HS	ITS	327	<i>Penicillium brevicompactum</i> strain KAS5854 <i>Penicillium brevicompactum</i> strain KAS5812 <i>Penicillium brevicompactum</i> strain KAS5776	100	KY469047.1 KY469041.1 KY469037.1	Eurotiales	MH791238
78	F1D	F	GPY	ITS	392	<i>Penicillium brevicompactum</i> strain MERVA5 <i>Penicillium</i> sp.isolate UCD160901G3_16UCDE1 <i>Penicillium brevicompactum</i> strainKG_6	99	MF503895.1 MG686505.1 MG647838.1	Eurotiales	MH791281
79	37.92F1B	F	PCA	ITS	446	<i>Penicillium brevicompactum</i> strain 82 <i>Penicillium brevicompactum</i> strain IHBF2254 <i>Penicillium</i> sp. isolate BR692	100	KY401133.1 MF326601.1 KY438237.1	Eurotiales	MH791261
80	WA1D	WO	PCA	ITS	328	<i>Penicillium brevicompactum</i> strain KAS5854 <i>Penicillium brevicompactum</i> strain KAS5812 <i>Penicillium brevicompactum</i> strain KAS5776	100	KY469047.1 KY469041.1 KY469037.1	Eurotiales	MH791239

81	62.72F1A	F	PCA	ITS	364	<i>Penicillium brevicompactum</i> strain 82 <i>Penicillium brevicompactum</i> strain IHBF2254 <i>Penicillium</i> sp. isolate BR692	100	KY401133.1 MF326601.1 KY438237.1	Eurotiales	MH791282
82	3WE1B	WO	GPY	18S	553	<i>Hypocreomycetidae</i> sp. ST-2017a <i>Gliocladium cibotii</i> isolate gcy1 <i>Acremonium furcatum</i> strain AY858	98	KY882037.1 KY315573.1 MG250388.1	Hypocreales	MH791186
83	37RWE2	WO	GPY	ITS	484	<i>Phialemonium</i> sp. Gall_27 <i>Phialemonium dimorphosporum</i> strain 2015-F-034 <i>Phialemonium</i> sp. T004-F2-2	100	KT823792.1 KU751865.1 LC109299.1	Sordariales	MH791268
84	5EWS2	SC	PCA	ITS	399	Fungal endophyte isolate 15 <i>Phoma</i> sp. CJL-2014 strain Rc-R-42	96 95	KU179250.1 KJ542231.1	Pleosporales	MH791242
85	33XWA2	WO	GPY	18S	729	<i>Byssothecium obiones</i> isolate CM1CS2C1 <i>Emericellopsis minima</i> strain CBS871.68 <i>Acremonium</i> sp. TVG-S004-0211	94 99	KX263807.1 KC987212.1 KU145487.1	Hypocreales	MH791184
86	35XWA2	WO	PCA	ITS	376	<i>Acremonium</i> sp. Y36-2 <i>Emericellopsis</i> sp. OUCMBI101058	97	KP872531.1 HQ914819.1	Hypocreales	MH791290
87	14PWF2	WO	GPY	ITS	303	Fungal sp.strainTH31 Uncultured <i>Emericellopsis</i> , clone10J50C67(MOTU75)		KY607763.1 HG936806.1		
88	2EWE2	WO	GPY	18S	1519	<i>Pseudohalonectria lignicola</i> strain M95 <i>Phomopsis</i> sp. ONH-2015 strain MATB4 <i>Macrophomina phaseolina</i> strain JD-CP2	96 93 93	JX134679.1 KM510387.1 JQ954870.1	Magnaporthales	MH791285
89	10PL2	L	GPY	ITS	250	Lindgomycetaceae sp. strain KF970 Lindgomycetaceae sp. KF970 Uncultured fungus: A_3_16	99	KY362378.1 KM096176.1 AB534319.1	Pleosporales	MH791191
90	17PH2	WA	GPY	18S	1531	<i>Penicillium porphyreum</i> CBS382.64 <i>Penicillium lagaena</i> CBS185.65 <i>Penicillium</i> sp. strain SYPF7919	100	NR_153224.1 NR_153223.1 MF588872.1	Eurotiales	MH791269
91	24PWA2	WO	WSP	ITS	459	<i>Aspergillus fumigatus</i> strain YuZhu2 <i>Aspergillus fumigatus</i> strain TMS-26 <i>Aspergillus fumigatus</i> strain WL002 <i>Leptosphaeria</i> sp. isolate DEPMDZ-9 <i>Leptosphaeria</i> sp. aurim1184	100 99	KU512836.1 KJ746594.1 KJ528402.1 KU901551.1 DQ093683.1	Eurotiales	MH791192
92	18.74F1C	F	WSP	-	-	<i>Pleosporales</i> sp. bc_gw_9967a		KF428332.1		
93	32XWF2	WO	GPY	ITS	544	<i>Cadophora luteo-olivacea</i> isolate Cadoph_L02 <i>Cadophora luteo-olivacea</i> isolate Cadoph_L01 <i>Cadophora luteo-olivacea</i> culture MUT<ITA>.2817	100	MG944391.1 MG944390.1 MG813217.1	Helotiales	MH796079
94	26XWS2	SC	GPY	ITS	460	Fungal endophyte isolate 15 <i>Phoma</i> sp.CJL-2014 strain Rc-R-42	97 96	KU179250.1 KJ542231.1	Pleosporales	MH791270
95	HBB	WA	HS	ITS	389	<i>Byssothecium obiones</i> isolate CM1CS2C1 <i>Penicillium</i> sp. DUCC7308 <i>Penicillium carneum</i> strain CBS468.65 <i>Penicillium carneum</i> CBS112297	100	KX263807.1 KC291136.1 JN097809.1 NR_111551.1	Eurotiales	MH791283
96	3EWA2	WO	WSP	ITS	422	<i>Gibellulopsis nigrescens</i> isolate LG1401_GL11A <i>Gibellulopsis nigrescens</i> culture-collection MUT<ITA>.1664 <i>Gibellulopsis</i> sp.MYf203	100	KX359602.1 KU935672.1	Glomerellales	MH791271
97	16PWC2	WO	GPY	18S	1536	<i>Penicillium chrysogenum</i> strain Fungal sp. ZJ48 Fungal sp. ZJ34	99	KX079890.1 KX580630.1 KT582272.1 KT582268.1	Eurotiales	MH791193
98	H1A_C	WA	GPY	18S	1017	<i>Penicillium brevicompactum</i> strain ALI318	99	AF548082.1	Eurotiales	MH791175

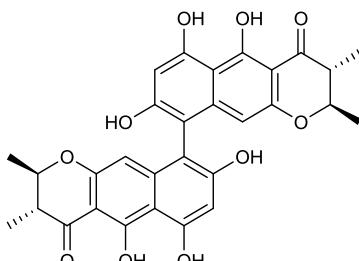
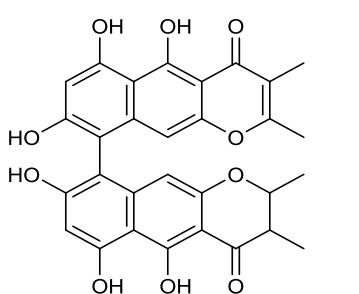
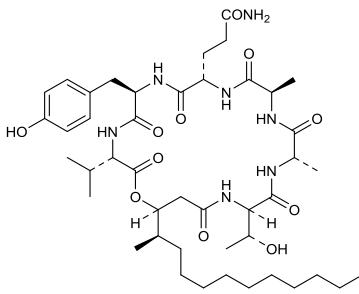
99	13PWB2	WO	HS	ITS	457	<i>Penicillium brevicompactum</i> strain CB10 <i>Penicillium brevicompactum</i> strain CB9 <i>Plectosphaerella cucumerina</i> isolate E-429 <i>Plectosphaerella cucumerina</i> isolate E-371 <i>Plectosphaerella cucumerina</i> isolate E-370 Fungal endophyte isolate 15 <i>Byssothecium obiones</i> isolate CM1CS2C1 <i>Pleosporales</i> sp. s092 <i>Penicillium</i> sp. isolate UCD160901G3_16UCDE1 <i>Penicillium brevicompactum</i> strain KG_6 <i>Penicillium brevicompactum</i> strain Bsa4SNA3 Fungal endophyte isolate 15 <i>Byssothecium obiones</i> isolate CM1CS2C1 <i>Pleosporales</i> sp. s092 <i>Acremonium</i> sp. 195OA-2013 <i>Acremonium</i> sp. 86OA-2013 <i>Acremonium</i> sp. 28OA-2013 Fungal endophyte isolate 15 <i>Phoma</i> sp. CJL-2014 strain Rc-R-42 <i>Byssothecium obiones</i> isolate CM1CS2C1 <i>Cladosporium cladosporioides</i> <i>Cladosporium cladosporioides</i> isolate SR779-ENO1 <i>Cladosporium</i> sp. isolate C7-10 <i>Phytophthora lacustris</i> strain CWM37902 <i>Phytophthora lacustris</i> isolate 250492 <i>Phytophthora lacustris</i> isolate 250491 Fungal endophyte isolate 15 <i>Phoma</i> sp. CJL-2014 strain Rc-R-42 <i>Pleosporales</i> sp. XJ7 Fungal endophyte isolate 15 <i>Phoma</i> sp. CJL-2014 strainRc-R-42 <i>Byssothecium obiones</i> isolate CM1CS2C1 <i>Hypoxyylon fragiforme</i> isolate CBS206.31 Uncultured <i>Hypoxyylon</i> MOTU1 <i>Hypoxyylon fragiforme</i> voucher BIOUG24047-A11 <i>Leptosphaeria</i> sp. isolate DEPMRDZ-9 <i>Leptosphaeria</i> sp. aurim1184 <i>Pleosporales</i> sp. bc_gw_9967a <i>Phaeosphaeriaceae</i> sp. OTU_081 Uncultured <i>Phaeosphaeria</i> clone FTrs21 Uncultured fungus clone S276 <i>Leptosphaeria</i> sp. isolate DEPMRDZ-9 <i>Leptosphaeria</i> sp. aurim1184 <i>Pleosporales</i> sp. bc_gw_9967a Fungal endophyte isolate 15 <i>Byssothecium obiones</i> isolate CM1CS2C1 <i>Pleosporales</i> sp. s092 <i>Acremonium</i> sp. 195OA-2013 <i>Acremonium</i> sp. 86OA-2013 <i>Acremonium</i> sp. 28OA-2013 <i>Epicoccum nigrum</i> isolate 5341	99 97 96 96 100 96 94 94 99 99 95 100 100 100 100 99 97 96 96 97 96 95 99 98 92 98 98 96 96 95 99 99	KM222211.1 KM222210.1 KY582156.1 KY582117.1 KY582116.1 KU179250.1 KX263807.1 HQ649784.1 MG686505.1 MG647838.1 KY558616.1 KU179250.1 KX263807.1 HQ649784.1 JX535153.1 JX535094.1 JX535052.1 KU179250.1 KJ542231.1 KX263807.1 MG836709.1 KY964059.1 MG818941.1 JX272358.1 KT383052.1 KT383051.1 KU179250.1 KJ542231.1 KT383052.1 KU179250.1 KJ542231.1 KX263807.1 KU684022.1 LC015715.1 KT695333.1 KU901551.1 DQ093683.1 KF428332.1 HE998742.1 KT759274.1 FJ820763.1 KU901551.1 DQ093683.1 KF428332.1 KU179250.1 KX263807.1 HQ649784.1 JX535153.1 JX535094.1 JX535052.1 MG736207.1	Xylariales Pleosporales Eurotiales Pleosporales Hypocreales Pleosporales Capnodiales Perono-sporales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales Xylariales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales Pleosporales	MH791272 MH791243 MH791240 MH791244 MH791245 MH791273 MH791241 MH791274 MH791275 MH791287 MH791288 MH791276 MH791262 MH791246 MH791247 MH791248 MH791284
105	L1D_A	L	PCA	ITS	322					
106	39RWC2	WO	WSP	ITS	494					
107	8ES2	SE	HS	ITS	503					
108	41RWS2	SC	GPY	ITS	477					
109	20PWS2	SC	WSP	ITS	484					
110	22PWA2	WO	GPY	ITS	462					
111	L1D	L	PCA	ITS	470					
112	23PWA2	WO	PCA	ITS	442					
113	25XWS2	SC	PCA	ITS	323					
114	28XWS2	SC	WSP	ITS	258					
115	FWD1C	WO	WSP	ITS	373					

116	CL1D	L	HS	18S	889	<i>Epicoccum nigrum</i> strain: RH3 <i>Epicoccum nigrum</i> strain Uncultured marine fungus clone FAS_22 <i>Cladosporium cladosporioides</i> strain 095 <i>Cladosporium cladosporioides</i> strain 090	98	LC171699.1 LC171695.1 GQ120119.1 MF072585.1 MF072584.1	Capnodiales	MH791176	
117	49WS1B	SC	GPY	18S	1538	Pleosporales sp. MF565 Pleosporales sp. MF552 Pleosporales sp. MF550	98	KM096358.1 KM096350.1 KM096348.1	Pleosporales	MH791180	
118	NWS1A	SC	PCA	ITS	300	<i>Epicoccum nigrum</i> isolate MFLUCC17-1162 <i>Epicoccum nigrum</i> isolate MFLUCC17-1153 <i>Epicoccum nigrum</i> isolate MFLUCC17-1214	100	MG807029.1 MG807028.1 MG807027.1	Pleosporales	MH791263	
119	20WA1B	WO	GPY	18S	886	Hypocreales sp. LF213 <i>Cosmospora</i> sp. 3PC-2011 strain GJS96186 <i>Cosmospora</i> sp. 3PC-2011 strain GJS95199	99	KM096182.1 JN939679.1 JN939678.1	Hypocreales	MH791190	
120	31XWF2	WO	HS	ITS	403	<i>Aspergillus ruber</i> strain MHS9 <i>Aspergillus chevalieri</i> strain M-1 <i>Aspergillus chevalieri</i> strain M-6	100	KY629639.1 MF324891.1 MF324890.1	Eurotiales	MH791289	
121	41FSA	SD	PCA	ITS	291	<i>Epicoccum nigrum</i> isolate MFLUCC17-1162 <i>Epicoccum nigrum</i> isolate MFLUCC17-1153 <i>Epicoccum nigrum</i> isolate MFLUCC17-1214	100	MG807029.1 MG807028.1 MG807027.1	Pleosporales	MH791264	
122	B1F1B	F	WSP	ITS	374	Fungal sp. isolate ZY-58 <i>Plectosphaerella</i> sp. IwLs3 <i>Plectosphaerella</i> sp. Jul1b	100	KY040255.1 LC222413.1 LC222408.1	Glomerellales	MH791265	
123	B2F1B	F	WSP	ITS	486	Fungal sp. isolate ZY-58 <i>Plectosphaerella cucumerina</i> isolate VGPC14-2 <i>Plectosphaerella</i> sp. isolate LG1401_GL10B	99	KY040255.1 MF688853.1 KX359601.1	Glomerellales	MH791266	

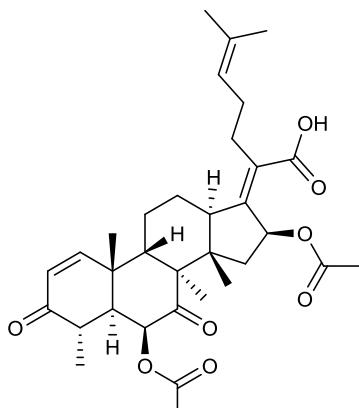
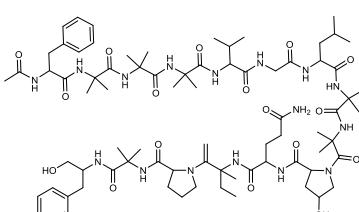
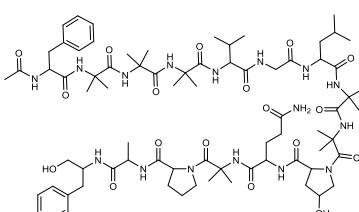
**Supplementary Table 2.** Putatively identified compounds by dereplication of extracts using GNPS combined with an *in silico* MS/MS database (ISDB-UNPD) and manual dereplication based on DNP, REAXYS, MarinLit and SciFinder databases. Annotation considered the  $m/z$   $[M+H]^+$ , biological source, retention time, predicted molecular formula and fragmentation pattern. Culture type; N: metabolite derived from a mono-culture, C: metabolite derived from co-culture.

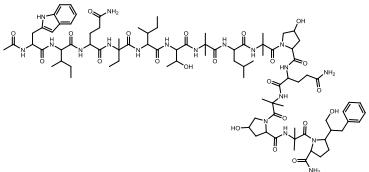
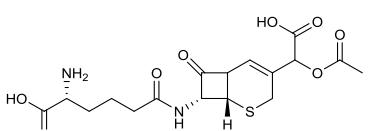
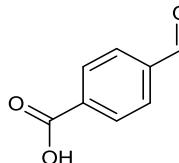
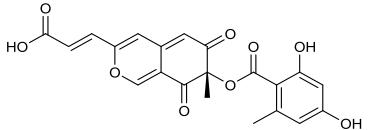
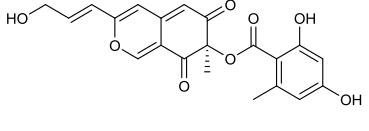
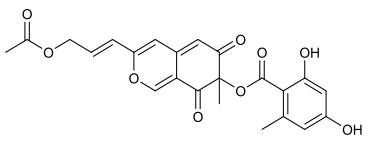
No.	Putative ID/ chemical family	Structure	Molecular formula of the $m/z [M+H]^+$ ( $\Delta$ ppm)	Parent mass $m/z [M+H]^+$	MS/MS	Retention time(min)/ Culture type
1	Cephalochromin (naphtho- $\gamma$ -pyrone)		$C_{28}H_{23}O_{10}$ (1.3)	519.1284	501.1195, 260.0698, 245.0457, 231.0683, 219.0297, 218.0229	7.46 N/C
2	Ustilaginoidin G/ Dihydroisoustilaginoidin A (naphtho- $\gamma$ -pyrone)		$C_{28}H_{21}O_{10}$ (2.9)	517.1150	499.1036, 260.0694, 258.0541, 245.0427, 231.0701, 219.0291	7.31 N/C

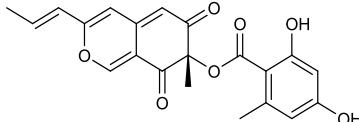
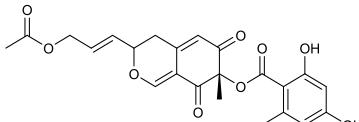
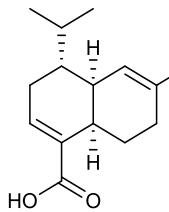
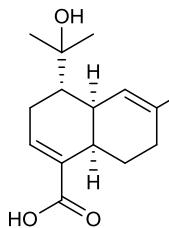
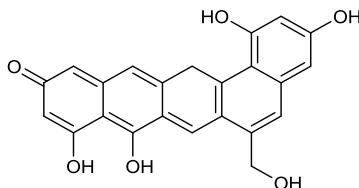
3	Ustilaginoidin A (naphtho- $\gamma$ -pyrone)		C <sub>28</sub> H <sub>19</sub> O <sub>10</sub> (-2.1)	515.1259	-	4.69
4	Ustilaginoidin I (naphtho- $\gamma$ -pyrone)		C <sub>28</sub> H <sub>21</sub> O <sub>11</sub> (1.1)	533.1090	515.0963, 493.1126, 477.0819, 451.0999, 260.0693	6.12 N/C
5	Ustilaginoidin V (naphtho- $\gamma$ -pyrone)		C <sub>28</sub> H <sub>23</sub> O <sub>11</sub> (-0.4)	535.1237	517.1116, 493.1128, 477.0807, 451.1015, 260.0688, 517.1116, 493.1128, 477.0807, 451.1015, 260.0688	6.12 N/C
6	Ustilaginoidin E (naphtho- $\gamma$ -pyrone)		C <sub>29</sub> H <sub>25</sub> O <sub>10</sub> (3.1)	533.1479	515.1333, 490.1250, 477.0801, 274.0849, 260.0694	7.84 N/C

7	Chaetochromin A or Ustilaginoidin D (naphtho-γ-pyrone)		C <sub>30</sub> H <sub>27</sub> O <sub>10</sub> (-2.7)	547.1599	529.1428, 504.1302, 491.1051, 274.0846, 201.0479	8.25
8	Chaetochromin Stereoisomer, didehydro 2',3'- (naphtho-γ-pyrone)		C <sub>30</sub> H <sub>25</sub> O <sub>10</sub> (-0.1)	545.1447	464.2164, 424.1467, 272.0674	8.62
9	Acuminatum C (cyclodepsipeptide)		C <sub>44</sub> H <sub>72</sub> N <sub>7</sub> O <sub>11</sub> (4.3)	874.546	856.5190, 551.2844, 466.3281, 434.2038, 395.2917, 377.2818, 271.1421, 200.1040, 101.0707	8.14 N/C

10	Acuminatum B (cyclodepsipeptide)		C <sub>45</sub> H <sub>74</sub> N <sub>7</sub> O <sub>11</sub> (0.7)	888.5449	870.5326, 565.2996, 466.3303, 434.2056, 395.2923, 271.1425	8.44 N/C
11	3-Hydroxy-7(11),9-eremophiladien-8-one; 3 $\beta$ -form, 3-Ac (bicyclic sesquiterpenoid)		C <sub>17</sub> H <sub>25</sub> O <sub>3</sub> (1.4)	277.1808	259.1704, 151.0759	5.24 N/C
12	3,6-Dihydroxy-7(11),9-eremophiladien-8-one; (3 $\alpha$ ,6 $\alpha$ )-form, 3-Ac (bicyclic sesquiterpenoid)		C <sub>17</sub> H <sub>25</sub> O <sub>4</sub> (1)	293.1756	275.1643, 257.1547, 151.0760	5.37 N/C
13	Zervamicin ZIIB (peptaibol)	Ac-Trp-Ile-Gln-Iva-Ile-Thr-Aib- Leu-Aib	Corresponds to 9 amino acid sequence of Zervamicin ZIIB	1066.5811	981.5859, 850.4821, 783.4412, 682.3937, 569.3098, 470.2407, 342.1846	7.13 N

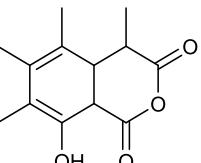
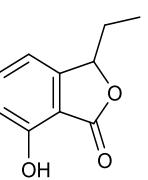
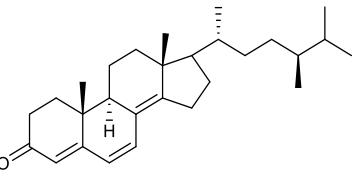
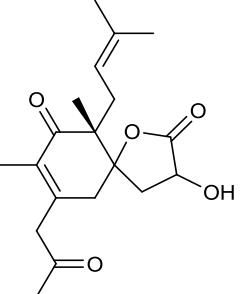
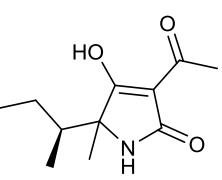
14	Helvolic acid (nortriterpenoid)		C <sub>31</sub> H <sub>41</sub> O <sub>6</sub> (-0.2)	Calculated for 509.2906	491.2789, 463.2843, 449.2691, 403.2646, 385.2529, 213.1283, 177.0921, 139.0759	7.87 N/C
15	Zervamicin ZIC (peptaibol)	Ac-Trp-Ile-Glu-Iva-Ile-Thr-Aib- Leu-Aib-Hyp-Gln-Aib-Hyp-Aib	Correspond to 14 amino acid sequence of Zervamicin ZIC	1592.9006	1067.6276, 982.5656, 851.4849, 683.3985, 570.3151, 471.2359, 342.1906	7.10 N/C
16	Emerimycin_IV (peptaibol)		C <sub>77</sub> H <sub>121</sub> N <sub>16</sub> O <sub>19</sub> (2)	1573.8994	1224.6918, 884.5237, 799.4716, 714.4200, 544.3147, 445.2454, 360.1936	7.21 N/C
17	Heptaibin (peptaibol)		C <sub>76</sub> H <sub>119</sub> N <sub>16</sub> O <sub>19</sub> (1.4)	1559.8879	1210.6702, 884.5254, 799.4731, 714.4203, 544.3164, 445.2562, 360.1929	6.92 N/C

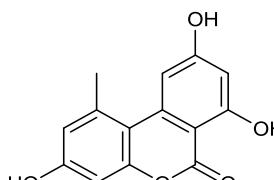
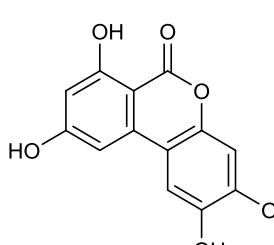
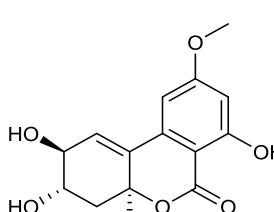
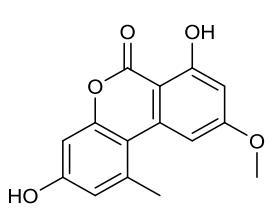
18	Zervamicin ZIIB (peptaibol)		C <sub>76</sub> H <sub>120</sub> N <sub>17</sub> O <sub>20</sub> (0.2)	1590.8916	1066.6288, 682.3939, 569.3097, 525.2674, 470.2415, 440.2150, 327.1674, 249.1608, 152.1079	850.4811, 7.12 N/C
19	Cephalosporin C (β-lactam)		C <sub>16</sub> H <sub>22</sub> N <sub>3</sub> O <sub>8</sub> S (0.5)	416.1130		2.71 C
20	4-methoxybenzoic acid (benzenoid)		C <sub>8</sub> H <sub>7</sub> O <sub>3</sub> (-1.3)	151.0393	123.0439	4.85 N/C
21	Mitorubric acid (azaphilone)		C <sub>21</sub> H <sub>17</sub> O <sub>9</sub> (-1)	413.1085	263.0558, 245.0469, 151.0392	5.06 N/C
22	Mitorubrinol (azaphilone)		C <sub>21</sub> H <sub>19</sub> O <sub>8</sub> (0.3)	399.1081	249.0766, 231.0664, 151.0394	4.85 N/C
23	Mitorubrin; 3'-Acetoxy (azaphilone)		C <sub>23</sub> H <sub>21</sub> O <sub>9</sub> (0.2)	441.1187	291.0876, 273.0766, 231.0668, 151.0397	6.16 N/C

24	Mitorubrin (azaphilone)		C <sub>21</sub> H <sub>19</sub> O <sub>7</sub> (0)	383.1132	233.0821, 215.0715, 151.0400	6.62 N/C
25	Mitorubrin ;3' acetoxy,3,4-dihydro (azaphilone)		C <sub>23</sub> H <sub>23</sub> O <sub>9</sub> (0)	443.1342	293.1012, 151.0389	6.3 N
26	Sclerosporin (sesquiterpene)		C <sub>15</sub> H <sub>23</sub> O <sub>2</sub> (3.4)	235.1706	-	5.2 N/C
27	Hydroxsclerosporin (sesquiterpene)		C <sub>15</sub> H <sub>23</sub> O <sub>3</sub> (0.8)	251.1685	-	3.08 C
28	Hypoxyxyl erone (xanthenone)		C <sub>22</sub> H <sub>15</sub> O <sub>7</sub> (-0.8)	391.0815	375.2151, 245.0477, 149.0225	5.08 N/C

29	7-hydroxy-16,18-dimethyl-10-phenyl[11]cytochalasa-6(12),13-diene-1,21-dione (cytochalasin)		C <sub>28</sub> H <sub>38</sub> NO <sub>3</sub> (-0.5)	436.2850	418.2742, 400.2596, 390.2785, 308.1632, 271.2033	7.07
30	Cytochalasin J (cytochalasin)		C <sub>28</sub> H <sub>38</sub> NO <sub>4</sub> (-0.4)	452.281	434.2694, 416.2605, 392.2578, 374.2509, 120.0797	5.85
31	Cytochalasin L 697318 , Deoxy 18B -hydroxy (cytochalasin)		C <sub>30</sub> H <sub>40</sub> NO <sub>4</sub> (0.8)	478.2961	306.2810, 263.2382, 245.2268, 261.0641	N/C
32	Cytochalasin H (cytochalasin)		C <sub>30</sub> H <sub>40</sub> NO <sub>5</sub> (-0.6)	494.2903	456.2508, 434.2686, 416.2589, 398.2482, 358.2169, 308.1653, 290.1552, 251.1802, 120.0813	5.87

33	7-hydroxy-16,18-dimethyl-10-phenyl[11]cytochalasan-6(12),13-diene-1,21-dione (cytochalasin)		C <sub>28</sub> H <sub>36</sub> NO <sub>3</sub> (6.9)	434.2725	416.2589, 398.2485, 392.2592, 374.2479, 358.2162, 269.1906, 251.1810, 120.0812	5.86 N/C
34	1 <i>H</i> -cycloundec[d]isoindole-1,15(2 <i>H</i> )-dione,3,3a,4,6a,9,10,11,12--3,3a,4,6a,9,10,11,12-tetramethyl-3-(phenylmethyl)-(3S,3aR,4S,7E,10S,13E,15aS) (cytochalasin)		C <sub>28</sub> H <sub>36</sub> NO <sub>2</sub> (-0.5)	418.2750	400.2640, 346.2175, 334.2193, 252.1393, 200.1081, 172.0772, 147.1176	9.07 N/C
35	Cytochalasin L 697318; deoxy (cytochalasin)		C <sub>30</sub> H <sub>40</sub> NO <sub>3</sub> (3)	462.3007	424.2617, 402.2786, 374.2862, 332.1990, 320.2102, 292.1707, 268.1733, 255.2106, 172.0762, 145.1010, 120.0820	10.4 N/C
36	1 <i>H</i> -Cycloundec[d]isoindole, [11]cytochalasa-6(12),13,19-trien-1-one deriv. (cytochalasin)		C <sub>28</sub> H <sub>34</sub> NO <sub>2</sub> (-0.5)	416.2585	398.2484, 374.2482, 360.1965, 269.1909, 251.1804, 172.0759, 120.0814	6.13 N/C

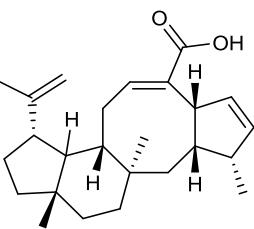
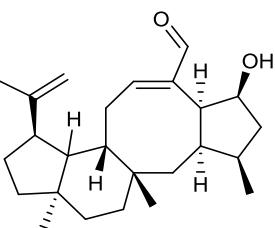
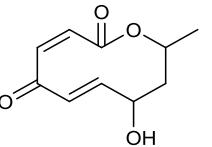
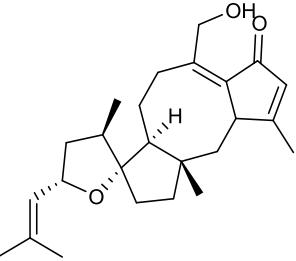
37	Sclerin (isochromene)		C <sub>15</sub> H <sub>23</sub> O <sub>2</sub> (2.6)	235.1704 (-1.7)	217.1588, 173.1330, 147.1185, 121.1015, 109.1016, 95.0857 161.0601, 141.9589, 139.9877, 133.0652, 97.9689, 151.0749	5.92 N/C
38	Iso-ochracein (benzofuranone)		C <sub>10</sub> H <sub>11</sub> O <sub>3</sub> (-1.7)	179.0675	161.0601, 141.9589, 139.9877, 133.0652, 97.9689, 151.0749	5.26 N/C
39	Ergosta-4,6,8,22-tetraene-3-one (steroid)		C <sub>28</sub> H <sub>41</sub> O (3.8)	393.3172	-	10.9 N/C
40	Spiroindicumide B (spirolactone polyketide)		C <sub>19</sub> H <sub>27</sub> O <sub>5</sub> (-32.6)*	335.1532	-	9.84 C
41	Tenuazonic acid (pyrrolone)		C <sub>10</sub> H <sub>16</sub> NO <sub>3</sub> (1)	198.1132 (-1.7)	181.0872, 158.0032, 153.0917, 142.0505, 125.0239, 116.9765, 96.9615	4.59 N/C

42	Alternariol (benzocoumarin)		C <sub>14</sub> H <sub>11</sub> O <sub>5</sub> (1.2)	259.0609	241.0513, 231.0673, 217.0515, 213.0552, 191.0712, 187.0761	5.03 N/C
43	Alternuisol (benzocoumarin)		C <sub>14</sub> H <sub>11</sub> O <sub>6</sub> (0.7)	275.0558	257.0395, 234.9118	5.35 N/C
44	Altenuene (benzocoumarin)		C <sub>15</sub> H <sub>17</sub> O <sub>6</sub> (1.4)	293.1029	275.0919, 257.0820, 239.0712, 229.0868	4.26 N/C
45	Alternariol: 9- Me ether (benzocoumarin)		C <sub>15</sub> H <sub>13</sub> O <sub>5</sub> (2.2)	273.0769	255.0670, 241.0516, 227.0712, 214.0643, 197.0615	6.51 N/C

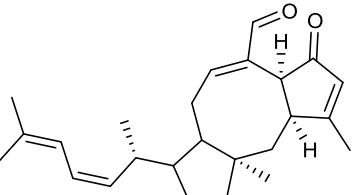
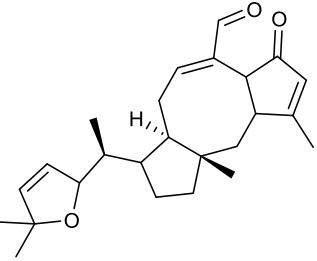
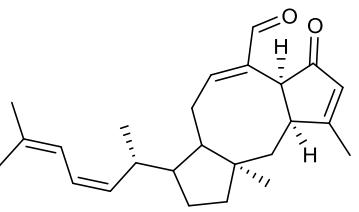
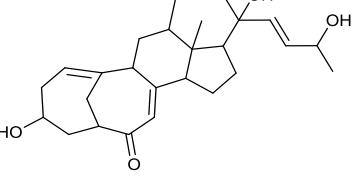
46	Hypochromin B (naphtho- $\gamma$ -pyrone)		C <sub>10</sub> H <sub>21</sub> O <sub>11</sub> (0.4)	557.1086	513.1144, 495.1042, 351.0492, 307.0609, 246.0501, 218.0586, 203.0293, 151.0380	5.45 N/C
47	Dehydroaltenusin (benzocoumarin)		C <sub>15</sub> H <sub>13</sub> O <sub>6</sub> (1)	289.0715	273.1877, 250.1772, 211.0662, 206.9172, 177.1377, 167.1055, 163.1177, 159.1173	5.67 N/C
48	De-O-methylxanthomegnin (binaphthoquinone)		C <sub>29</sub> H <sub>21</sub> O <sub>12</sub> (0.2)	561.1034	543.092, 525.0798, 515.0967, 497.0858, 341.0285, 313.0333	6.75 N/C
49	Xanthomegnin (binaphthoquinone)		C <sub>30</sub> H <sub>23</sub> O <sub>12</sub> (5.4)	575.1221		5.47 (N/C)
50	3-benzyl-6-benzylidene-piperazine-2,5-dione (diketopiperazine)		C <sub>18</sub> H <sub>17</sub> N <sub>2</sub> O <sub>2</sub> (-43.7)*	293.1160	264.1031, 236.1138, 193.1021, 179.0825, 162.0561, 144.0487, 134.0624, 118.0654, 91.0541	4.17 C

51	3,6-dibenzyl-2,5-piperazinedione (diketopiperazine)		C <sub>18</sub> H <sub>19</sub> N <sub>2</sub> O <sub>2</sub> (-43.4)*	295.1303		4.17 C
52	Stachybotrydial (spirocyclic drimanes)		C <sub>23</sub> H <sub>31</sub> O <sub>5</sub> (30.7)*	387.229	368.3897, 251.2700, 338.3758, 239.1426, 177.0921, 123.1175	9.76 N/C
53	cyclo{L-alanyl-D-alanyl-[ [(2S,9S)-2-amino-9-hydroxy-8-oxodecanoyl]-D-prolyl} (JM47) (cyclic tetrapeptide)		C <sub>21</sub> H <sub>35</sub> N <sub>4</sub> O <sub>6</sub> (-29.8)*	439.2395	422.2732, 399.2073, 366.1740, 281.1512, 132.0997	5.12 N/C
54	cyclo-(alanyl->alanyl->prolyl->2-amino-9,10-epoxy-8-oxo-decanoyl) cyclo<(2-amino-9,10-epoxy-8-oxodecanoyl)-alanyl-alanyl-prolyl (cyclic tetrapeptide)		C <sub>21</sub> H <sub>33</sub> N <sub>4</sub> O <sub>6</sub> (-23.6)*	437.2296	419.2223, 397.1274, 365.1661, 347.1664, 319.1791, 281.1640, 125.0974	5.46 N/C

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55	Emericolin D (sesterterpene)		C <sub>25</sub> H <sub>37</sub> O <sub>2</sub> (0.3)	369.2785	351.2686, 323.2741, 257.1545, 177.0915, 109.1017	8.33
56	Emericolin A (sesterterpene)		C <sub>25</sub> H <sub>39</sub> O <sub>2</sub> (-0.8)	371.294	353.2844, 325.2898, 315.2339, 269.2280, 213.1642, 193.1956, 159.1173	10.48 N/C
57	Pyrenolide C (keto-lactone)		C <sub>10</sub> H <sub>13</sub> O <sub>4</sub> (2.5)	197.0819	-	2.26 N
58	8-deoxyophiobolin J (ophiobolin)		C <sub>25</sub> H <sub>37</sub> O <sub>3</sub> (-0.3)	385.2742	367.2634, 349.2538, 307.2069; 201.1648	9.28 N/C

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59	Ophiobolin G (ophiobolin)		C <sub>25</sub> H <sub>35</sub> O <sub>2</sub> (-0.8)	367.2621	-	8.25
60	Ophiobolin T (ophiobolin)		C <sub>25</sub> H <sub>35</sub> O <sub>3</sub> (-6.8)	383.2549	-	5.28
61	Ophiobolin A; 3-Deoxy, 3,4-didehydro, 6 $\beta$ - hydroxy (ophiobolin)		C <sub>25</sub> H <sub>35</sub> O <sub>4</sub> (0)	399.2540	381.2426, 363.2315, 345.2189, 279.1754, 159.1177, 145.1012	5.25
62	Cyclocitrinol; Hydroxy (steroid with bicyclic ring)		C <sub>25</sub> H <sub>37</sub> O <sub>5</sub> (-4.1)	417.2624	-	5.06
C						

\*Peak ions of low intensity (molecular formula prediction with high ppm errors)