

Highlights of biosynthetic enzymes and natural products from symbiotic cyanobacteria

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SUPPORTING INFORMATION

Table S1: List of publicly available cyanobiont genomes

Organism	Isolation source	Host Organism	Country of Origin	NCBI/JGI Accession	NCBI/JGI BioProject	Contigs	Genome Size (Mb)	Ref.
<i>Prochloron didemni</i> P1-Palau	Ascidian	<i>Lissoclinum patella</i>	Palau	AGRF000000000	PRJNA74381	101	6.20	1
<i>Prochloron didemni</i> P2-Fiji	Ascidian	<i>Lissoclinum patella</i>	Fiji	AFSJ000000000	PRJNA82333	3261	7.52	1
<i>Prochloron didemni</i> P3-Solomon	Ascidian	<i>Lissoclinum patella</i>	Solomon Islands	AFSK000000000	PRJNA82335	1964	5.86	1
<i>Prochloron didemni</i> P4-Papua New Guinea	Ascidian	<i>Lissoclinum patella</i>	Papua New Guinea	AGGA000000000	PRJNA82337	690	5.69	1
<i>Desmonostoc muscorum</i> LEGE 12446	Cycad	<i>Cycas revoluta</i>	Portugal	JADXS000000000	PRJNA667061	12	9.64	2
<i>Nostoc cycadae</i> WK-1	Cycad	<i>Cycas revoluta</i>	Japan	BDGE000000000	PRJDB4931	150	6.77	3
<i>Nostoc punctiforme</i> PCC 73102	Cycad	<i>Macrozamia</i> sp.	Australia	CP001037	PRJNA216	1	9.06	4
<i>Nostoc</i> sp. 106C	Cycad	<i>Dioon merolae</i>	Mexico	MTAW000000000	PRJNA360305	241	8.66	5
<i>Nostoc</i> sp. 3335mG	Cycad	<i>Dioon edule</i>	Mexico	QHKA000000000	PRJNA472998	714	9.23	5
<i>Nostoc</i> sp. LEGE 12447	Cycad	<i>Cycas revoluta</i>	Portugal	JADEXT000000000	PRJNA667061	109	8.60	6
<i>Nostoc</i> sp. LEGE 12450	Cycad	<i>Encephalartos horridus</i>	Portugal	JADEXU000000000	PRJNA667061	415	8.60	6
<i>Nostoc</i> sp. PA-18-2419	Cycad	<i>Zamia pseudoparasitica</i>		SZNH000000000	PRJNA540319	106	7.62	7
<i>Nostoc</i> sp. RF31YmG	Cycad	<i>Dioon merolae</i>	Mexico	MTAX000000000	PRJNA360315	149	9.2	5
<i>Nostoc</i> sp. T09	Cycad	<i>Dioon caputoi</i>	Mexico	MTAV000000000	PRJNA360300	270	8.25	5
<i>Nostocales cyanobacterium</i> LEGE 12452	Cycad	<i>Encephalartos horridus</i>	Portugal	JADEXV000000000	PRJNA667061	552	8.40	6
<i>Calothrix rhizosoleniae</i> SC01	Diatom	<i>Chaetoceros</i>		FYBH000000000	PRJEB19506	472	5.97	8
Cyanobacterium endosymbiont of <i>Epithemia turgida</i> isolate EtSB	Diatom	<i>Epithemia turgida</i>	Japan	AP012549	PRJDB498	1	2.80	9
<i>Richelia intracellularis</i> HH01	Diatom	<i>Hemiaulus hauckii</i>	Brazil	CAIY000000000	PRJEA104979	38	3.30	10
<i>Richelia intracellularis</i> RC01	Diatom	<i>Rhizosolenia clevei</i>		CBZS000000000	PRJEB5207	857	5.50	8
Cyanobiont of <i>Ornithocercus magnificus</i> strain OmCyn01	Dinoflagellate	<i>Ornithocercus magnificus</i>	Japan	BIMP000000000	PRJDB7787	16	1.88	11
<i>Candidatus</i> Atelocyanobacterium thalassa UBA4158	Eukaryotic alga			DFVO000000000	PRJNA348753	13	1.45	12
<i>Candidatus</i> Atelocyanobacterium thalassa SIO64986	Eukaryotic alga		USA	JPSF000000000	PRJNA256120	52	1.49	13
<i>Candidatus</i> Atelocyanobacterium thalassa ALOHA	Eukaryotic alga			NC_013771	PRJNA30917	1	1.44	14
<i>Nostoc</i> sp. Moss2	Feathermoss	<i>Pleurozium schreber</i>		2630968269		24	9.17	15
<i>Nostoc</i> sp. Moss3	Feathermoss	<i>Pleurozium schreber</i>		2630969009		12	9.10	15
<i>Nostoc</i> sp. Moss4	Feathermoss	<i>Pleurozium schreber</i>		2630968271		26	8.98	15
<i>Nostoc</i> sp. Moss5	Feathermoss	<i>Hylocomium splendens</i>		2630968270		67	7.24	15
<i>Nostoc</i> sp. Moss6	Feathermoss	<i>Hylocomium splendens</i>		2630969011		11	7.14	15
<i>Nostoc azollae</i>	Freshwater Fern	<i>Azolla filiculoides</i>	Netherlands	CAJTBH000000000	PRJEB45214	353	4.79	
<i>Nostoc azollae</i> IRR1 2001	Freshwater Fern	<i>Azolla mexicana</i> IRR1 2001	USA	CAJTAI000000000	PRJEB45214	341	4.87	
<i>Nostoc azollae</i> IRR1 3004	Freshwater Fern	<i>Azolla caroliniana</i> IRR1 3004	Brazil	CAJTBM000000000	PRJEB45214	356	4.72	
<i>Nostoc azollae</i> IRR1 3017	Freshwater Fern	<i>Azolla caroliniana</i> IRR1 3017	Uruguay	CAJSZD000000000	PRJEB45214	356	4.70	
<i>Nostoc azollae</i> IRR1 4021	Freshwater Fern	<i>Azolla microphylla</i> IRR1 4021	Ecuador	CAJTAD000000000	PRJEB45214	336	4.85	
<i>Nostoc azollae</i> IRR1 5001	Freshwater Fern	<i>Azolla nilotica</i> IRR1 5001	Sudan	CAJSYP000000000	PRJEB45214	264	4.77	
<i>Nostoc azollae</i> IRR1 6502	Freshwater Fern	<i>Azolla rubra</i> IRR1 6502	Australia	CAJSZE000000000	PRJEB45214	368	4.70	
<i>Nostoc</i> sp. UCD120	Freshwater Fern	<i>Azolla</i>		JACKZR000000000	PRJNA591939	1143	8.41	16
<i>Nostoc</i> sp. UCD121	Freshwater Fern	<i>Azolla</i>		JACKZS000000000	PRJNA591940	631	8.50	16
<i>Nostoc</i> sp. UCD122	Freshwater Fern	<i>Azolla</i>		JACKZN000000000	PRJNA591941	1244	8.29	16
<i>Nostoc</i> sp. 2RC	Freshwater Fern	<i>Azolla pinnata</i>		JACKZU000000000	PRJNA591930	869	8.68	16
<i>Trichormus (Nostoc) azollae</i> 0708	Freshwater Fern	<i>Azolla</i>		NC_014248	PRJNA30807	3	5.49	17
<i>Anthocerotibacter panamensis</i> C109	Hornwort	<i>Leiosporoceros dussii</i>	Panama	CP062698	PRJNA665722	1	4.19	18
<i>Nostoc</i> sp. C057	Hornwort	<i>Phaeoceros</i>	USA	CP040281	PRJNA534312	16	9.23	19
<i>Nostoc</i> sp. TCL240-02	Hornwort	<i>Leiosporoceros dussii</i>	Panama	CP040094	PRJNA534312	1	7.88	19
<i>Nostoc</i> sp. TCL026-01	Hornwort	<i>Leiosporoceros dussii</i>	Panama	CP040297	PRJNA534312	8	7.39	19
<i>Nostoc punctiforme</i> NIES-2108	Lichen	<i>Peltigera didactyla</i>	Japan	LXQE000000000	PRJNA319602	205	9.20	
<i>Nostoc</i> sp. ATCC 53789	Lichen		Scotland	CP046703	PRJNA588357	13	8.66	20
<i>Nostoc</i> sp. JL23	Lichen	<i>Peltigera aphthosa</i>	Canada	JABXKN000000000	PRJNA616181	157	8.06	21
<i>Nostoc</i> sp. JL31	Lichen	<i>Peltigera extenuata</i>	Canada	JABXKO000000000	PRJNA616181	123	7.63	21
<i>Nostoc</i> sp. JL33	Lichen	<i>Peltigera malacea</i>	Canada	JABXKP000000000	PRJNA616181	106	7.11	21

<i>Nostoc</i> sp. JL34	Lichen	<i>Peltigera evansiana</i>	USA	JABXKQ000000000	PRJNA616181	184	7.82	21
<i>Nostoc</i> sp. LPT	Lichen	<i>Leptogium austroamericanum</i>	USA	JABXKF000000000	PRJNA256476	190	8.61	21
<i>Nostoc</i> sp. NMS1	Lichen	<i>Peltigera hydrothyria</i>	Canada	JABXKG000000000	PRJNA616181	204	7.88	21
<i>Nostoc</i> sp. NMS2	Lichen	<i>Peltigera hydrothyria</i>	Canada	JABXKH000000000	PRJNA616181	183	7.57	21
<i>Nostoc</i> sp. NMS4	Lichen	<i>Peltigera venosa</i>	Finland	JABXKI000000000	PRJNA616181	440	7.58	21
<i>Nostoc</i> sp. NMS7	Lichen	<i>Solorina crocea</i>	Finland	JABXKJ000000000	PRJNA616181	271	8.29	21
<i>Nostoc</i> sp. NMS8	Lichen	<i>Peltigera dolichorrhiza</i>	Panama	JABXKK000000000	PRJNA616181	130	7.93	21
<i>Nostoc</i> sp. NMS9	Lichen	<i>Peltigera phyllidiosa</i>	USA	JABXKL000000000	PRJNA616181	110	8.09	21
<i>Nostoc</i> sp. NOS(2021)	Lichen	<i>Peltigera aphthosa</i>	Sweden	JABXKM000000000	PRJNA616181	346	7.62	21
<i>Nostoc</i> sp. ' <i>Lobaria pulmonaria</i> (5183) cyanobiont'	Lichen	<i>Lobaria pulmonaria</i>	Iceland	CP026692	PRJNA275880	5	7.34	22
<i>Nostoc</i> sp. ' <i>Peltigera membranacea</i> cyanobiont' N6	Lichen	<i>Peltigera membranacea</i>	Iceland	CP026681	PRJNA279350	11	8.90	22
<i>Nostoc</i> sp. ' <i>Peltigera membranacea</i> cyanobiont' 210A	Lichen	<i>Peltigera membranacea</i>	Iceland	NOLJ000000000	PRJNA389199	30	8.32	22
<i>Nostoc</i> sp. ' <i>Peltigera membranacea</i> cyanobiont' 232	Lichen	<i>Peltigera membranacea</i>	Iceland	NOLK000000000	PRJNA389202	397	9.16	22
<i>Nostoc</i> sp. ' <i>Peltigera membranacea</i> cyanobiont' 213	Lichen	<i>Peltigera membranacea</i>	Iceland	NOLI000000000	PRJNA389200	378	8.33	22
<i>Nostoc</i> sp. ' <i>Peltigera malacea</i> cyanobiont' DB3992	Lichen	<i>Peltigera malacea</i>	Iceland	NSHF000000000	PRJNA389205	985	8.52	22
<i>Nostoc</i> sp. C052	Liverwort	<i>Blasia pusilla</i>	USA	CP040272	PRJNA534312	9	9.88	19
<i>Nostoc</i> sp. KVJ2	Liverwort	<i>Blasia pusilla</i>	Norway	NNBU000000000	PRJNA388173	4203	25.51	15
<i>Nostoc</i> sp. KVJ10	Liverwort	<i>Blasia pusilla</i>	Norway	NNBT000000000	PRJNA388173	11,646	43.52	15
<i>Nostoc</i> sp. KVJ11	Liverwort	<i>Blasia pusilla</i>	Norway	NNBV000000000	PRJNA388173	5030	36.88	15
<i>Nostoc</i> sp. KVJ20	Liverwort	<i>Blasia pusilla</i>	Norway	LSSA000000000	PRJNA310825	425	9.18	15,23
Candidatus <i>Aphanocapsa</i> (<i>Synechococcus</i>) <i>feldmannii</i> 277cl	Sponge	<i>Petrosia ficiformis</i>	Israel	SRMN000000000	PRJNA515489	214	1.90	24
Candidatus <i>Aphanocapsa</i> (<i>Synechococcus</i>) <i>feldmannii</i> 277cV	Sponge	<i>Petrosia ficiformis</i>	Israel	SRMO000000000	PRJNA515489	100	2.50	24
Candidatus <i>Aphanocapsa</i> (<i>Synechococcus</i>) <i>feldmannii</i> 288cV	Sponge	<i>Petrosia ficiformis</i>	Israel	SRMM000000000	PRJNA515489	125	2.20	24
Candidatus <i>Paraprochloron terpsiosi</i> SP5CPC1	Sponge	<i>Lamellodysidea herbacea</i>	Guam	JACONB000000000	PRJNA320446	397	2.79	25
Candidatus <i>Synechococcus spongiarum</i> 142	Sponge	<i>Ircinia variabilis</i>	Israel	JXU000000000	PRJNA273429	327	2.23	26
Candidatus <i>Synechococcus spongiarum</i> 10D	Sponge	<i>Aplysina aerophoba</i> SAPs10	Croatia	MWLG000000000	PRJNA235061	62	0.57	27
Candidatus <i>Synechococcus spongiarum</i> 10E	Sponge	<i>Aplysina aerophoba</i> SAPs10	Croatia	MWLF000000000	PRJNA235068	50	0.45	27
Candidatus <i>Synechococcus spongiarum</i> 15L	Sponge	<i>Aplysina aerophoba</i> SAPs15	Slovenia	JYFQ000000000	PRJNA274222	229	2.21	26
Candidatus <i>Synechococcus spongiarum</i> 15M	Sponge	<i>Aplysina aerophoba</i> SAPs15	Slovenia	MWLD000000000	PRJNA239126	84	1.50	27
Candidatus <i>Synechococcus spongiarum</i> 15N	Sponge	<i>Aplysina aerophoba</i> SAPs15	Slovenia	MWLE000000000	PRJNA239118	107	1.47	27
Candidatus <i>Synechococcus spongiarum</i> m9	Sponge	<i>Theonella swinhoei</i>	South China Sea	FITM000000000	PRJEB12597	180	1.41	28
Candidatus <i>Synechococcus spongiarum</i> SH4	Sponge	<i>Carteriospongia foliascens</i>	Saudi Arabia	JENA000000000	PRJNA238381	273	1.66	29
Candidatus <i>Synechococcus spongiarum</i> SP3	Sponge	<i>Theonella swinhoei</i>	Israel	JXQG000000000	PRJNA255756	117	2.13	29
<i>Hormoscilla</i> sp. GM102CHS1	Sponge	<i>Lamellodysidea herbacea</i>	Guam	JACONF000000000	PRJNA320446	518	5.04	25
<i>Hormoscilla</i> sp. GM7CHS1pb	Sponge	<i>Lamellodysidea herbacea</i>	Guam	JACONN000000000	PRJNA320446	6	6.40	25
<i>Hormoscilla</i> sp. GUM007	Sponge	<i>Lamellodysidea herbacea</i>	Guam	RFFB000000000	PRJNA320446	70	6.87	25,30
<i>Hormoscilla</i> sp. GUM202	Sponge	<i>Lamellodysidea herbacea</i>	Guam	RFFC000000000	PRJNA320446	70	6.87	25,30
<i>Hormoscilla</i> sp. SP12CHS1	Sponge	<i>Lamellodysidea herbacea</i>	Guam	JACOMV000000000	PRJNA320446	573	4.99	25
<i>Hormoscilla</i> sp. SP5CHS1	Sponge	<i>Lamellodysidea herbacea</i>	Guam	JACONA000000000	PRJNA320446	445	4.83	25
<i>Leptothoe kymatousa</i> TAU-MAC 1615	Sponge	<i>Chondrilla nucula</i>	Greece	JADOER000000000	PRJNA677867	18	4.07	31
<i>Leptothoe spongiaria</i> TAU-MAC 1115	Sponge	<i>Acanthella acuta</i>	Greece	JADOES000000000	PRJNA677873	92	5.24	31

Grey indicates genomes with >100 contigs

Table S2: List of cyanobiont natural products

Compound Class	Compound Name	*CyanoMetDB Compound Identifier	Cyanobiont	Symbiotic host	§ MiBIG Ref.	Ref.
Aeruginosins	Aeruginosin875		<i>Nostoc sp.</i> KVJ1, KVJ3, SKS1	<i>Blasia pusilla</i> L. (Genotype I, VII, XIV)		32
Aeruginosins	Aeruginosin889		<i>Nostoc sp.</i> KVJ1, KVJ3, KVJ4, SKS1, SKS2	<i>Blasia pusilla</i> L. (Genotype I, VII, VIII, XIV, XV)		32
Aeruginosins	Dysinosin A	CyanoMetDB_1376	<i>Hormoscilla spongelliae</i> GUM007	<i>Lamellodysidea herbacea</i>		30,33
Aeruginosins	Dysinosin B	CyanoMetDB_1212	<i>Hormoscilla spongelliae</i> GUM007	<i>Lamellodysidea herbacea</i>		30,34
Aeruginosins	Dysinosin C	CyanoMetDB_1424	<i>Hormoscilla spongelliae</i> GUM007	<i>Lamellodysidea herbacea</i>		30,34
Aeruginosins	Dysinosin D	CyanoMetDB_1421	<i>Hormoscilla spongelliae</i> GUM007	<i>Lamellodysidea herbacea</i>		30,34
Aeruginosins	Desoxydysinosin C	CyanoMetDB_2578	<i>Hormoscilla spongelliae</i> GUM007	<i>Lamellodysidea herbacea</i>		30
Aeruginosins	Desoxydysinosin D	CyanoMetDB_2577	<i>Hormoscilla spongelliae</i> GUM007	<i>Lamellodysidea herbacea</i>		30
Aeruginosins	Suomilide B		<i>Nostoc sp.</i> KVJ20	<i>Blasia pusilla</i> L.		35
Aeruginosins	Suomilide C		<i>Nostoc sp.</i> KVJ20	<i>Blasia pusilla</i> L.		35
Aeruginosins	Suomilide D		<i>Nostoc sp.</i> KVJ20	<i>Blasia pusilla</i> L.		35
Aeruginosins	Suomilide E		<i>Nostoc sp.</i> KVJ20	<i>Blasia pusilla</i> L.		35
Aeruginosins	Suomilide/Banyaside-like 899		<i>Nostoc sp.</i> KVJ18, KVJ20, SKS4	<i>Blasia pusilla</i> L. (Genotype X, XI, XXIV)		32
Aeruginosins	Suomilide/Banyaside-like 927		<i>Nostoc sp.</i> KVJ18, KVJ20, SKS4	<i>Blasia pusilla</i> L. (Genotype X, XI, XXIV)		32
Aeruginosins	Suomilide/Banyaside-like 997		<i>Nostoc sp.</i> KVJ18, KVJ20, SKS4	<i>Blasia pusilla</i> L. (Genotype X, XI, XXIV)		32
Aeruginosins	Suomilide/Banyaside-like 1045		<i>Nostoc sp.</i> KVJ18, KVJ20, SKS4	<i>Blasia pusilla</i> L. (Genotype X, XI, XXIV)		32
Aeruginosins	Suomilide/Banyaside-like 1115		<i>Nostoc sp.</i> KVJ18, KVJ20, SKS4	<i>Blasia pusilla</i> L. (Genotype X, XI, XXIV)		32
Anabaenopeptins	Anabaenopeptin KVJ811	CyanoMetDB_2312	<i>Nostoc punctiforme</i> KVJ2	<i>Blasia pusilla</i> L. (Genotype VI)		36
Anabaenopeptins	Anabaenopeptin KVJ827	CyanoMetDB_2313	<i>Nostoc punctiforme</i> KVJ2	<i>Blasia pusilla</i> L. (Genotype VI)		36
Anabaenopeptins	Anabaenopeptin KVJ841	CyanoMetDB_2314	<i>Nostoc punctiforme</i> KVJ2	<i>Blasia pusilla</i> L. (Genotype VI)		36
Anabaenopeptins	Anabaenopeptin NZ857	CyanoMetDB_0715	<i>Nostoc punctiforme</i> KVJ2	<i>Macrozamia sp.</i>	BGC0001479	37–39
Anabaenopeptins	Anabaenopeptin SA9	CyanoMetDB_2102	<i>Nostoc sp.</i> ATCC 53789	Unknown Lichen		40
Anabaenopeptins	Anabaenopeptin SA10	CyanoMetDB_2100	<i>Nostoc sp.</i> ATCC 53789	Unknown Lichen		40
Anabaenopeptins	Anabaenopeptin SA11	CyanoMetDB_2101	<i>Nostoc sp.</i> ATCC 53789	Unknown Lichen		40
Anabaenopeptins	Anabaenopeptin SA12	CyanoMetDB_2095	<i>Nostoc sp.</i> ATCC 53789	Unknown Lichen		40
Anabaenopeptins	Schizopeptin 791	CyanoMetDB_0811	<i>Nostoc sp.</i> KVJ20	<i>Blasia pusilla</i> L.		35
Alkaloid	Scytonemin A	CyanoMetDB_0332	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia sp.</i>		41
Cryptophycin	Cryptophycin A	CyanoMetDB_1104	<i>Nostoc sp.</i> ATCC 53789	Unknown Lichen	BGC0000975	20,42
Cyanobactins	Ascidiacyclamide	CyanoMetDB_2655	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>		43
Cyanobactins	Bistratamide A	CyanoMetDB_1361	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		44
Cyanobactins	Bistratamide B	CyanoMetDB_1370	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		44
Cyanobactins	Bistratamide C	CyanoMetDB_1511	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		45
Cyanobactins	Bistratamide D	CyanoMetDB_1440	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		45
Cyanobactins	Bistratamide E	CyanoMetDB_1441	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		46
Cyanobactins	Bistratamide F	CyanoMetDB_1436	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		46
Cyanobactins	Bistratamide G	CyanoMetDB_1443	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		46
Cyanobactins	Bistratamide H	CyanoMetDB_1444	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		46
Cyanobactins	Bistratamide I	CyanoMetDB_1433	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		46
Cyanobactins	Bistratamide J	CyanoMetDB_1434	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		46
Cyanobactins	Bistratamide K	CyanoMetDB_1368	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		47
Cyanobactins	Bistratamide L	CyanoMetDB_1369	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		47
Cyanobactins	Bistratamide M	CyanoMetDB_1538	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		47
Cyanobactins	Bistratamide N	CyanoMetDB_1539	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>		47
Cyanobactins	Comoramide A	CyanoMetDB_2672	<i>Prochloron didemni</i>	<i>Didemnum molle</i>		48
Cyanobactins	Comoramide B	CyanoMetDB_2673	<i>Prochloron didemni</i>	<i>Didemnum molle</i>		48
Cyanobactins	Didmolamide A	CyanoMetDB_2641	<i>Prochloron didemni</i>	<i>Didemnum molle</i>		49

Cyanobactins	Didmolamide B	CyanoMetDB_2642	<i>Prochloron didemni</i>	<i>Didemnum molle</i>	49
Cyanobactins	Hexamollamide		<i>Prochloron didemni</i>	<i>Didemnum molle</i>	50
Cyanobactins	Lissoclinamide 1	CyanoMetDB_2560	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	51,52
Cyanobactins	Lissoclinamide 2	CyanoMetDB_2559	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	51,52
Cyanobactins	Lissoclinamide 3	CyanoMetDB_2622	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	51,53
Cyanobactins	Lissoclinamide 4		<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	51,54
Cyanobactins	Lissoclinamide 5	CyanoMetDB_2638	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	51,54
Cyanobactins	Lissoclinamide 6		<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	51,53
Cyanobactins	Lissoclinamide 7	CyanoMetDB_2668	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	51,55
Cyanobactins	Lissoclinamide 8		<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	51,55
Cyanobactins	Lissoclinamide 9	CyanoMetDB_2630	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	56
Cyanobactins	Lissoclinamide 10	CyanoMetDB_2631	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	56
Cyanobactins	Mayotamide A	CyanoMetDB_2671	<i>Prochloron didemni</i>	<i>Didemnum molle</i>	48
Cyanobactins	Mayotamide B	CyanoMetDB_2670	<i>Prochloron didemni</i>	<i>Didemnum molle</i>	48
Cyanobactins	Minimide	CyanoMetDB_2581	<i>Prochloron didemni</i>	<i>Didemnum molle</i>	57
Cyanobactins	Mollamide A	CyanoMetDB_2669	<i>Prochloron didemni</i>	<i>Didemnum molle</i>	58,59
Cyanobactins	Mollamide B	CyanoMetDB_2603	<i>Prochloron didemni</i>	<i>Didemnum molle</i>	60
Cyanobactins	Mollamide C	CyanoMetDB_2602	<i>Prochloron didemni</i>	<i>Didemnum molle</i>	60
Cyanobactins	Mollamide E	CyanoMetDB_2592	<i>Prochloron didemni</i>	<i>Didemnum molle</i>	61,62
Cyanobactins	Mollamide F	CyanoMetDB_2591	<i>Prochloron didemni</i>	<i>Didemnum molle</i>	62
Cyanobactins	Nairaiamide A	CyanoMetDB_2674	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>	63
Cyanobactins	Nairaiamide B	CyanoMetDB_2675	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>	63
Cyanobactins	Patellamide A	CyanoMetDB_2473	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	BGC0000475 64
Cyanobactins	Patellamide B	CyanoMetDB_2621	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	BGC0000476 65
Cyanobactins	Patellamide C	CyanoMetDB_2474	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	BGC0000475 64
Cyanobactins	Patellamide D	CyanoMetDB_0987	<i>Prochloron didemni</i>	<i>Lissoclinum bistratum</i>	54
Cyanobactins	Patellamide E	CyanoMetDB_2562	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	66
Cyanobactins	Patellamide F	CyanoMetDB_2656	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	67
Cyanobactins	Patellamide G	CyanoMetDB_2585	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	68
Cyanobactins	Patellin 1	CyanoMetDB_2648	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	69
Cyanobactins	Patellin 4	CyanoMetDB_2649	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	59,69
Cyanobactins	Patellin 5	CyanoMetDB_2652	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	59,69
Cyanobactins	Patellin 2	CyanoMetDB_2651	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	BGC0000477 51,69
Cyanobactins	Patellin 3	CyanoMetDB_2653	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	BGC0000477 51,69
Cyanobactins	Patellin 6	CyanoMetDB_2654	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	BGC0000478 51,69
Cyanobactins	Prelissoclinamide 2	CyanoMetDB_2666	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	70
Cyanobactins	Prepatellin-B-formate	CyanoMetDB_2667	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	70
Cyanobactins	Preulithicyclamide	CyanoMetDB_2665	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	70
Cyanobactins	Preulithicyclamide	CyanoMetDB_2575	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	71
Cyanobactins	Tawicyclamide A	CyanoMetDB_2623	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	72
Cyanobactins	Tawicyclamide B	CyanoMetDB_2624	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	72
Cyanobactins	Trunkamide A	CyanoMetDB_2650	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	BGC0000478 51,69
Cyanobactins	Ulithicyclamide	CyanoMetDB_2590	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	73,74
Cyanobactins	Ulithicyclamide A	CyanoMetDB_2589	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	73
Cyanobactins	Ulithicyclamide B	CyanoMetDB_2643	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	75
Cyanobactins	Ulithicyclamide E	CyanoMetDB_2584	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	68
Cyanobactins	Ulithicyclamide F	CyanoMetDB_2582	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	68
Cyanobactins	Ulithicyclamide G	CyanoMetDB_2583	<i>Prochloron didemni</i>	<i>Lissoclinum patella</i>	68
Cyanobactins	Westiellamide (cyclozoline)	CyanoMetDB_1342	<i>Prochloron sp.</i>	<i>Lissoclinum bistratum</i>	76
Furanolide	Nostoclide I	CyanoMetDB_1570	<i>Nostoc sp.</i>	<i>Peltigera canina</i>	77
Furanolide	Nostoclide II	CyanoMetDB_1567	<i>Nostoc sp.</i>	<i>Peltigera canina</i>	77
Furanolide	Nostoclide N1	CyanoMetDB_2427	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia sp.</i>	BGC0002677 78
Furanolide	Nostoclide N2	CyanoMetDB_2428	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia sp.</i>	BGC0002677 78
Lanthipeptides	Divamide A	CyanoMetDB_2605	<i>Prochloron didemni</i>	<i>Didemnum molle</i> E11-036	BGC0001576 79

Lanthipeptides	Divamide B	CyanoMetDB_2604	<i>Prochloron didemni</i>	<i>Didemnum molle</i> E11-037	BGC0001577	79
Lanthipeptides	Divamide C	CyanoMetDB_2678	<i>Prochloron didemni</i>	<i>Didemnum molle</i> E11-037		79
Lipoglycopeptides	Desmamide A	CyanoMetDB_2243	<i>Desmonostoc muscorum</i> LEGE 12446	<i>Cycas revoluta</i>	BGC0002625	2
Lipoglycopeptides	Desmamide B	CyanoMetDB_2244	<i>Desmonostoc muscorum</i> LEGE 12446	<i>Cycas revoluta</i>	BGC0002625	2
Lipoglycopeptides	Desmamide C	CyanoMetDB_2245	<i>Desmonostoc muscorum</i> LEGE 12446	<i>Cycas revoluta</i>	BGC0002625	2
Microviridin	Microviridin N3	CyanoMetDB_2174	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia</i> sp.	BGC0002049	37
Microviridin	Microviridin N4	CyanoMetDB_2173	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia</i> sp.	BGC0002049	37
Microviridin	Microviridin N5	CyanoMetDB_2172	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia</i> sp.	BGC0002049	37
Microviridin	Microviridin N6	CyanoMetDB_2171	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia</i> sp.	BGC0002049	37
Microviridin	Microviridin N7	CyanoMetDB_2170	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia</i> sp.	BGC0002049	37
Microviridin	Microviridin N8	CyanoMetDB_2169	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia</i> sp.	BGC0002049	37
Microviridin	Microviridin N9	CyanoMetDB_2168	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia</i> sp.	BGC0002049	37
Mycosporine-like amino acids	Asterina 330	CyanoMetDB_1724	Unknown Unknown	<i>Lobaria retigera</i> <i>Stereocaulon foliolosum</i>		80
Mycosporine-like amino acids	mycosporine-glu-gly	CyanoMetDB_1690	<i>Hormoscilla spongelliae</i> Unknown Unknown	<i>Lamellodysidea herbacea</i> <i>Lobaria retigera</i> <i>Peltigera polydactylon</i>		80,81
Mycosporine-like amino acids	Mycosporine-glycine	CyanoMetDB_1770	<i>Hormoscilla spongelliae</i> <i>Prochloron</i> sp. Unknown Unknown	<i>Lamellodysidea herbacea</i> <i>Lissoclinium patella</i> <i>Lobaria retigera</i> <i>Peltigera polydactylon</i>		80,81
Mycosporine-like amino acids	Mycosporine-glycine-valine	CyanoMetDB_1687	Unknown	<i>Lobaria retigera</i>		80
Mycosporine-like amino acids	Mycosporine taurine	CyanoMetDB_1753	Unknown Unknown Unknown	<i>Lobaria retigera</i> <i>Stereocaulon foliolosum</i> <i>Peltigera polydactylon</i>		80
Mycosporine-like amino acids	Palythene	CyanoMetDB_1711	<i>Hormoscilla spongelliae</i> Unknown Unknown Unknown	<i>Dysidea herbacea</i> <i>Lobaria retigera</i> <i>Stereocaulon foliolosum</i> <i>Peltigera polydactylon</i>		80,81
Mycosporine-like amino acids	Palythine	CyanoMetDB_1769	Unknown Unknown Unknown	<i>Lobaria retigera</i> <i>Stereocaulon foliolosum</i> <i>Peltigera polydactylon</i>		80
Mycosporine-like amino acids	Palythinol	CyanoMetDB_1709	Unknown	<i>Lobaria retigera</i>		80
Mycosporine-like amino acids	Shinorine	CyanoMetDB_1710	<i>N. punctiforme</i> PCC 73102 <i>Hormoscilla spongelliae</i> GUM007, GUM202 Unknown Unknown	<i>Macrozamia</i> sp. <i>Lamellodysidea herbacea</i> <i>Lobaria retigera</i> <i>Peltigera polydactylon</i>		30,80,82
Mycosporine-like amino acids	Usujirene		<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>		81
Nostocyclopeptides	Nostopeptolide 1052	CyanoMetDB_2175	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia</i> sp.	BGC0002061	37
Nostocyclopeptides	Nostocyclopeptide A1	CyanoMetDB_1006	<i>Nostoc</i> sp. ATCC 53789; <i>Nostoc</i> sp. KVJ4, KVJ20	Unknown Lichen; <i>Blasia pusilla</i> L. (Genotype VIII, XI)	BGC0000397	32,83
Nostocyclopeptides	Nostocyclopeptide A2	CyanoMetDB_0923	<i>Nostoc</i> sp. ATCC 53789;	Unknown Scottish Lichen	BGC0000397	32,83
Nostocyclopeptides	Nostocyclopeptide A3	CyanoMetDB_0873	<i>Nostoc</i> sp. ATCC 53789;	Unknown Scottish Lichen	BGC0000397	32,83
Nostopeptolide	Nostopeptolide A1	CyanoMetDB_0439	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia</i> sp.	BGC0002061	37,84
Nostophycins	Nostophycin	CyanoMetDB_0658	<i>Nostoc</i> sp. SKS8	<i>Blasia pusilla</i> L. (Genotype XVIII)		32
	Nostovalerolactone	CyanoMetDB_2429	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia</i> sp.	BGC0002711	78
	9-Dehydronostovalerolactone	CyanoMetDB_2430	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia</i> sp.	BGC0002711	78
	Nostamide A	CyanoMetDB_0710	<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia</i> sp.	BGC0001479	36,39
Pederins	Nosperin	CyanoMetDB_1378	<i>Nostoc</i> sp. N6 <i>Nostoc</i> sp. KVJ10	<i>Peltigera membranacea</i> <i>Blasia pusilla</i> L. (Genotype IX)	BGC0001071	85
Peptide hepatotoxins	[DMAdda5]MC-LR	CyanoMetDB_1788	<i>Nostoc</i> sp. IO-102-I Unknown	<i>Pannaria pezizoides</i> <i>Peltigera dolichorhiza</i>		86
Peptide hepatotoxins	[ADMAdda5]MC-LR	CyanoMetDB_1909	<i>Nostoc</i> sp. IO-102-I	<i>Pannaria pezizoides</i>		86

			Unknown	<i>Peltigera dolichorhiza</i>	
Peptide hepatotoxins	[ADMAAdda5]MC-YR	CyanoMetDB_2044	<i>Nostoc</i> sp. IO-102-I	<i>Pannaria pezizoides</i>	86
Peptide hepatotoxins	[D-Asp ³ ,ADMAAdda5]MC-LR	CyanoMetDB_1975	<i>Nostoc</i> sp. IO-102-I Unknown	<i>Pannaria pezizoides</i> <i>Lobaria scrobiculata</i> <i>Peltigera leucophlebia</i>	86
Peptide hepatotoxins	[DMAdda5]MC-HiIR	CyanoMetDB_1850	<i>Nostoc</i> sp. IO-102-I	<i>Pannaria pezizoides</i>	86
Peptide hepatotoxins	[DMAdda5]MC-(H4)YR	CyanoMetDB_1949	<i>Nostoc</i> sp. UK18	<i>Peltigera leucophlebia</i>	87
Peptide hepatotoxins	[DMAdda5]MC-FR	CyanoMetDB_1901	<i>Nostoc</i> sp. UK18	<i>Peltigera leucophlebia</i>	87
Peptide hepatotoxins	[ADMAAdda5]MC-(H4)YHar	CyanoMetDB_2060	<i>Nostoc</i> sp. UK18	<i>Peltigera leucophlebia</i>	87
Peptide hepatotoxins	[ADMAAdda5]MC-(H4)YR	CyanoMetDB_2051	<i>Nostoc</i> sp. UK18	<i>Peltigera leucophlebia</i>	87
Peptide hepatotoxins	[ADMAAdda5]MC-FR	CyanoMetDB_2012	<i>Nostoc</i> sp. UK18	<i>Peltigera leucophlebia</i>	87
Peptide hepatotoxins	[D-Asp ³ ,ADMAAdda5]MC-(H4)YR	CyanoMetDB_2023	<i>Nostoc</i> sp. UK18	<i>Peltigera leucophlebia</i>	87
Peptide hepatotoxins	[D-Asp ³ ,DMAAdda5]MC-LR	CyanoMetDB_1806	<i>Nostoc</i> sp. UK18 Unknown	<i>Peltigera leucophlebia</i> <i>Nephroma laevigatum</i>	87
Peptide hepatotoxins	[ADMAAdda5]MC-RHar	CyanoMetDB_2054	Unknown	<i>Nephroma parile</i>	88
Peptide hepatotoxins	[ADMAAdda5]MC-RR	CyanoMetDB_2075	Unknown Unknown Unknown Unknown	<i>Nephroma parile</i> <i>Peltigera hymenina</i> <i>Peltigera collina</i> <i>Peltigera leucophlebia</i> <i>Peltigera praetextata</i>	88
Peptide hepatotoxins	[D-Asp ³ ,ADMAAdda5]MC-HphR	CyanoMetDB_2013	Unknown Unknown Unknown	<i>Peltigera praetextata</i> <i>Peltigera membranacea</i> <i>Peltigera hymenina</i>	88
Peptide hepatotoxins	[D-Asp ³ ,ADMAAdda5]MC-RR	CyanoMetDB_1998	Unknown Unknown Unknown Unknown	<i>Nephroma parile</i> <i>Peltigera praetextata</i> <i>Peltigera membranacea</i> <i>Peltigera hymenina</i> <i>Peltigera leucophlebia</i>	88
Peptide hepatotoxins	[D-Leu1,ADMAAdda5]MC-LHar	CyanoMetDB_2053	Unknown	<i>Peltigera</i> sp.	88
Peptide hepatotoxins	[D-Leu1,ADMAAdda5]MC-LR	CyanoMetDB_2028	Unknown Unknown Unknown	<i>Nephroma cellulolum</i> <i>Peltigera evansiana</i> <i>Peltigera</i> sp.	88
Peptide hepatotoxins	[D-Leu1,D-Asp ³ ,ADMAAdda5]MC-LR	CyanoMetDB_1989	Unknown Unknown	<i>Nephroma cellulolum</i> <i>Peltigera evansiana</i>	88
Peptide hepatotoxins	[D-Leu1,D-Asp ³ ,DMAAdda5]MC-LR	CyanoMetDB_1882	Unknown	<i>Peltigera degenii</i>	88
Peptide hepatotoxins	[D-Leu1,D-Asp ³]MC-HphR	CyanoMetDB_2038	Unknown	<i>Peltigera degenii</i>	88
Peptide hepatotoxins	[D-Leu1,D-Asp ³]MC-LR	CyanoMetDB_1834	Unknown	<i>Peltigera degenii</i>	88
Peptide hepatotoxins	[D-Leu1]MC-HtyR	CyanoMetDB_2062	Unknown <i>Nostoc</i> sp. UK92.II	<i>Peltigera membranacea</i> <i>Peltigera degenii</i>	88
Peptide hepatotoxins	[D-Leu1]MC-LHar	CyanoMetDB_1992	Unknown	<i>Peltigera evansiana</i>	88
Peptide hepatotoxins	[D-Asp ³]MC-RR	CyanoMetDB_1941	Unknown	<i>Sticta fuliginosa</i>	88
Peptide hepatotoxins	MC-RR	CyanoMetDB_1802	Unknown	<i>Sticta fuliginosa</i>	88
Peptide hepatotoxins	[D-Leu1]MC-LR	CyanoMetDB_1997	Unknown <i>Nostoc</i> sp. UK222.Ib Unknown <i>Nostoc</i> sp. UK89.II <i>Nostoc</i> sp. UK92.II	<i>Peltigera evansiana</i> <i>Peltigera degenii</i> <i>Peltigera evansiana</i> <i>Peltigera neopolydactyla</i> <i>Peltigera membranacea</i>	88
Peptide hepatotoxins	Nodularin R	CyanoMetDB_0861	<i>Nostoc</i> sp. 73.1 <i>Nostoc</i> sp. 65.1 Unknown Unknown	<i>Macrozamia serpentine</i> <i>Macrozamia riedlei</i> <i>Sticta</i> sp. <i>Peltigera dolichorhiza</i>	BGC0000396 88,89
Peptide hepatotoxins	[L-Harb] Nodularin	CyanoMetDB_0800	<i>Nostoc</i> sp. 73.1 <i>Nostoc</i> sp. 65.1 <i>Nostoc</i> sp. KVJ1, KVJ3, SKS1	<i>Macrozamia serpentine</i> <i>Macrozamia riedlei</i> <i>Blasia pusilla</i> L. (Genotype I, VII, XIV)	BGC0000396 88,89

Polybrominated diethyl ethers	2'-Hydroxy-2,3',4,5'-tetrabromodiphenyl ether	CyanoMetDB_2636	<i>Hormoscilla spongelliae</i> GUM020 (clade Ib)	<i>Lamellodysidea herbacea</i>	90
Polybrominated diethyl ethers	6-Hydroxy-2,2',4,4'-tetrabromodiphenyl ether	CyanoMetDB_2637	<i>Hormoscilla spongelliae</i> GUM020 (clade Ib) <i>Hormoscilla spongelliae</i> SP4 (clade IV)	<i>Lamellodysidea herbacea</i> <i>Dysidea granulosa</i>	90
Polybrominated diethyl ethers	3,6-dibromo-2-(5-bromo-2-hydroxyphenoxy)phenol	CyanoMetDB_2576	<i>Hormoscilla spongelliae</i> GUM202 (clade II)	<i>Lamellodysidea herbacea</i>	30
Polybrominated diethyl ethers	3,6-Dibromo-2-(3,5-dibromo-2-hydroxyphenoxy)phenol	CyanoMetDB_2644	<i>Hormoscilla spongelliae</i> GUM202 (clade II)	<i>Lamellodysidea herbacea</i>	30
Polybrominated diethyl ethers	3,5-dibromo-2-(3,5-dibromo-2-methoxyphenoxy)phenol	CyanoMetDB_2588	<i>Hormoscilla spongelliae</i> SP12 (clade Ia) <i>Hormoscilla spongelliae</i> GUM202 (clade II)	<i>Lamellodysidea herbacea</i>	30,90
Polybrominated diethyl ethers	2,3,5-Tribromo-6-(3,5-dibromo-2-hydroxyphenoxy)phenol	CyanoMetDB_2635	<i>Hormoscilla spongelliae</i> GUM202 (clade II)	<i>Lamellodysidea herbacea</i>	30
Polybrominated diethyl ethers	2,3,5-tribromo-6-(3,5-dibromo-2-methoxyphenoxy)phenol	CyanoMetDB_2646	<i>Hormoscilla spongelliae</i> GUM202 (clade II)	<i>Lamellodysidea herbacea</i>	30
Polybrominated diethyl ethers	3,4,5-tribromo-2-(3,5-dibromo-2-hydroxyphenoxy)phenol	CyanoMetDB_2657	<i>Hormoscilla spongelliae</i> GUM202 (clade II)	<i>Lamellodysidea herbacea</i>	30
Polybrominated diethyl ethers	3,4,5-tribromo-2-(3,5-dibromo-2-methoxyphenoxy)phenol	CyanoMetDB_2658	<i>Hormoscilla spongelliae</i> GUM202 (clade II)	<i>Lamellodysidea herbacea</i>	30
Polybrominated diethyl ethers	3,4,6-Tribromo-2-(3,5-dibromo-2-hydroxyphenoxy)phenol	CyanoMetDB_2561	<i>Hormoscilla spongelliae</i> GUM202 (clade II)	<i>Lamellodysidea herbacea</i>	30
Polybrominated diethyl ethers	2,3,4,5-Tetrabromo-6-(3,5-dibromo-2-hydroxyphenoxy)phenol	CyanoMetDB_2634	<i>Hormoscilla spongelliae</i> GUM202 (clade II)	<i>Lamellodysidea herbacea</i>	30
Polybrominated diethyl ethers	2,3,4,5-Tetrabromo-6-(3,5-dibromo-2-methoxyphenoxy)phenol	CyanoMetDB_2645	<i>Hormoscilla spongelliae</i> GUM202 (clade II)	<i>Lamellodysidea herbacea</i>	30
Polychlorinated leucines	10-Dechlorodysideathiazole	CyanoMetDB_2660	<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>	91
Polychlorinated leucines	10-dechloro- <i>N</i> -methylidysideathiazole	CyanoMetDB_2662	<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>	91
Polychlorinated leucines	11-Dechloro-13-demethylisodysidenine	CyanoMetDB_2608	<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>	92
Polychlorinated leucines	13-demethylidysidenin	CyanoMetDB_2609	<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>	92
Polychlorinated leucines	13-demethylisodysidenin	CyanoMetDB_2610	<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>	92
Polychlorinated leucines	2,3-Dihydrodysamide C	CyanoMetDB_2632	<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>	93
Polychlorinated leucines	5-Epidysidamide G	CyanoMetDB_2593	<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>	94
Polychlorinated leucines	9,10-didechloro- <i>N</i> -methylidysideathiazole	CyanoMetDB_2663	<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>	91
Polychlorinated leucines	Barbaleucamide A	CyanoMetDB_1683	<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>	95
Polychlorinated leucines	Barbaleucamide B	CyanoMetDB_2639	<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>	95
Polychlorinated leucines	Callyspongiamide A	CyanoMetDB_2557	Unknown	<i>Callyspongia</i> sp.	96
Polychlorinated leucines	Callyspongiamide B	CyanoMetDB_2556	Unknown	<i>Callyspongia</i> sp.	96
Polychlorinated leucines	Didechlorodihydrodysamide C	CyanoMetDB_2606	<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>	97,98
Polychlorinated leucines	Dihydrodysamide C	CyanoMetDB_2607	Unknown	<i>Dysidea fragilis</i>	92,94,99 -101
			Unknown	<i>Dysidea herbacea</i>	
			Unknown	<i>Dysidea chlorea</i>	
Polychlorinated leucines	Dysamide A	CyanoMetDB_2554	Unknown	<i>Lamellodysidea herbacea</i>	94,96,99 -101
			Unknown	<i>Dysidea fragilis</i>	
			Unknown	<i>Dysidea chlorea</i>	
Polychlorinated leucines	Dysamide B	CyanoMetDB_2555	Unknown	<i>Callyspongia</i> sp.	99-101
			Unknown	<i>Lamellodysidea herbacea</i>	
Polychlorinated leucines	Dysamide C	CyanoMetDB_2553	Unknown	<i>Dysidea fragilis</i>	99-101
			Unknown	<i>Dysidea chlorea</i>	

Polychlorinated leucines	Dysamide D	CyanoMetDB_2613	Unknown Unknown <i>Hormoscilla spongeliae</i>	<i>Dysidea fragilis</i> <i>Dysidea chlorea</i> <i>Lamellodysidea herbacea</i>	94,100,101
Polychlorinated leucines	Dysamide E		Unknown <i>Hormoscilla spongeliae</i>	<i>Dysidea chlorea</i> <i>Lamellodysidea herbacea</i>	94,101
Polychlorinated leucines	Dysamide I	CyanoMetDB_2564	Unknown	<i>Dysidea chlorea</i>	101
Polychlorinated leucines	Dysamide J	CyanoMetDB_2563	Unknown	<i>Dysidea chlorea</i>	101
Polychlorinated leucines	Dysamide K	CyanoMetDB_2570	Unknown	<i>Dysidea chlorea</i>	101
Polychlorinated leucines	Dysamide L	CyanoMetDB_2571	Unknown	<i>Dysidea chlorea</i>	101
Polychlorinated leucines	Dysamide M	CyanoMetDB_2573	Unknown	<i>Dysidea chlorea</i>	101
Polychlorinated leucines	Dysamide N	CyanoMetDB_2572	Unknown	<i>Dysidea chlorea</i>	101
Polychlorinated leucines	Dysamide O	CyanoMetDB_2565	Unknown	<i>Dysidea chlorea</i>	101
Polychlorinated leucines	Dysamide P	CyanoMetDB_2574	Unknown	<i>Dysidea chlorea</i>	101
Polychlorinated leucines	Dysamide Q	CyanoMetDB_2566	Unknown	<i>Dysidea chlorea</i>	101
Polychlorinated leucines	Dysamide R	CyanoMetDB_2567	Unknown	<i>Dysidea chlorea</i>	101
Polychlorinated leucines	Dysamide S	CyanoMetDB_2568	Unknown	<i>Dysidea chlorea</i>	101
Polychlorinated leucines	Dysamide T	CyanoMetDB_2569	Unknown	<i>Dysidea chlorea</i>	101
Polychlorinated leucines	Dysamide U	CyanoMetDB_2676	Unknown	<i>Dysidea</i> sp.	102
Polychlorinated leucines	Dysidamide A	CyanoMetDB_2586	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	94,103
Polychlorinated leucines	Dysidamide B	CyanoMetDB_2612	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	94,104
Polychlorinated leucines	Dysidamide C	CyanoMetDB_2611	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	94,104
Polychlorinated leucines	Dysidamide D	CyanoMetDB_2597	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	94
Polychlorinated leucines	Dysidamide E	CyanoMetDB_2598	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	94
Polychlorinated leucines	Dysidamide F	CyanoMetDB_2595	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	94
Polychlorinated leucines	Dysidamide G	CyanoMetDB_2594	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	94
Polychlorinated leucines	Dysidamide H	CyanoMetDB_2596	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	94
Polychlorinated leucines	Dysideaprolin A	CyanoMetDB_1611	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	95
Polychlorinated leucines	Dysideaprolin B	CyanoMetDB_1584	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	95
Polychlorinated leucines	Dysideaprolin C	CyanoMetDB_1643	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	95
Polychlorinated leucines	Dysideaprolin D	CyanoMetDB_1604	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	95
Polychlorinated leucines	Dysideaprolin E	CyanoMetDB_1605	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	95
Polychlorinated leucines	Dysideaprolin F	CyanoMetDB_1608	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	95
Polychlorinated leucines	Dysideapyrrolidone	CyanoMetDB_2664	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	91
Polychlorinated leucines	Dysideathiazole	CyanoMetDB_2659	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	91,105
Polychlorinated leucines	Dysidenin	CyanoMetDB_2619	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	106
Polychlorinated leucines	Dysidin	CyanoMetDB_2647	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	107
Polychlorinated leucines	Herbamide A	CyanoMetDB_2601	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	108
Polychlorinated leucines	Isodysidenin	CyanoMetDB_2633	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	109
Polychlorinated leucines	Neodysidenin	CyanoMetDB_2640	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	110
Polychlorinated leucines	N-methyldysideathiazole	CyanoMetDB_2661	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	91
Polychlorinated leucines	O-Acetyldysidamide	CyanoMetDB_2587	<i>Hormoscilla spongeliae</i>	<i>Lamellodysidea herbacea</i>	103
Polychlorinated leucines	Sintokamide A	CyanoMetDB_2615	Unknown	<i>Dysidea</i> sp.	111
Polychlorinated leucines	Sintokamide B	CyanoMetDB_2614	Unknown	<i>Dysidea</i> sp.	111
Polychlorinated leucines	Sintokamide C	CyanoMetDB_2616	Unknown	<i>Dysidea</i> sp.	111
Polychlorinated leucines	Sintokamide D	CyanoMetDB_2617	Unknown	<i>Dysidea</i> sp.	111
Polychlorinated leucines	Sintokamide E	CyanoMetDB_2618	Unknown	<i>Dysidea</i> sp.	111
Polychlorinated leucines	D-Leucine, 5,5-dichloro-N-[(3S)-4,4-dichloro-3-methyl-1-oxobutyl]-N-methyl-, methyl ester, (4S)-	CyanoMetDB_2629	Unknown	<i>Dysidea</i> sp.	112
Polychlorinated leucines	D-Leucine, 5,5,5-trichloro-N-methyl-N-[(3S)-4,4,4-trichloro-3-methyl-1-oxobutyl]-, (4S)-	CyanoMetDB_2625	Unknown	<i>Dysidea</i> sp.	112

Polychlorinated leucines	L-Leucine, 5,5,5-trichloro-N-methyl-N-[(3S)-4,4,4-trichloro-3-methyl-1-oxobutyl]-, (4S)-	CyanoMetDB_2626	Unknown	<i>Dysidea</i> sp.	112
Polychlorinated leucines	D-Leucine, 5,5,5-trichloro-N-methyl-N-[(3S)-4,4,4-trichloro-3-methyl-1-oxobutyl]-, methyl ester, (4S)-	CyanoMetDB_2627	Unknown	<i>Dysidea</i> sp.	112
Polychlorinated leucines	L-Leucine, 5,5,5-trichloro-N-methyl-N-[(3S)-4,4,4-trichloro-3-methyl-1-oxobutyl]-, methyl ester, (4S)-	CyanoMetDB_2628	Unknown	<i>Dysidea</i> sp.	112
Polychlorinated leucines	Methyl (4S,6S)-7,7,7-trichloro-2,2,6-trimethyl-3-oxo-4-[[[(3S)-4,4,4-trichloro-3-methyl-1-oxobutyl]amino]heptanoate	CyanoMetDB_2599	<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>	94
Polychlorinated leucines	Methyl (3S,4S,6S)-7,7,7-trichloro-3-hydroxy-2,2,6-trimethyl-4-[[[(3S)-4,4,4-trichloro-3-methyl-1-oxobutyl]amino]heptanoate	CyanoMetDB_2600	<i>Hormoscilla spongelliae</i>	<i>Lamellodysidea herbacea</i>	94
Terpene	Geosmin		<i>Nostoc punctiforme</i> PCC 73102	<i>Macrozamia</i> sp.	BGC0000661 113

* CyanoMetDB version 2.0: includes further references and structural information for each compound and can be found at: <https://zenodo.org/record/7922070>

§ The MiBIG database¹¹⁴ can be found at: <https://mibig.secondarymetabolites.org/>

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