

Supplementary information

Monitoring of biofouling communities in a Portuguese port using a combined morphological and metabarcoding approach

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Supplementary Table S1. Summary of the samples surveyed per month, respective biomass and DNA concentration.

Sampling per Month	Grids	Subsamples	Sequenced Sample	Biomass of Sequenced Sample (g)	DNA of Sequenced Sample (ng/ μ L)
April 2016	6 painted grids	3 painted subsamples	1 painted sample	0.1602	23 $\pm$ 3.1
	12 bare grids	3 bare subsamples	1 bare sample	0.2539	26.9 $\pm$ 8.0
May 2016	6 painted grids	3 painted subsamples	1 painted sample	0.0867	114 $\pm$ 16.0
	12 bare grids	3 bare subsamples	1 bare sample	0.1663	62.7 $\pm$ 6.4
Jun 2016	6 painted grids	3 painted subsamples	1 painted sample	0.0162	87.5 $\pm$ 1.90
	12 bare grids	3 bare subsamples	1 bare sample	0.0492	47.2 $\pm$ 1.02
Jul 2016	6 painted grids	3 painted subsamples	1 painted sample	0.0166	42.8 $\pm$ 3.48
	12 bare grids	3 bare subsamples	1 bare sample	0.2509	50.6 $\pm$ 3.96
Aug 2016	6 painted grids	3 painted subsamples	1 painted sample	0.0236	67.9 $\pm$ 2.66
	12 bare grids	3 bare subsamples	1 bare sample	0.1559	56.9 $\pm$ 1.02
Sep 2016	6 painted grids	3 painted subsamples	1 painted sample	0.0162	69.5 $\pm$ 4.14
	12 bare grids	3 bare subsamples	1 bare sample	0.3144	81.7 $\pm$ 0.47
Oct 2016	6 painted grids	3 painted subsamples	1 painted sample	0.0344	57.1 $\pm$ 1.16
	12 bare grids	3 bare subsamples	1 bare sample	0.0858	40.1 $\pm$ 0.95
Nov 2016	6 painted grids	3 painted subsamples	1 painted sample	0.1398	18.0 $\pm$ 0.79
	12 bare grids	3 bare subsamples	1 bare sample	0.2635	60.6 $\pm$ 1.17
Dez 2016	6 painted grids	3 painted subsamples	1 painted sample	0.4162	27.4 $\pm$ 1.35
	12 bare grids	3 bare subsamples	1 bare sample	0.8132	22.3 $\pm$ 0.13
Jan 2017	6 painted grids	3 painted subsamples	1 painted sample	0.2183	68.7 $\pm$ 1.09
	12 bare grids	3 bare subsamples	1 bare sample	0.3370	23.7 $\pm$ 3.45
Feb 2017	6 painted grids	3 painted subsamples	1 painted sample	0.1195	24.5 $\pm$ 4.3
	12 bare grids	3 bare subsamples	1 bare sample	0.2756	34.2 $\pm$ 0.16
Mar 2017	6 painted grids	3 painted subsamples	1 painted sample	0.2121	21.9 $\pm$ 0.11
	12 bare grids	3 bare subsamples	1 bare sample	0.6403	12.9 $\pm$ 2.17
Mar 2017 Northeast	hole plate	1 bare subsample	1 bare sample	0.5298	14.8 $\pm$ 0.07
Mar 2017 Southwest	Whole plate	1 bare subsample	1 bare sample	0.6330	22.3 $\pm$ 0.07

Supplementary Table S2. Summary of the primers used to amplify the main target fouling taxa present on the monitoring structure.

Gene marker	Primer set	Primer Sequence (5'-3')	Fragment size (bp)	Target taxa
16S rRNA	341F ⁴⁹	CCTACGGGNGGCWGCAG	464	Prokaryotes
	785R ⁴⁹	GACTACHVGGGTATCTAATCC		
18S rRNA	TAREuk454FWD1 ⁵⁰	CCAGCASCYGC GGTAATTCC	270	Eukaryotes
	TAREukREV3 ⁵⁰	ACTTTCGTTCTTGATYRATGA		
COI	mICOLintF ⁵¹	TAAACTTCAGGGTGACCAARAAYCA	313	Metazoans
	dgHCO2198 ⁵²	GGWACWGGWTGAACWGTWTAYCCYCC		
23S rRNA	p23SrVF ⁵³	GGACAGAAAGACCCTATGAA	377	Eukaryotic algae and cyanobacteria
	p23SrVR ⁵³	TCAGCCTGTTATCCCTAGAG		

Supplementary Table S3. Morphological identification of the main taxa observed in the stainless-steel plates deployed at Leixões port from April 2016 until March 2017. Values 0 and 1 indicate absence and presence, respectively.

Sampling months from April 2016 to March 2017

<i>Observed Genus/Species</i>	April	May	June	July	Aug.	Sept.	Out.	Nov.	Dec.	Jan.	Feb.	March
<i>Actinia sp.</i>	0	0	0	0	0	0	1	1	1	1	1	1
<i>Amoeba sp.</i>	0	0	0	0	0	0	0	1	0	0	0	0
<i>Amphibalanus sp.</i>	1	1	1	1	1	1	1	1	1	1	1	1
<i>Asterionellopsis sp.</i>	1	1	1	1	1	1	1	1	1	1	1	1
<i>Bacillaria sp.</i>	1	1	1	1	1	1	1	1	1	1	1	1
<i>Botryllus schlosseri</i>	0	0	0	0	0	0	0	0	1	1	1	1

<i>Bugula sp.</i>	0	1	1	1	0	0	0	0	0	0	0	0
<i>Callochiton sp.</i>	0	0	0	0	0	0	0	0	0	0	0	1
<i>Ceranium ciliatum</i>	0	1	1	1	0	0	0	0	0	0	0	1
<i>Chthamalus sp.</i>	1	1	1	1	1	1	1	1	1	1	1	1
<i>Ciona intestinalis</i>	0	0	0	0	0	1	1	1	1	1	1	1
<i>Dendrodoa grossularia</i>	0	0	0	0	0	0	0	0	0	0	1	1
<i>Didemnum vexillum</i>	0	0	0	0	0	0	0	0	0	0	1	1
<i>Ectocarpus sp.</i>	1	1	1	1	0	0	0	0	0	1	1	1
<i>Ectopleura sp.</i>	0	1	0	0	0	0	0	0	1	1	1	1

Ficopomatus enigmatus

0 0 1 1 1 1 1 1 1 1 1 1

Gelidium sp.

0 0 0 0 0 0 1 1 1 1 1 1

Licmophora sp.

1 1 1 1 1 1 1 1 1 1 1 1

Melosira artica

1 1 1 1 1 1 1 1 1 1 1 1

Melosira nummuloides

1 1 1 1 1 1 1 1 1 1 1 1

Mytilus sp.

1 1 1 1 1 1 1 1 1 1 1 1

Obelia sp.

0 1 1 1 0 0 0 0 0 0 0 0

Paracentrotus lividus

1 1 1 1 1 1 1 1 1 1 1 1

Pseudovorticella sp.

1 0 1 1 1 0 0 0 0 0 1 1

<i>Sabellastarte sp.</i>	0	0	0	0	0	0	1	1	1	1	1	1
<i>Striatella sp.</i>	1	1	1	1	1	1	1	1	1	1	1	1
<i>Ulva lactuca</i>	0	0	0	1	1	1	1	0	0	0	0	0
Watersipora subatra	0	0	0	0	0	1	1	1	1	1	1	1

Supplementary Table S4. List of detected phyla with the different approaches.

Phyla	16S rRNA	18S rRNA	23S rRNA	COI	Morphology
Acidobacteria	Acidobacteria	-	Acidobacteria	-	-
Actinobacteria	Actinobacteria	-	Actinobacteria	-	-
Alveolata	-	-	Alveolata	-	-
Amoebozoa	-	Amoebozoa	-	Amoebozoa	Amoebozoa
Annelida	-	Annelida	-	Annelida	Annelida
Apicomplexa	-	Apicomplexa	-	-	-
Apusozoa	-	Apusozoa	-	-	-
Arthropoda	-	Arthropoda	-	Arthropoda	Arthropoda
Ascomycota	-	-	-	Ascomycota	-
Bacillariophyta	-	-	Bacillariophyta	Bacillariophyta	Bacillariophyta
Bacteroidetes	Bacteroidetes	-	Bacteroidetes	Bacteroidetes	-
Basidiomycota	-	-	-	Basidiomycota	-
Brachiopoda	-	-	-	Brachiopoda	-
Bryozoa	-	Bryozoa	-	Bryozoa	Bryozoa
Candidatus	-	-	Candidatus	-	-
Cercozoa	-	Cercozoa	-	-	-
Charophyta	-	Charophyta	-	-	-
Chlamydiae	Chlamydiae	-	-	-	-
Chlorobi	Chlorobi	-	-	-	-
Chloroflexi	Chloroflexi	-	Chloroflexi	-	-
Chlorophyta	-	Chlorophyta	Chlorophyta	Chlorophyta	Chlorophyta
Chordata	-	Chordata	-	Chordata	Chordata
Ciliophora	-	Ciliophora	-	-	Ciliophora
Cnidaria	-	Cnidaria	-	Cnidaria	Cnidaria
Crenarchaeota	Crenarchaeota	-	-	-	-
Cryptophyta	-	Cryptophyta	Cryptophyta	-	-
Cyanobacteria	Cyanobacteria	-	Cyanobacteria	-	-
Dinoflagellata	-	Dinoflagellata	-	-	-
Echinodermata	-	Echinodermata	-	Echinodermata	Echinodermata
Euglenozoa	-	-	Euglenozoa	-	-
Euryarchaeota	Euryarchaeota	-	-	-	-
Excavata	-	Excavata	-	-	-
Firmicutes	Firmicutes	-	Firmicutes	-	-
Fusobacteria	Fusobacteria	-	-	-	-
Gastrotricha	-	Gastrotricha	-	Gastrotricha	-
Gemmatimonadetes	Gemmatimonadetes	-	-	-	-
Haptophyta	-	Haptophyta	-	Haptophyta	-
Lentisphaerae	Lentisphaerae	-	Lentisphaerae	-	-
Mollusca	-	Mollusca	Mollusca	Mollusca	Mollusca
Nematoda	-	Nematoda	-	Nematoda	-
Nemertea	-	Nemertea	-	Nemertea	-
Nitrospirae	Nitrospirae	-	Nitrospirae	-	-
Ochrophyta	-	Ochrophyta	-	-	Ochrophyta
Phaeophyceae	-	-	-	Phaeophyceae	-
Placozoa	-	-	-	Placozoa	-
Planctomycetes	Planctomycetes	-	Planctomycetes	Platyhelminthes	-
Platyhelminthes	-	Platyhelminthes	-	-	-

Porifera	-	Porifera	-	Porifera	-
Proteobacteria	Proteobacteria	-	Proteobacteria	Proteobacteria	-
Protozoa	-	Protozoa	-	-	-
Rhodophyta	-	Rhodophyta	Rhodophyta	Rhodophyta	Rhodophyta
Rhombzoa	-	-	-	Rhombzoa	-
Rotifera	-	Rotifera	-	Rotifera	-
Spirochaetes	Spirochaetes	-	-	-	-
Stramenopiles	-	Stramenopiles	-	Stramenopiles	-
Streptophyta	-	-	Streptophyta	Streptophyta	-
Synergistetes	Synergistetes	-	-	-	-
Tardigrada	-	-	-	Tardigrada	-
Tenericutes	Tenericutes	-	Tenericutes	-	-
Thermi	Thermi	-	-	-	-
Verrucomicrobia	Verrucomicrobia	-	Verrucomicrobia	-	-

Supplementary Table S5. List of NIS found in the COI NGS datasets.

Taxa	Common Name	Phylum	Native Range	Reference
<i>Aiptasia pulchella</i>	Glass anemone	Cnidaria	NW Pacific	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/523
<i>Amathia gracilis</i>	Moss animal	Bryozoa	NE Atlantic	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/544
<i>Amphibalanus improvisus</i>	Bay barnacle	Arthropoda	NW Atlantic	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/537
<i>Austrominius modestus</i>	Balanus	Arthropoda	Pacific	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/480
<i>Bougainvillia muscus</i>	Umbrella semi-globular	Cnidaria	North Atlantic Ocean including Mediterranean Sea; Arctic Ocean; E and W South Atlantic and Indo-Pacific Oceans	http://invasions.si.edu/nemesis/browseDB/SpeciesSummary.jsp?TSN=-29
<i>Callyspongia siphonella</i>	Tube sponge	Porifera	Red Sea	http://www.marinespecies.org/porifera/porifera.php?p=taxdetails&id=166199
<i>Ceramium secundatum</i>	-	Rhodophyta	Northern Atlantic Ocean	http://invasions.si.edu/nemesis/browseDB/GroupSummary.jsp?GRP=Algae https://www.marlin.ac.uk/species/detail/1476
<i>Chaetogaster diaphanus</i>	-	Annelida	New Zealand Exclusive Economic Zone; North Atlantic Ocean; Poland; Spanish Exclusive Economic Zone	http://invasions.si.edu/nemesis/calnemo/searchTaxa.jsp?taxon=Chaetogaster+diaphanus http://www.catalogueoflife.org/annual-checklist/2019/details/species/id/baca38822a630349a645ad5fe1ed7d37
<i>Clytia hemisphaerica</i>	Jellyfish	Cnidaria	North America	https://www.cabi.org/isc/datasheet/113386
<i>Ctenodrilus serratus</i>	-	Annelida	Mediterranean Sea	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/1747
<i>Dasya baillouviana</i>	-	Rhodophyta	Mediterranean NE Atlantic	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/746
<i>Ectopleura crocea</i>	Pink-mouth hydroid	Cnidaria	NW Atlantic	https://animaldiversity.org/accounts/Ectopleura_crocea/

<i>Halichondria panicea</i>	Breadcrumb sponge	Porifera	North Atlantic; Mediterranean Sea	http://invasions.si.edu/nemesis/browseDB/searchTaxa.jsp?taxon=Halichondria+panicea
<i>Haliclystus tenuis</i>	Stalked jellyfish	Cnidaria	Antarctic Atlantic; Southwest Atlantic and Southeast Pacific	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/1715
<i>Halothrix lumbricalis</i>	-	Ochrophyta	Distribution Long Island Sound to Gulf of Maine, Scotian Shelf to Gulf of St. Lawrence, and to the northeastern Newfoundland Shelf	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/485 http://www.marinespecies.org/aphia.php?p=taxdetails&id=144944#notes
<i>Hymeniacidon perlevis</i>	Crumb-of-bread sponge	Porifera	Northern Atlantic Ocean: Western Europe	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/1725 http://www.marinespecies.org/aphia.php?p=taxdetails&id=132663#distributions
<i>Monocorophium sextonae</i>	Mudshrimp	Arthropoda	New Zealand or NE Atlantic depending of information source	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/566 https://www.nobanis.org/globalassets/speciesinfo/m/monocorophium-sextonae/monocorophium-sextonae3.pdf
<i>Myrionema strangulans</i>	-	Chordariaceae	Long Island Sound to Gulf of St. Lawrence, Strait of Belle Isle	http://invasions.si.edu/nemesis/browseDB/searchTaxa.jsp?taxon=Myrionema+strangulans http://www.marinespecies.org/aphia.php?p=taxdetails&id=144985#notes
<i>Oithona similis</i>	Copepod	Arthropoda	Distribution: Arctic to Cape Cod	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/981/ http://www.marinespecies.org/aphia.php?p=taxdetails&id=106656#notes

<i>Perforatus perforatus</i>	Acorn barnacle	Arthropoda	Distribution: Mediterranean and extending southward to the coasts of Africa and northwards up the Spanish and French coasts to the south-west coasts of Great Britain	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/1642/ https://www.marlin.ac.uk/species/detail/1603
<i>Pilumnus hirtellus</i>	Bristly crab	Arthropoda	Distribution: Southern Norway southwards to Cape Verde Islands, Mediterranean and Black Sea	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/1511 https://www.marlin.ac.uk/species/detail/1627
<i>Polysiphonia brodiei</i> *	-	Rhodophyta	Distribution: UK and Scandinavia	https://www.cabi.org/isc/datasheet/107751
<i>Polysiphonia denudata</i>	-	Rhodophyta	Western Indian Ocean and Western Central Atlantic	http://invasions.si.edu/nemesis/calnemo/GroupSummary.jsp?GRP=Algae / https://www.sealifebase.ca/summary/Polysiphonia-denudata.html#
<i>Polysiphonia morrowii</i>	-	Rhodophyta	North Pacific	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/919
<i>Porphyra umbilicalis</i>	Black butter	Rhodophyta	Mediterranean Sea	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/1431
<i>Ruditapes philippinarum</i>	Japanese cockle	Mollusca	China and Japan	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/500
<i>Watersipora subtorquata</i> *	Moss animal	Bryozoa	Gulf of Mexico	http://www.corpi.ku.lt/databases/index.php/aquanis/species/view/id/689

*Species identified in both metabarcoding and morphologically approach.

Supplementary Table S6. Blast-hit results used for the taxonomic assignment of NIS. All blast hit results come from the search of the COI-Derived OTUs in NT-NCBI database.

OTU id	NT-NCBI Accession number	Species	Alignment Lenght	Identity (%)	GAPS	Coverage (%)	E-value	Bitscore	Taxon Id	Description in NT-NCBI
Uniq199;size=360;	gi 537743898	<i>Aiptasia pulchella</i>	312	95.513	0	100	1.85E-137	499	12924	Aiptasia pulchella complete mitochondrial genome, isolate US1
Uniq199;size=360;	gi 537743883	<i>Aiptasia pulchella</i>	312	95.513	0	100	1.85E-137	499	12924	Aiptasia pulchella complete mitochondrial genome, isolate NOR1
Uniq211;size=328;	gi 537743898	<i>Aiptasia pulchella</i>	312	95.513	0	100	1.85E-137	499	12924	Aiptasia pulchella complete mitochondrial genome, isolate US1
Uniq211;size=328;	gi 537743883	<i>Aiptasia pulchella</i>	312	95.513	0	100	1.85E-137	499	12924	Aiptasia pulchella complete mitochondrial genome, isolate NOR1
Uniq13879;size=6;	gi 1383527676	<i>Amathia gracilis</i>	308	93.506	0	98	3.13E-125	459	560980	Amathia gracilis voucher BMBM-0907 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq480;size=130;	gi 1035662449	<i>Amphibalanus improvisus</i>	312	99.679	0	100	3.86E-159	571	1220549	Amphibalanus improvisus voucher USNM:IZ:1287238 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq480;size=130;	gi 936253556	<i>Amphibalanus improvisus</i>	312	99.679	0	100	3.86E-159	571	1220549	Amphibalanus improvisus voucher MT03225 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq480;size=130;	gi 936253512	<i>Amphibalanus improvisus</i>	312	99.679	0	100	3.86E-159	571	1220549	Amphibalanus improvisus voucher MT03221 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq480;size=130;	gi 936253088	<i>Amphibalanus improvisus</i>	312	99.679	0	100	3.86E-159	571	1220549	Amphibalanus improvisus voucher MT03223 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial

Uniq480;size=130;	gi 786321723	<i>Amphibalanus improvisus</i>	312	99.679	0	100	3.86E-159	571	1220549	Amphibalanus improvisus isolate Bsex-353 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq512;size=122;	gi 1035662449	<i>Amphibalanus improvisus</i>	312	99.679	0	100	3.86E-159	571	1220549	Amphibalanus improvisus voucher USNM:IZ:1287238 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq512;size=122;	gi 936253556	<i>Amphibalanus improvisus</i>	312	99.679	0	100	3.86E-159	571	1220549	Amphibalanus improvisus voucher MT03225 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq512;size=122;	gi 936253512	<i>Amphibalanus improvisus</i>	312	99.679	0	100	3.86E-159	571	1220549	Amphibalanus improvisus voucher MT03221 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq512;size=122;	gi 936253088	<i>Amphibalanus improvisus</i>	312	99.679	0	100	3.86E-159	571	1220549	Amphibalanus improvisus voucher MT03223 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq512;size=122;	gi 786321723	<i>Amphibalanus improvisus</i>	312	99.679	0	100	3.86E-159	571	1220549	Amphibalanus improvisus isolate Bsex-353 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq246;size=265;	gi 1320903723	<i>Austrominius modestus</i>	312	99.679	0	100	3.86E-159	571	1732093	Austrominius modestus isolate 010316-06C cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq246;size=265;	gi 1304472505	<i>Austrominius modestus</i>	312	99.679	0	100	3.86E-159	571	1732093	Austrominius modestus isolate 010316_06MM cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq246;size=265;	gi 936252898	<i>Austrominius modestus</i>	312	99.679	0	100	3.86E-159	571	1732093	Austrominius modestus voucher MT03161 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial

Uniq246;size=265;	gi 1320903727	<i>Austrominius modestus</i>	312	99.359	0	100	1.80E-157	566	1732093	Austrominius modestus isolate 010316-06B cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq246;size=265;	gi 936253892	<i>Austrominius modestus</i>	312	99.359	0	100	1.80E-157	566	1732093	Austrominius modestus voucher MT03158 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq279;size=227;	gi 1320903723	<i>Austrominius modestus</i>	311	99.678	0	99	1.39E-158	569	1732093	Austrominius modestus isolate 010316-06C cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq279;size=227;	gi 1304472505	<i>Austrominius modestus</i>	311	99.678	0	99	1.39E-158	569	1732093	Austrominius modestus isolate 010316_06MM cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq279;size=227;	gi 936252898	<i>Austrominius modestus</i>	311	99.678	0	99	1.39E-158	569	1732093	Austrominius modestus voucher MT03161 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq279;size=227;	gi 1320903727	<i>Austrominius modestus</i>	311	99.357	0	99	6.46E-157	564	1732093	Austrominius modestus isolate 010316-06B cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq279;size=227;	gi 936253892	<i>Austrominius modestus</i>	311	99.357	0	99	6.46E-157	564	1732093	Austrominius modestus voucher MT03158 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq7;size=27913;	gi 985560044	<i>Bougainvillia muscus</i>	312	100	0	100	8.29E-161	577	308567	Bougainvillia muscus isolate 345 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq8;size=27711;	gi 985560044	<i>Bougainvillia muscus</i>	312	100	0	100	8.29E-161	577	308567	Bougainvillia muscus isolate 345 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq10583;size=8;	gi 664803921	<i>Callyspongia siphonella</i>	297	97.306	0	95	3.84E-139	505	469330	Callyspongia siphonella cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial

Uniq13537;size=6;	gi 1122285008	<i>Callyspongia siphonella</i>	294	98.639	0	94	3.94E-144	521	469330	Callyspongia siphonella isolate V2K1 cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq6503;size=14;	gi 664803921	<i>Callyspongia siphonella</i>	296	97.297	0	94	1.43E-138	503	469330	Callyspongia siphonella cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq7265;size=12;	gi 1122285008	<i>Callyspongia siphonella</i>	295	98.644	0	94	1.11E-144	523	469330	Callyspongia siphonella isolate V2K1 cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq1420;size=54;	gi 961526476	<i>Ceramium secundatum</i>	312	94.551	0	100	1.86E-132	483	193556	Ceramium secundatum voucher GWS018041 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq2314;size=36;	gi 961526476	<i>Ceramium secundatum</i>	312	94.551	0	100	1.86E-132	483	193556	Ceramium secundatum voucher GWS018041 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq4695;size=19;	gi 378532182	<i>Chaetogaster diaphanus</i>	312	97.756	0	100	3.91E-149	538	212246	Chaetogaster diaphanus isolate CE439 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq4695;size=19;	gi 793346027	<i>Chaetogaster diaphanus</i>	312	97.115	0	100	8.47E-146	527	212246	Chaetogaster diaphanus mitochondrial partial COI gene for cytochrome oxidase subunit 1, isolate N1_251
Uniq6528;size=14;	gi 378532182	<i>Chaetogaster diaphanus</i>	312	97.756	0	100	3.91E-149	538	212246	Chaetogaster diaphanus isolate CE439 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq6528;size=14;	gi 793346027	<i>Chaetogaster diaphanus</i>	312	97.115	0	100	8.47E-146	527	212246	Chaetogaster diaphanus mitochondrial partial COI gene for cytochrome oxidase subunit 1, isolate N1_251
Uniq86;size=966;	gi 1069323480	<i>Clytia hemisphaerica</i>	312	100	0	100	8.29E-161	577	252671	Clytia hemisphaerica voucher MZUSP:2795 cytochrome oxidase

										subunit I (COI) gene, partial cds; mitochondrial
Uniq86;size=966;	gi 1069323456	<i>Clytia hemisphaerica</i>	312	99.679	0	100	3.86E-159	571	252671	Clytia hemisphaerica voucher MZUSP:2790 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq86;size=966;	gi 1069323472	<i>Clytia hemisphaerica</i>	312	99.359	0	100	1.80E-157	566	252671	Clytia hemisphaerica voucher MZUSP:2794 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq86;size=966;	gi 1069323460	<i>Clytia hemisphaerica</i>	312	99.359	0	100	1.80E-157	566	252671	Clytia hemisphaerica voucher MZUSP:2792 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq86;size=966;	gi 1069323468	<i>Clytia hemisphaerica</i>	312	99.038	0	100	8.35E-156	560	252671	Clytia hemisphaerica voucher MZUSP:2793 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq87;size=949;	gi 1069323480	<i>Clytia hemisphaerica</i>	312	100	0	100	8.29E-161	577	252671	Clytia hemisphaerica voucher MZUSP:2795 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq87;size=949;	gi 1069323456	<i>Clytia hemisphaerica</i>	312	99.679	0	100	3.86E-159	571	252671	Clytia hemisphaerica voucher MZUSP:2790 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq87;size=949;	gi 1069323472	<i>Clytia hemisphaerica</i>	312	99.359	0	100	1.80E-157	566	252671	Clytia hemisphaerica voucher MZUSP:2794 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq87;size=949;	gi 1069323460	<i>Clytia hemisphaerica</i>	312	99.359	0	100	1.80E-157	566	252671	Clytia hemisphaerica voucher MZUSP:2792 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq87;size=949;	gi 1069323468	<i>Clytia hemisphaerica</i>	312	99.038	0	100	8.35E-156	560	252671	Clytia hemisphaerica voucher MZUSP:2793 cytochrome oxidase

										subunit I (COI) gene, partial cds; mitochondrial
Uniq2123;size=39;	gi 874520343	<i>Ctenodrilus serratus</i>	312	98.718	0	100	3.89E-154	555	40316	Ctenodrilus serratus cytochrome oxidase subunit I gene, partial cds; mitochondrial
Uniq161;size=472;	gi 1198411024	<i>Dasya baillouviana</i>	303	94.389	0	97	1.87E-127	466	35166	Dasya baillouviana voucher TRP/CWS 12-166-1 [BDA1776] cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq172;size=448;	gi 1198411024	<i>Dasya baillouviana</i>	302	94.371	0	96	6.74E-127	464	35166	Dasya baillouviana voucher TRP/CWS 12-166-1 [BDA1776] cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq681;size=96;	gi 1198411024	<i>Dasya baillouviana</i>	303	92.739	0	97	4.08E-119	438	35166	Dasya baillouviana voucher TRP/CWS 12-166-1 [BDA1776] cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq537;size=116;	gi 1198411024	<i>Dasya baillouviana</i>	302	92.715	0	96	1.47E-118	436	35166	Dasya baillouviana voucher TRP/CWS 12-166-1 [BDA1776] cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq4519;size=20;	gi 527468477	<i>Ectopleura crocea</i>	312	100	0	100	8.29E-161	577	576744	Ectopleura crocea isolate Acro01PR cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq4519;size=20;	gi 527468473	<i>Ectopleura crocea</i>	312	99.679	0	100	3.86E-159	571	576744	Ectopleura crocea isolate Acro03JU cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq4519;size=20;	gi 527468467	<i>Ectopleura crocea</i>	312	99.679	0	100	3.86E-159	571	576744	Ectopleura crocea isolate Acro01RJ cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial

Uniq4519;size=20;	gi 527468475	<i>Ectopleura crocea</i>	312	99.359	0	100	1.80E-157	566	576744	Ectopleura crocea isolate Acro05JU cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq4519;size=20;	gi 527468471	<i>Ectopleura crocea</i>	312	99.359	0	100	1.80E-157	566	576744	Ectopleura crocea isolate Acro04MA cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq7168;size=12;	gi 527468477	<i>Ectopleura crocea</i>	312	100	0	100	8.38E-161	577	576744	Ectopleura crocea isolate Acro01PR cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq7168;size=12;	gi 527468473	<i>Ectopleura crocea</i>	312	99.679	0	100	3.90E-159	571	576744	Ectopleura crocea isolate Acro03JU cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq7168;size=12;	gi 527468467	<i>Ectopleura crocea</i>	312	99.679	0	100	3.90E-159	571	576744	Ectopleura crocea isolate Acro01RJ cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq7168;size=12;	gi 527468475	<i>Ectopleura crocea</i>	312	99.359	0	100	1.81E-157	566	576744	Ectopleura crocea isolate Acro05JU cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq7168;size=12;	gi 527468471	<i>Ectopleura crocea</i>	312	99.359	0	100	1.81E-157	566	576744	Ectopleura crocea isolate Acro04MA cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq135;size=692;	gi 1321068866	<i>Halichondria panicea</i>	312	100	0	100	8.29E-161	577	6063	Halichondria panicea voucher SB16A cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq135;size=692;	gi 512764451	<i>Halichondria panicea</i>	312	99.359	0	100	1.80E-157	566	6063	Halichondria panicea cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq139;size=676;	gi 1321068866	<i>Halichondria panicea</i>	312	100	0	100	8.29E-161	577	6063	Halichondria panicea voucher SB16A cytochrome oxidase

										subunit I (COI) gene, partial cds; mitochondrial
Uniq139;size=676;	gi 512764451	<i>Halichondria panicea</i>	312	99.359	0	100	1.80E-157	566	6063	Halichondria panicea cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq141;size=668;	gi 1025756842	<i>Haliclystus tenuis</i>	309	98.706	0	99	1.81E-152	549	756010	Haliclystus tenuis isolate 06JAP101-5 cytochrome oxidase subunit 1 (cox1) gene, partial cds; mitochondrial
Uniq2061;size=40;	gi 1025756842	<i>Haliclystus tenuis</i>	311	98.714	0	99	5.03E-153	551	756010	Haliclystus tenuis isolate 06JAP101-5 cytochrome oxidase subunit 1 (cox1) gene, partial cds; mitochondrial
Uniq79;size=1063;	gi 1025756842	<i>Haliclystus tenuis</i>	309	97.735	0	99	1.82E-147	532	756010	Haliclystus tenuis isolate 06JAP101-5 cytochrome oxidase subunit 1 (cox1) gene, partial cds; mitochondrial
Uniq84;size=1010;	gi 1025756842	<i>Haliclystus tenuis</i>	309	97.735	0	99	1.82E-147	532	756010	Haliclystus tenuis isolate 06JAP101-5 cytochrome oxidase subunit 1 (cox1) gene, partial cds; mitochondrial
Uniq188;size=384;	gi 781789938	<i>Halothrix lumbricalis</i>	310	100	0	99	1.07E-159	573	133519	Halothrix lumbricalis mitochondrial partial COI gene for cytochrome oxidase subunit 1, strain NAP12-s#3-30A
Uniq188;size=384;	gi 781786344	<i>Halothrix lumbricalis</i>	310	100	0	99	1.07E-159	573	133519	Halothrix lumbricalis mitochondrial partial COI gene for cytochrome oxidase subunit 1, strain GR11-54
Uniq191;size=375;	gi 781789938	<i>Halothrix lumbricalis</i>	309	100	0	99	3.86E-159	571	133519	Halothrix lumbricalis mitochondrial partial COI gene for cytochrome oxidase subunit 1, strain NAP12-s#3-30A
Uniq191;size=375;	gi 781786344	<i>Halothrix lumbricalis</i>	309	100	0	99	3.86E-159	571	133519	Halothrix lumbricalis mitochondrial partial COI gene for cytochrome oxidase subunit 1, strain GR11-54
Uniq3833;size=23;	gi 1321068858	<i>Hymeniacion perlevis</i>	312	100	0	100	8.29E-161	577	177573	Hymeniacion perlevis voucher Ag19A cytochrome oxidase

										subunit I (COI) gene, partial cds; mitochondrial
Uniq3833;size=23;	gi 1321068852	<i>Hymeniacion perlevis</i>	312	100	0	100	8.29E-161	577	177573	Hymeniacion perlevis voucher Ag19D cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq3833;size=23;	gi 1321068848	<i>Hymeniacion perlevis</i>	312	100	0	100	8.29E-161	577	177573	Hymeniacion perlevis voucher Al17B cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq3833;size=23;	gi 1321068846	<i>Hymeniacion perlevis</i>	312	100	0	100	8.29E-161	577	177573	Hymeniacion perlevis voucher Al17D cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq3833;size=23;	gi 1321068840	<i>Hymeniacion perlevis</i>	312	100	0	100	8.29E-161	577	177573	Hymeniacion perlevis voucher An13C cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq6993;size=13;	gi 1321068858	<i>Hymeniacion perlevis</i>	312	100	0	100	8.38E-161	577	177573	Hymeniacion perlevis voucher Ag19A cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq6993;size=13;	gi 1321068854	<i>Hymeniacion perlevis</i>	312	100	0	100	8.38E-161	577	177573	Hymeniacion perlevis voucher Ag19C cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq6993;size=13;	gi 1321068852	<i>Hymeniacion perlevis</i>	312	100	0	100	8.38E-161	577	177573	Hymeniacion perlevis voucher Ag19D cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq6993;size=13;	gi 1321068848	<i>Hymeniacion perlevis</i>	312	100	0	100	8.38E-161	577	177573	Hymeniacion perlevis voucher Al17B cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq6993;size=13;	gi 1321068846	<i>Hymeniacion perlevis</i>	312	100	0	100	8.38E-161	577	177573	Hymeniacion perlevis voucher Al17D cytochrome oxidase subunit

										I (COI) gene, partial cds; mitochondrial
Uniq6230;size=14;	gi 936254012	<i>Monocorophium sextonae</i>	308	100	0	98	1.39E-158	569	1582902	Monocorophium sextonae voucher MT01124 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq6230;size=14;	gi 936253422	<i>Monocorophium sextonae</i>	308	100	0	98	1.39E-158	569	1582902	Monocorophium sextonae voucher MT01123 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq6230;size=14;	gi 936252958	<i>Monocorophium sextonae</i>	308	100	0	98	1.39E-158	569	1582902	Monocorophium sextonae voucher MT01126 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq6230;size=14;	gi 936252870	<i>Monocorophium sextonae</i>	308	100	0	98	1.39E-158	569	1582902	Monocorophium sextonae voucher MT01127 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq6328;size=14;	gi 936254012	<i>Monocorophium sextonae</i>	309	100	0	99	3.86E-159	571	1582902	Monocorophium sextonae voucher MT01124 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq6328;size=14;	gi 936253422	<i>Monocorophium sextonae</i>	309	100	0	99	3.86E-159	571	1582902	Monocorophium sextonae voucher MT01123 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq6328;size=14;	gi 936252958	<i>Monocorophium sextonae</i>	309	100	0	99	3.86E-159	571	1582902	Monocorophium sextonae voucher MT01126 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq6328;size=14;	gi 936252870	<i>Monocorophium sextonae</i>	309	100	0	99	3.86E-159	571	1582902	Monocorophium sextonae voucher MT01127 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq11718;size=7;	gi 781789166	<i>Myrionema strangulans</i>	309	100	0	99	3.86E-159	571	86898	Myrionema strangulans mitochondrial partial COI gene for

											cytochrome oxidase subunit 1, strain BLZ12-18
Uniq11718;size=7;	gi 781788974	<i>Myrionema strangulans</i>	309	100	0	99	3.86E-159	571	86898		Myrionema strangulans mitochondrial partial COI gene for cytochrome oxidase subunit 1, strain BLZ11-233
Uniq11718;size=7;	gi 781788907	<i>Myrionema strangulans</i>	309	100	0	99	3.86E-159	571	86898		Myrionema strangulans mitochondrial partial COI gene for cytochrome oxidase subunit 1, strain BLZ11-219
Uniq11718;size=7;	gi 781788839	<i>Myrionema strangulans</i>	309	100	0	99	3.86E-159	571	86898		Myrionema strangulans mitochondrial partial COI gene for cytochrome oxidase subunit 1, strain BLZ11-204
Uniq11718;size=7;	gi 781788606	<i>Myrionema strangulans</i>	309	100	0	99	3.86E-159	571	86898		Myrionema strangulans mitochondrial partial COI gene for cytochrome oxidase subunit 1, strain BLZ11-171
Uniq5262;size=17;	gi 781789166	<i>Myrionema strangulans</i>	310	100	0	99	1.07E-159	573	86898		Myrionema strangulans mitochondrial partial COI gene for cytochrome oxidase subunit 1, strain BLZ12-18
Uniq5262;size=17;	gi 781788974	<i>Myrionema strangulans</i>	310	100	0	99	1.07E-159	573	86898		Myrionema strangulans mitochondrial partial COI gene for cytochrome oxidase subunit 1, strain BLZ11-233
Uniq5262;size=17;	gi 781788907	<i>Myrionema strangulans</i>	310	100	0	99	1.07E-159	573	86898		Myrionema strangulans mitochondrial partial COI gene for cytochrome oxidase subunit 1, strain BLZ11-219
Uniq5262;size=17;	gi 781788839	<i>Myrionema strangulans</i>	310	100	0	99	1.07E-159	573	86898		Myrionema strangulans mitochondrial partial COI gene for cytochrome oxidase subunit 1, strain BLZ11-204
Uniq5262;size=17;	gi 781788606	<i>Myrionema strangulans</i>	310	100	0	99	1.07E-159	573	86898		Myrionema strangulans mitochondrial partial COI gene for

										cytochrome oxidase subunit 1, strain BLZ11-171
Uniq5051;size=18;	gi 1024390348	<i>Oithona similis</i>	231	99.134	0	74	1.91E-112	416	324873	Oithona similis voucher OsiF1176_NA cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq5051;size=18;	gi 1024390346	<i>Oithona similis</i>	231	99.134	0	74	1.91E-112	416	324873	Oithona similis voucher 704Osi16_NA COI gene, partial sequence; mitochondrial
Uniq5051;size=18;	gi 1024390344	<i>Oithona similis</i>	231	99.134	0	74	1.91E-112	416	324873	Oithona similis voucher 484Osi23_NA cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq5051;size=18;	gi 1024390342	<i>Oithona similis</i>	231	99.134	0	74	1.91E-112	416	324873	Oithona similis voucher OsiF1183_NA cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq5051;size=18;	gi 1024390340	<i>Oithona similis</i>	231	99.134	0	74	1.91E-112	416	324873	Oithona similis voucher OsiF1182_NA COI gene, partial sequence; mitochondrial
Uniq106;size=801;	gi 949478689	<i>Perforatus perforatus</i>	276	100	0	88	8.53E-141	510	1562161	Perforatus perforatus cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq106;size=801;	gi 1122285432	<i>Perforatus perforatus</i>	312	99.038	0	100	8.35E-156	560	1562161	Perforatus perforatus isolate F3S4 cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq106;size=801;	gi 1020994734	<i>Perforatus perforatus</i>	312	99.038	0	100	8.35E-156	560	1562161	Perforatus perforatus isolate 153472A cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq127;size=719;	gi 949478689	<i>Perforatus perforatus</i>	275	100	0	88	3.07E-140	508	1562161	Perforatus perforatus cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq127;size=719;	gi 1122285432	<i>Perforatus perforatus</i>	312	99.038	0	100	8.35E-156	560	1562161	Perforatus perforatus isolate F3S4 cytochrome c oxidase subunit I

Uniq127;size=719;	gi 1020994734	<i>Perforatus perforatus</i>	312	99.038	0	100	8.35E-156	560	1562161	(COI) gene, partial cds; mitochondrial Perforatus perforatus isolate 153472A cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq16100;size=5;	gi 1122285440	<i>Pilumnus hirtellus</i>	312	100	0	100	8.29E-161	577	483407	Pilumnus hirtellus isolate K11 cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq16100;size=5;	gi 936254418	<i>Pilumnus hirtellus</i>	312	100	0	100	8.29E-161	577	483407	Pilumnus hirtellus voucher MT04581 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq16100;size=5;	gi 936254044	<i>Pilumnus hirtellus</i>	312	100	0	100	8.29E-161	577	483407	Pilumnus hirtellus voucher MT03176 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq16100;size=5;	gi 936253934	<i>Pilumnus hirtellus</i>	312	100	0	100	8.29E-161	577	483407	Pilumnus hirtellus voucher MT03191 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq16100;size=5;	gi 936253812	<i>Pilumnus hirtellus</i>	312	100	0	100	8.29E-161	577	483407	Pilumnus hirtellus voucher MT03177 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq7428;size=12;	gi 1122285440	<i>Pilumnus hirtellus</i>	312	100	0	100	8.29E-161	577	483407	Pilumnus hirtellus isolate K11 cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq7428;size=12;	gi 936254418	<i>Pilumnus hirtellus</i>	312	100	0	100	8.29E-161	577	483407	Pilumnus hirtellus voucher MT04581 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq7428;size=12;	gi 936254044	<i>Pilumnus hirtellus</i>	312	100	0	100	8.29E-161	577	483407	Pilumnus hirtellus voucher MT03176 cytochrome oxidase

										subunit 1 (COI) gene, partial cds; mitochondrial
Uniq7428;size=12;	gi 936253934	<i>Pilumnus hirtellus</i>	312	100	0	100	8.29E-161	577	483407	Pilumnus hirtellus voucher MT03191 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq7428;size=12;	gi 367057081	<i>Pilumnus hirtellus</i>	312	100	0	100	8.29E-161	577	483407	Pilumnus hirtellus voucher JSDAz135 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq25;size=13275;	gi 1203234130	<i>Polysiphonia brodiei</i>	312	100	0	100	8.29E-161	577	159751	Polysiphonia brodiei isolate PD516 cytochrome oxidase subunit 1 (cox1) gene, complete cds; mitochondrial
Uniq25;size=13275;	gi 692335831	<i>Polysiphonia brodiei</i>	297	100	0	95	1.81E-152	549	159751	Polysiphonia brodiei voucher RMAR1752 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq25;size=13275;	gi 692335829	<i>Polysiphonia brodiei</i>	289	100	0	92	5.06E-148	534	159751	Polysiphonia brodiei voucher RMAR1869 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq25;size=13275;	gi 692335823	<i>Polysiphonia brodiei</i>	284	100	0	91	3.05E-145	525	159751	Polysiphonia brodiei voucher RMAR1738 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq25;size=13275;	gi 692335827	<i>Polysiphonia brodiei</i>	258	100	0	82	8.65E-131	477	159751	Polysiphonia brodiei voucher RMAR1870 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq3381;size=26;	gi 1203234198	<i>Polysiphonia denudata</i>	265	98.113	0	84	2.42E-126	462	159752	Polysiphonia denudata cytochrome oxidase subunit 1 (cox1) gene, partial cds; mitochondrial
Uniq3687;size=24;	gi 1203234198	<i>Polysiphonia denudata</i>	265	98.113	0	84	2.42E-126	462	159752	Polysiphonia denudata cytochrome oxidase subunit 1

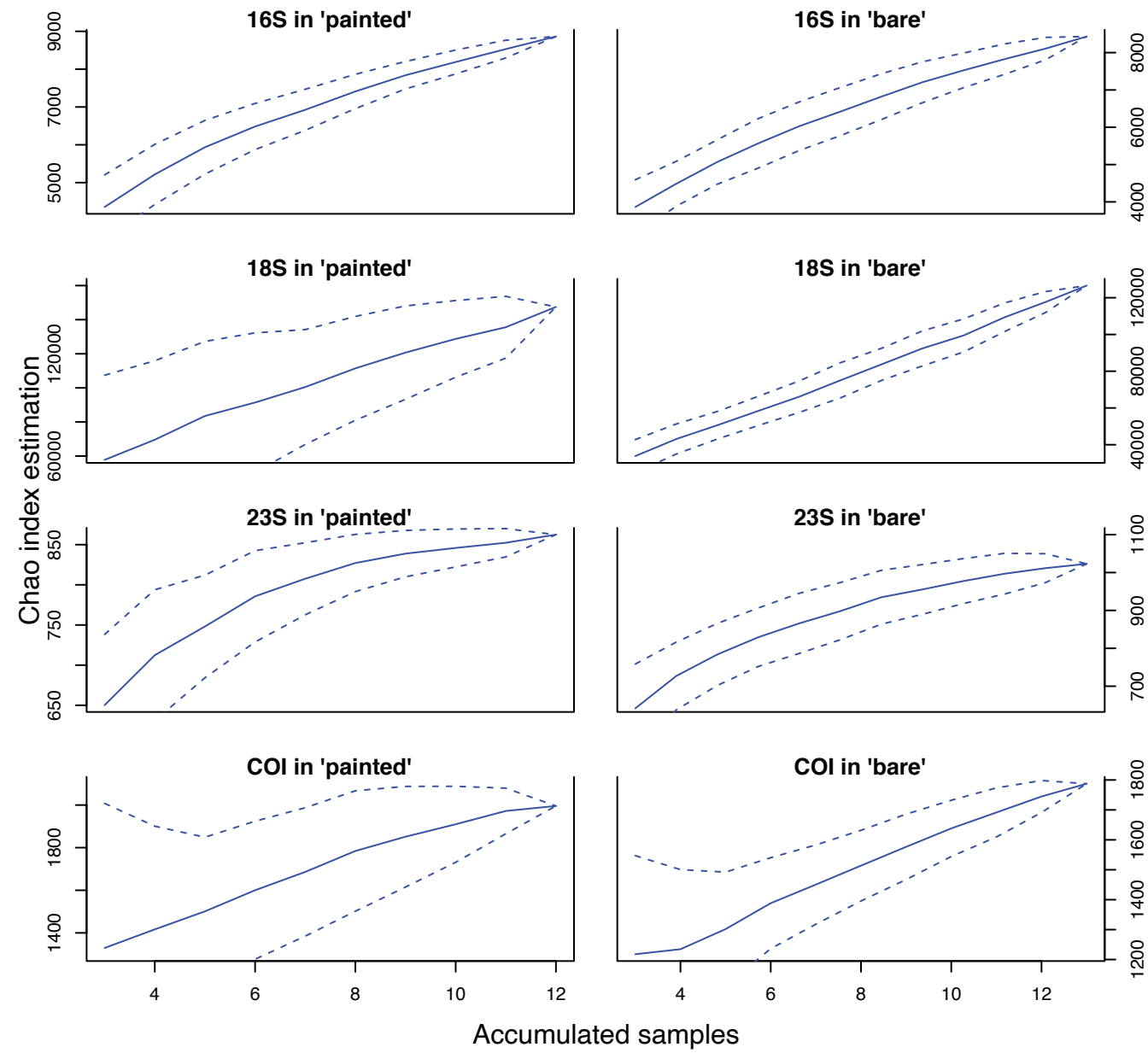
										(cox1) gene, partial cds; mitochondrial
Uniq3144;size=27;	gi 318085388	<i>Polysiphonia morrowii</i>	299	90.97	0	95	1.49E-108	403	173542	Polysiphonia morrowii voucher NZ04-130 cytochrome c oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq3671;size=24;	gi 318085388	<i>Polysiphonia morrowii</i>	299	90.97	0	95	1.49E-108	403	173542	Polysiphonia morrowii voucher NZ04-130 cytochrome c oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq39;size=4509;	gi 378554603	<i>Porphyra umbilicalis</i>	312	100	0	100	8.29E-161	577	2786	Porphyra umbilicalis mitochondrion, complete genome
Uniq39;size=4509;	gi 343887871	<i>Porphyra umbilicalis</i>	312	100	0	100	8.29E-161	577	2786	Porphyra umbilicalis voucher GWS002655 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq39;size=4509;	gi 343887831	<i>Porphyra umbilicalis</i>	312	100	0	100	8.29E-161	577	2786	Porphyra umbilicalis voucher GWS007866 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq39;size=4509;	gi 312608226	<i>Porphyra umbilicalis</i>	312	100	0	100	8.29E-161	577	2786	Porphyra umbilicalis voucher GWS005951 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq39;size=4509;	gi 343887883	<i>Porphyra umbilicalis</i>	312	99.679	0	100	1.07E-159	573	2786	Porphyra umbilicalis voucher GWS008070 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq42;size=4251;	gi 378554603	<i>Porphyra umbilicalis</i>	312	100	0	100	8.29E-161	577	2786	Porphyra umbilicalis mitochondrion, complete genome
Uniq42;size=4251;	gi 343887871	<i>Porphyra umbilicalis</i>	312	100	0	100	8.29E-161	577	2786	Porphyra umbilicalis voucher GWS002655 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq42;size=4251;	gi 343887831	<i>Porphyra umbilicalis</i>	312	100	0	100	8.29E-161	577	2786	Porphyra umbilicalis voucher GWS007866 cytochrome oxidase

										subunit 1 (COI) gene, partial cds; mitochondrial
Uniq42;size=4251;	gi 312608226	<i>Porphyra umbilicalis</i>	312	100	0	100	8.29E-161	577	2786	Porphyra umbilicalis voucher GWS005951 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq42;size=4251;	gi 343887883	<i>Porphyra umbilicalis</i>	312	99.679	0	100	1.07E-159	573	2786	Porphyra umbilicalis voucher GWS008070 cytochrome oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq3819;size=23;	gi 1141997811	<i>Ruditapes philippinarum</i>	312	100	0	100	8.29E-161	577	129788	Ruditapes philippinarum haplotype Hap_46 cytochrome oxidase subunit I gene, partial cds; mitochondrial
Uniq3819;size=23;	gi 1141997807	<i>Ruditapes philippinarum</i>	312	100	0	100	8.29E-161	577	129788	Ruditapes philippinarum haplotype Hap_44 cytochrome oxidase subunit I gene, partial cds; mitochondrial
Uniq3819;size=23;	gi 1141997803	<i>Ruditapes philippinarum</i>	312	100	0	100	8.29E-161	577	129788	Ruditapes philippinarum haplotype Hap_42 cytochrome oxidase subunit I gene, partial cds; mitochondrial
Uniq3819;size=23;	gi 1141997751	<i>Ruditapes philippinarum</i>	312	100	0	100	8.29E-161	577	129788	Ruditapes philippinarum haplotype Hap_16 cytochrome oxidase subunit I gene, partial cds; mitochondrial
Uniq3819;size=23;	gi 874508332	<i>Ruditapes philippinarum</i>	312	100	0	100	8.29E-161	577	129788	Ruditapes philippinarum mitochondrion, complete genome
Uniq6949;size=13;	gi 1141997811	<i>Ruditapes philippinarum</i>	312	100	0	100	8.38E-161	577	129788	Ruditapes philippinarum haplotype Hap_46 cytochrome oxidase subunit I gene, partial cds; mitochondrial
Uniq6949;size=13;	gi 1141997807	<i>Ruditapes philippinarum</i>	312	100	0	100	8.38E-161	577	129788	Ruditapes philippinarum haplotype Hap_44 cytochrome oxidase subunit I gene, partial cds; mitochondrial

Uniq6949;size=13;	gi 1141997803	<i>Ruditapes philippinarum</i>	312	100	0	100	8.38E-161	577	129788	Ruditapes philippinarum haplotype Hap_42 cytochrome oxidase subunit I gene, partial cds; mitochondrial
Uniq6949;size=13;	gi 1141997751	<i>Ruditapes philippinarum</i>	312	100	0	100	8.38E-161	577	129788	Ruditapes philippinarum haplotype Hap_16 cytochrome oxidase subunit I gene, partial cds; mitochondrial
Uniq6949;size=13;	gi 874508332	<i>Ruditapes philippinarum</i>	312	100	0	100	8.38E-161	577	129788	Ruditapes philippinarum mitochondrion, complete genome
Uniq282;size=226;	gi 1122285498	<i>Watersipora subtorquata</i>	312	100	0	100	8.29E-161	577	193294	Watersipora subtorquata isolate G3C13 cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq282;size=226;	gi 90018725	<i>Watersipora subtorquata</i>	296	100	0	94	6.50E-152	547	193294	Watersipora subtorquata isolate WsV1 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq282;size=226;	gi 223861317	<i>Watersipora subtorquata</i>	312	97.756	0	100	3.91E-149	538	193294	Watersipora subtorquata mitochondrion, complete genome
Uniq296;size=216;	gi 1122285498	<i>Watersipora subtorquata</i>	312	100	0	100	8.29E-161	577	193294	Watersipora subtorquata isolate G3C13 cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq296;size=216;	gi 90018725	<i>Watersipora subtorquata</i>	295	100	0	94	2.34E-151	545	193294	Watersipora subtorquata isolate WsV1 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq296;size=216;	gi 223861317	<i>Watersipora subtorquata</i>	312	97.756	0	100	3.91E-149	538	193294	Watersipora subtorquata mitochondrion, complete genome
Uniq516;size=121;	gi 1122285492	<i>Watersipora subtorquata</i>	312	100	0	100	8.29E-161	577	193294	Watersipora subtorquata isolate F2E1 cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq516;size=121;	gi 342360257	<i>Watersipora subtorquata</i>	312	100	0	100	8.29E-161	577	193294	Watersipora subtorquata isolate WsubTB01 cytochrome c oxidase

										subunit 1 (COI) gene, partial cds; mitochondrial
Uniq516;size=121;	gi 342360255	<i>Watersipora subtorquata</i>	312	100	0	100	8.29E-161	577	193294	Watersipora subtorquata isolate Bry8Wsub cytochrome c oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq516;size=121;	gi 237930312	<i>Watersipora subtorquata</i>	312	100	0	100	8.29E-161	577	193294	Watersipora subtorquata haplotype Ws1 cytochrome c oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq516;size=121;	gi 90018717	<i>Watersipora subtorquata</i>	312	99.679	0	100	1.07E-159	573	193294	Watersipora subtorquata isolate WsSI2 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq530;size=118;	gi 1122285492	<i>Watersipora subtorquata</i>	312	100	0	100	8.29E-161	577	193294	Watersipora subtorquata isolate F2E1 cytochrome c oxidase subunit I (COI) gene, partial cds; mitochondrial
Uniq530;size=118;	gi 342360257	<i>Watersipora subtorquata</i>	312	100	0	100	8.29E-161	577	193294	Watersipora subtorquata isolate WsubTB01 cytochrome c oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq530;size=118;	gi 342360255	<i>Watersipora subtorquata</i>	312	100	0	100	8.29E-161	577	193294	Watersipora subtorquata isolate Bry8Wsub cytochrome c oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq530;size=118;	gi 237930312	<i>Watersipora subtorquata</i>	312	100	0	100	8.29E-161	577	193294	Watersipora subtorquata haplotype Ws1 cytochrome c oxidase subunit 1 (COI) gene, partial cds; mitochondrial
Uniq530;size=118;	gi 90018717	<i>Watersipora subtorquata</i>	312	99.679	0	100	1.07E-159	573	193294	Watersipora subtorquata isolate WsSI2 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial

Supplementary Figure S1. Sampling–month based rarefaction curves of Chao 1 for both painted and bare panels and for each of the four gene markers. Dashed lines indicate 95% confidence interval.



Supplementary File S1. Nucleotide sequences of OTUs found in the COI-derived dataset and with correspondence in at least one of the four NIS databases Inspected.

>Uniq7;size=27913;

TCTTTCAGCAGCTCAAGCTCATTCAAGGCCCTTCAGTTGATATGGCAATATTTAGTTTACACTGCGCAGGAGCATCATC
CATTATGGGAGCAATTAATTTTATTACTACAATTATTAATATGAGAGCTCCTGGAATGTCTTTGACAAACTACCTCTT
TTCGTTTGATCTGTTTTATCACAGCTTTCTTGTTATTATTATCTCTACCAGTACTAGCAGGAGCAATTACTATGCTTCT
AACTGATAGAACTTTAACACCACTTTCTTTGACCCAGCTGGTGGGGGAGATCCGGTTTTATATCAACACTTATTT

>Uniq8;size=27711;

AAATAAGTGTGATATAAAACCGGATCTCCCCACCAGCTGGGTCAAAGAAAGTGGTGTTAAAGTTTCTATCAGTTA
GAAGCATAGTAATTGCTCCTGCTAGTACTGGTAGAGATAATAATAACAAGAAAGCTGTGATAAAAACAGATCAAAC
GAAAAGAGGTAGTTTGTGCGAAAGACATTCCAGGAGCTCTCATATTAATAATTGTAGTAATAAAATTAATTGCTCCCA
TAATGGATGATGCTCCTGCGCAGTGTAATACTAAATATTGCCATATCAACTGAAGGGCCTGAATGAGCTTGAGCTGCT
GAAAGA

>Uniq25;size=13275;

TTTAAGTTCATTCAAAGTCATTCAAGGAGCTGCAGTTGATTTGGCAATTTTTAGCCTTCATTTGTCAGGTGCTTCTTCT
ATTTTAGGAGCTATTAATTTTATTTCTACAATTTTAAATATGCGGAACCCAGGCCAAACATTTTACAGAATTCCTCTTT
TTGTATGATCTATTTTGTAAACAGCTTTTTACTTTTATTAGCAGTACCTGTTCTTGCAAGGAGCTATAACTATGTTATTA
ACTGATCGAAATTTTAACACAGCGTTTTTGTATCCTGCAGGTGGCGGTGATCCTGTACTTTACCAACATTTATTT

>Uniq39;size=4509;

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GTAACATTGTAATAGCACCCGTAATACAGGAACGGCTAATAACAACAGAAAAGCTGTAATTAAGATAGACCAGAC
AAATAATGGAATACGGTACATACTTTGCCCTGGATTGCGCATATTGAATATGGTAGTAATAAAATTAATAGACCAA
GTATAGAAGAAGCTCCCGATAAATGCAAACTAAAAATAGCTAGATCAACGGCTCCTCCAGAGTGACTTTGAATAGA
ACTTAGT

>Uniq42;size=4251;

ACTAAGTTCTATTCAAAGTCACTCTGGAGGAGCCGTTGATCTAGCTATTTTTAGTTTGCATTTATCGGGAGCTTCTTC
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TTTGTCTGGTCTATCTTAATTACAGCTTTTCTGTTGTTATTAGCCGTTCTGTATTAGCGGGTGCTATTACAATGTTAC
TCACGGATAGAAATTTTAATACCACATTTTTTGTATCCTTCAGGTGGAGGTGACCCCGTTTTATATCAACATTTATTC

>Uniq79;size=1063;

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CAAATAAGGGTAATTTGTCTCAAGTTACACCTGGGGCACGCATATTAATAATTGTTGTAATGAAATTCATAGCGCCT
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CAGAAAGA

>Uniq84;size=1010;

TCTTCTGGAATACAAGCCCATTCAGGTGGTGCCGTAGATATGGGAATTTTCAGCCTCCATTTAGCAGGTGCCTCCT
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TATTTGTTTGATCCGTCTTAATTACAGCTTTTTTACTGTTATTGTCCTTGCCAGTACTAGCTGGAGCTATTACTATGCT
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>Uniq86;size=966;

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TTTGTGGTCAGTCTTAATTACTGCCTTTTTATTACTTTTATCTTTACCTGTATTAGCTGGAGCTATTACGATGTTACT
TACAGATAGAAATTTAATACAACATTCTTTGATCCAGCAGGTGGAGGTGATCCAGTATTATACCAACATTTATTT

>Uniq87;size=949;

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TAACATCGTAATAGCTCCAGCTAATACAGGTAAAGATAAAAAGTAATAAAAAGGCAGTAATTAAGACTGACCAAACA
AATAATGGTATTTATCTAAAGTTAAGCCAGGGGCTCTCATATTAATATTGTTGTAATAAAAATTTATGGCACCCATA
ATAGATGAAGCACCTGCACAATGTAACTAAAAATTGCCATATCTACTGATCCTCCTGAATGTGTTTGAGGTCCTGA
TAAA

>Uniq106;size=801;

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GTAATATTGTAATTGCTCCGGCCAACACAGGTAATGAAAGGAGTAAAGAATAACTGTAATAAATACGTTTACAC
GAAAAGAGGGAGTCGATCGAATGTAAGAGTTTCAGCTCGTATTAATAACCGTTGATATAAAATTAATGGCCCCTA
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>Uniq127;size=719;

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ATTTTAGGGGCCATTAATTTTATATCAACGGTTATTAATATACGAGCTGAACTCTTACATTCGATCGACTCCCTCTT
TCGTGTGAAGCGTATTTATTACAGTTATCTTTTACTCCTTCATTACCTGTGTTGGCCGGAGCAATTACAATATTACT
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>Uniq135;size=692;

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C

>Uniq139;size=676;

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AATAATGGCATTTCGGTCCATTGTAATACCTGGCGCTCTCATATTTATAATGTTGTAATGAAATTCATTGCTCCCAAT
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>Uniq141;size=668;

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TATTTGTTTGATCCGTCTTAATTACAGCTTTCTTACTGTTATTGTCCTTACCAGTGCTAGCGGGAGCTATTACTATGCT
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>Uniq161;size=472;

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AATAAAGGTATTCTATATAAAATTTGTCCCGGATTTTCGCATATTTAAATTTGTAGAAATAAAATTTATAGCACCTAATA
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>Uniq172;size=448;

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TTGTTTGATCTATATTGTAACTGCATTTTATTATTATTAGCTGTACCTGTTTTAGCTGGAGCTATTACTATGTTATTA
ACTGATCGTAATTTTAATACTTCATTTTTTGATCCATCAGGAGGTGGAGATCCTGTTTTATATCAACATTTATTT

>Uniq188;size=384;

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AAAAAGAGGTAACCTATCCATAGTCATACCAGGAGCACGCATATTAATAATAGTAGTAATAAAATTAATAGCACCTA
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>Uniq191;size=375;

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TTGTTTGGTCTGTTTTAATAACAGCTTTTTTACTTCTATTGTCTCTCCTGTTTTAGCTGGAGGTATCACCATGCTTTTA
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>Uniq199;size=360;

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TATTTGTATGGTCTATTTTAATCACTGCCTTTTTATTGTTGCTCTCCTTACCTGTATTAGCTGGTGCTATTACTATGCTT
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>Uniq211;size=328;

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AAATAATGGGAGTCTGTCCATTGTCATTCCTGGAGCCCGCATATTAATAATAGTTGTATAAAATTCATTGCCCTAA
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GATAAA

>Uniq246;size=265;

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ATTGTTTGAAGAGTATTTATTACAGTAATTCTATTACTTTTATCTCTCCTGTTCTAGCTGGAGCAATTACAATGTTA
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>Uniq279;size=227;

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ACAGA

>Uniq282;size=226;

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AAATAATGGGAGGTTTATAAAAGATATTCTTTTTCTCGTATATTGATAATCGTTACTATAAAATTAATTGCCCTAAA
ATAGAGGATACCCCAGCAAGATGTAGCGCAAAGATTGCCATATCTACTGAAGATCCTCTATGTGAGATATTAGAGG
ATAGA

>Uniq296;size=216;

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TATTTAGGGGCAATTAATTTATAGTAACGATTATCAATATACGAGGAAAAAGAATATCTTTATAAACCTCCCATT
ATTTGTTTGAGCCGTATTTATTACTGCACTATTATTACTTTTATCATTACCAGTACTAGCAGGGGCTATTACTATACTT
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>Uniq480;size=130;

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TTGTTTGAAGTGATTTATTACCGTAATTTACTTCTTTTATCATTACCTGTTTTAGCTGGTGCTATTACAATATTATTA
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>Uniq512;size=122;

GAATAAATGTTGATATAAAATTGGGTCTCCCCACCGTAGGGTCAAAAAAGAAGTGTTTAAGTTACGGTCAGTTA
ATAATATTGTAATAGCACCAGCTAAAACAGGTAATGATAAAGAAGTAAATTACGGTAATAAATACACTTCAAACA
AATAAAGGAAGTCGGTCAAAAGTAAGAGTTTCAGATCGTATATTAATTACTGTTGATATAAAATTAATTGCTCCTAA
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>Uniq516;size=121;

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