

The following appendix accompanies the article

Microbial community composition of black band disease on the coral host *Siderastrea siderea* from three regions of the wider Caribbean

Raju Sekar*, Longin T. Kaczmarsky, Laurie L. Richardson

Department of Biological Sciences, Florida International University, Miami, Florida 33199, USA

Email: rajusekar@yahoo.com

Marine Ecology Progress Series 362:85–98 (2008)

Appendix 1. Overview of 16S rRNA gene sequences from clone libraries produced from black band diseased (BBD) *Sidereum siderea* at various reef sites. Clone Libraries A, B; Horseshoe Reef, Bahamas; C: Rainbow Garden Reef, Bahamas; D: Watson's Reef, Florida Keys; E, G: Butler Bay, St. Croix; F: Frederiksted, St. Croix. Some of the sequences (48) from Clone Library A and all the sequences (47) from Clone Library B have been previously published as BBD216 and BBD217, respectively (Sekar et al. 2006). Sequences associated with toxin producing bacteria are indicated (see footnotes)

Accession numbers	Libraries (N similar clones)	Sequence length (bp)	Closest relative (accession number) in GenBank database	Similarity (%)	Phylogenetic affiliation
EF123366-76, EF123341, EF123345, EF123347-352	C(11), E(2), G(6)	539-1429	<i>Roseicyclus mahoneyensis</i> (AJ315682)	96-97	<i>Rhodobacterales, Alphaproteobacteria</i>
DQ446094-101, DQ446151, EF123381-382, 385, 386-389	A(10), B(1), C(1), E(1), F(1), G(2)	630-1425	<i>Roseobacter</i> sp. 8-1 (AJ536670), <i>Roseobacter</i> sp. DSS-8 (AF098493)	96-97	<i>Rhodobacterales, Alphaproteobacteria</i>
DQ446103-108, DQ446154-155	A(8), B(2), C(1), E(2), G(2)	417-1430	<i>Roseovarius crassostreae</i> CV919-312 (AF114484) ^a	94-97	<i>Rhodobacterales, Alphaproteobacteria</i>
EF123390-396					
DQ446110, DQ446172, EF123417, 420, 425-431	A(2), B(1), C(1), F(7), G(1)	475-1429	<i>Thalassobius mediterraneus</i> (AJ878874)	94-99	<i>Rhodobacterales, Alphaproteobacteria</i>
DQ644008-15, EF123307-10	A(1), C(1), D(1), F(7), G(2)	556-1432	<i>Alphaproteobacterium C116-18</i> (AJ294357) ^b	98-99	<i>Alphaproteobacteria</i>
EF123443-452, EF123459	D(6), G(5)	729-860	<i>Rhodobium</i> sp. (AY588950)	89-90	<i>Rhizobiales, Alphaproteobacteria</i>
DQ446092-93, DQ446135-143, EF123441	A(2), B(8), G(1)	651-1450	<i>Ochrobactrum</i> sp. (AF028733; AY331580)	91-92	<i>Rhizobiales, Alphaproteobacteria</i>
DQ446109, DQ446158-62, EF123408-411	A(1), B(5), C(1), E(1), F(2)	586-1428	<i>Silicibacter</i> sp. E923 (AY369990), <i>Silicibacter</i> sp. JC1077 (AF201086)	97-99	<i>Rhodobacterales, Alphaproteobacteria</i>
EF123291, EF123294-300, EF123320	D(5), E(1), F(2), G(1)	595-828	<i>Alphaproteobacterium</i> (AJ6333975, AJ6333977, 968)	96-99	<i>Alphaproteobacteria</i>
DQ644016, EF123418, DQ446171, DQ446145-50	A(2), B(7)	671-1427	<i>Rhodobacteraceae</i> bacterium (DQ234106; DQ234107)	96-97	<i>Rhodobacterales, Alphaproteobacteria</i>
EF123359-63, DQ446169, EF123423, EF123364-65	A(5), B(1), C(1), G(2)	619-1436	<i>Pelagibacca bermudensis</i> (DQ178660)	95-97	<i>Rhodobacterales, Alphaproteobacteria</i>
EF123453-457	A(4), B(4), E(1)	44-1450	<i>Sinorhizobium</i> sp. (AJ012211, AJ012210)	94-96	<i>Rhizobiales, Alphaproteobacteria</i>
DQ446134, DQ44664-665					
EF123339-40, EF123398-403	C(8)	593-1430	<i>Roseovarius tolerans</i> (Y11551)	95-96	<i>Rhodobacterales, Alphaproteobacteria</i>
DQ446166-168, DQ446170, EF123419, 421, 422, 424	B(4), C(4)	591-1425	<i>Sulfitobacter pontiacus</i> (Y13155), <i>Sulfitobacter</i> sp. (AY575043)	95-96	<i>Rhodobacterales, Alphaproteobacteria</i>
EF123321-27	D(6), G(1)	567-1462	<i>Rhodospirillaceae</i> bacterium (DQ401091), <i>Magnetospirillum</i> sp. CF21 (AJ863154; 51)	89-90	<i>Rhodospirillales, Alphaproteobacteria</i>
EF123302-306	F(1), G(5)	635-690	<i>Alphaproteobacterium ML42</i> (AJ315683)	96-97	<i>Alphaproteobacteria</i>
EF123333-335, 337, 407, 433	A(3), D(1), G(2)	702-1434	<i>Rhodobacteraceae</i> bacterium CL-TA03 (AY962292)	95-96	<i>Rhodobacterales, Alphaproteobacteria</i>
DQ446087-88, DQ644005-07	A(3), D(1), E(1)	425-1449	<i>Alphaproteobacterium PTB1</i> (AF260726) ^b	94-97	<i>Alphaproteobacteria</i>
EF123507-510, EF123513	D(3), E(1), F(1)	660-1492	<i>Desulfovibrionales, Delta proteobacteria</i>	89-96	
EF123551-555	C(4), D(1)	573-1495	Symbiont cf. <i>Flavobacterium</i> of <i>Tetraponera binghami</i> (AF459795)	98-99	<i>Flavobacteriales, Bacteroides</i>
EF123329-32	A(2), E(1), F(1)	528-1431	<i>Rhodobacteraceae</i> bacterium	95-96	<i>Rhodobacterales, Alphaproteobacteria</i>

Appendix 1. (continued)

Accession numbers	Libraries (N similar clones)	Sequence length (bp)	Closest relative (accession number) in GenBank database	Similarity (%)	Phylogenetic affiliation
EF123313-16	G(4)	616-706	Alphaproteobacterium endosymbiont 1a of <i>Inanidrilus leukodermatus</i> (AJ890099)	91-92	Alphaproteobacteria
EF123342-44, EF123346	E(3), F(1)	431-1429	Rhodobacteraceae bacterium (AF513935, 932)	95-96	Rhodobacterales, Alphaproteobacteria
DQ446090, EF123377-79	A(3), E(1)	504-707	<i>Roseivirax</i> sp. NT N51 (AB166939)	93-97	Rhodobacterales, Alphaproteobacteria
EF123437-440	C(3), F(1)	589-1451	<i>Ochrobactrum</i> sp. (AY662685), <i>Brucella</i> sp. (DQ305288)	91-92	Rhizobiales, Alphaproteobacteria
EF123383-384, 397, 404	A(3), D(1)	633-1441	<i>Roseobacter</i> sp. (DQ120726)	96-98	Rhodobacterales, Alphaproteobacteria
DQ446113-115	A(3), D(1)	538-1481	<i>Desulfobacteraceae</i> bacterium (AJ582696)	92-93	Desullobacterales, Delta proteobacteria
EF123495-498	C(4)	620-1550	<i>Desulfovibrio baarsii</i> (AF418174)	92-94	Desulfovibrionales, Delta proteobacteria
EF123499-502, EF123505	D(2), E(2)	764-1515	<i>Desulfovibrio halophilus</i> (X99237)	90-91	Desulfovibrionales, Delta proteobacteria
DQ446152, DQ644017-18	B(1), C(1), G(1)	667-1426	<i>Roseobacter</i> sp. 667-19 (AJ294355) ^b	96	Rhodobacterales, Alphaproteobacteria
EF123405, EF123412-413	D(3)	572-1426	<i>Silicibacter pomeroyi</i> (AF098491)	97	Rhodobacterales, Alphaproteobacteria
EF123417-419	A(2), G(1)	572-1426	<i>Stappia alba</i> (AJ889010)	95-98	Rhodobacterales, Alphaproteobacteria
EF123477-479	G(3)	1474-1488	<i>Beggiatoa</i> sp. 'Bay of Concepcion' (AF035956)	90	Thiotrichales, Gammaproteobacteria
EF123511, 506, 514	D(1), F(1), G(1)	590-1503	<i>Desulfovibrio</i> sp. (AF228128; AF228127)	89-96	Desulfovibrionales, Delta proteobacteria
DQ446118, EF123532-533	A(1), E(1), G(1)	708-1495	<i>Clostridium subatlanticum</i> (AF458779)	96	Clostridiales, Firmicutes
DQ446174, EF123560-561	B(1), C(1), F(1)	544-1484	<i>Flexibacter aggregans</i> (AB078038)	94-95	Sphingobacterales, Bacteroidetes
EF123565-567	D(1), G(2)	615-815	<i>Denitrovibrio acetiphilus</i> (AF146526)	93	Deferribacteres
EF123502, EF123515-516	E(2), F(1)	604-633	<i>Desulfovibrio zosterae</i> (Y18049)	94-97	Desulfovibrionales, Delta proteobacteria
EF123520-522	G(3)	606-711	<i>Epsilonproteobacterium</i> (AY038516)	98	Epsilonproteobacteria
EF123579-581	A(2), D(1)	1448-1451	<i>Synechococcus</i> sp. Dim (AY172803)	99	Cyanobacteria
DQ446084 , EF123311	A(1), F(1)	1415, 1425	Alphaproteobacterium (AY701434) ^b	98	Alphaproteobacteria
DQ446085-86	A(2)	701, 695	Alphaproteobacterium (AF473915)	96	Alphaproteobacteria
DQ446157, DQ446144	B(2)	1451, 668	<i>Rhodobacteraceae</i> bacterium (DQ005874)	98	Rhodobacterales, Alphaproteobacteria
EF123356-57	C(1), G(1)	1417, 1430	<i>Jannaschia</i> sp. (AJ534220; AJ534218) ^b	97	Rhodobacterales, Alphaproteobacteria
DQ446102, DQ446156	A(1), B(1)	680, 1430	<i>Roseovarius nubinibens</i> ISM (AF098495)	97	Rhodobacterales, Alphaproteobacteria
EF123406, EF123336	D(1), F(1)	1425, 1426	<i>Ruegeria</i> sp. AS-36 (AJ391197)	98	Rhodobacterales, Alphaproteobacteria
DQ446111, EF123462	A(1), E(1),	681, 604	Gammaproteobacterium KTC1119 (AF235120)	94, 97	Gammaproteobacteria
EF123465-66	A(1), G(1)	1498, 699	Gammaproteobacterium (U70696)	96	Gammaproteobacteria
EF123467-68	E(2)	1502, 565	Gammaproteobacterium (DQ351759)	94, 97	Gammaproteobacteria
EF123485-486	A(1), E(1)	1426, 482	<i>Vibrio</i> sp. V261 (DQ146982)	98	Vibrionales, Gammaproteobacteria
EF123487-488	D(2)	1517, 602	<i>Vibrio</i> sp. V794 (DQ146993)	99, 98	Vibrionales, Gammaproteobacteria
EF123504, EF123512	D(1), F(1)	775, 689	<i>Desulfovibrio</i> sp. (X95230)	89-96	Desulfovibrionales, Delta proteobacteria
EF123527-528	C(1), G(1)	1493, 703	Uncultured firmicute (AF441880)	97, 98	Firmicutes

Appendix 1. (continued)

Accession numbers	Libraries (N similar clones)	Sequence length (bp)	Closest relative (accession number) in GenBank database	Similarity (%)	Phylogenetic affiliation
EF123530-531	A(1), F(1)	527, 669	<i>Clostridium straminisolvens</i> (AB125279)	92	<i>Clostridiales</i>
DQ446120, EF123534	A(1), D(1)	1447, 1483	<i>Fusibacter</i> sp. (AB189368)	91	<i>Clostridiales</i>
EF123542-543	F(2)	563, 587	<i>Bacteroidetes</i> bacterium (AY822216)	95, 96	<i>Bacteroidetes</i>
EF123545-546	F(2)	712, 659	<i>Bacteroidetes</i> bacterium (AY348722)	99	<i>Bacteroidetes</i>
EF123563-564	C(2)	1482, 589	Candidate division SR1 bacterium (AY193173)	89	Candidate division SR1
DQ446126-127	A(2)	1465, 1469	<i>Lyngbya hieronymusii</i> var <i>hieronymusii</i> (AB045906)	91	<i>Cyanobacteria</i>
EF123282	A(1)	1442	Marine bacterium SCRIPPS_423 (AF359547)	96	<i>Bacteria</i>
EF123283	E(1)	592	Uncultured bacterium (AB120831)	92	<i>Bacteria</i>
DQ446131	B(1)	1429	Uncultured bacterium (AY354160)	93	<i>Bacteria</i>
EF123284	E(1)	594	Uncultured bacterium (AY654387)	89	<i>Bacteria</i>
EF123285	F(1)	689	Uncultured bacterium (AF424322)	96	<i>Bacteria</i>
EF123286	F(1)	687	Uncultured bacterium (DQ228575)	95	<i>Bacteria</i>
EF123287	F(1)	608	<i>Alphaproteobacteria</i> (AY712297)	95	<i>Alphaproteobacteria</i>
DQ446132	B(1)	679	<i>Alphaproteobacterium</i> (AY701455) ^b	97	<i>Alphaproteobacteria</i>
EF123288	C(1)	620	<i>Alphaproteobacterium</i> (AB089097)	89	<i>Alphaproteobacteria</i>
EF123290	C(1)	614	<i>Alphaproteobacterium</i> (AB026194)	99	<i>Alphaproteobacteria</i>
EF123289	C(1)	614	<i>Alphaproteobacterium</i> (AY822189)	91	<i>Alphaproteobacteria</i>
EF123292	D(1)	557	<i>Alphaproteobacterium</i> (AY499668)	96	<i>Alphaproteobacteria</i>
EF123293	D(1)	825	<i>Alphaproteobacterium</i> (AY711168)	91	<i>Alphaproteobacteria</i>
DQ446089	A(1)	685	<i>Alphaproteobacterium</i> (DQ200416)	92	<i>Alphaproteobacteria</i>
EF123319	F(1)	568	<i>Alphaproteobacterium</i> J487 (AY369982)	95	<i>Alphaproteobacteria</i>
EF123317	F(1)	593	<i>Alphaproteobacterium</i> (DQ200432)	96	<i>Alphaproteobacteria</i>
EF123318	F(1)	653	<i>Alphaproteobacterium</i> (AF473929)	97	<i>Alphaproteobacteria</i>
EF123312	F(1)	1455	<i>Alphaproteobacterium endosymbiont 2</i> of <i>Inanidrilus leuksdermatus</i> (A:1890097)	96	<i>Alphaproteobacteria</i>
EF123328	G(1)	681	<i>Rhodovibrio</i> sp. 2Mb1 (AY987846)	94	<i>Rhodospirillales, Alphaproteobacteria</i>
EF123338	F(1)	583	<i>Rhodobacteraceae</i> bacterium (AB180391)	98	<i>Rhodobacterales, Alphaproteobacteria</i>
EF123354	F(1)	701	<i>Ahrensiakielensis</i> (AY771772)	97	<i>Rhodobacterales, Alphaproteobacteria</i>
EF123353	F(1)	697	<i>Amaricoccus macauensis</i> (U88042)	94	<i>Rhodobacterales, Alphaproteobacteria</i>
EF123355	A(1)	1415	<i>Hyphomonas oceanitis</i> (AF082797)	96	<i>Rhodobacterales, Alphaproteobacteria</i>
DQ446133	B(1)	1433	<i>Oceanicoccus alexandrii</i> (AJ309862)	98	<i>Rhodobacterales, Alphaproteobacteria</i>
EF123358	F(1)	1427	<i>Parvularcula bermudensis</i> (AF544016)	94	<i>Rhodobacterales, Alphaproteobacteria</i>
EF123380	A(1)	695	<i>Roseobacter</i> sp. (AY663966)	97	<i>Rhodobacterales, Alphaproteobacteria</i>
DQ446153	B(1)	1425	<i>Roseobacter NAC1-19</i> (AF245628)	95	<i>Rhodobacterales, Alphaproteobacteria</i>

Appendix 1. (continued)

Accession numbers	Libraries (N similar clones)	Sequence length (bp)	Closest relative (accession number) in GenBank database	Similarity (%)	Phylogenetic affiliation
EF123434	D(1)	730	<i>Brucella melitensis</i> (AY594216)	90	<i>Rhizobiales, Alphaproteobacteria</i>
EF123435	F(1)	641	<i>Erythrobacter aquimaris</i> (AY461443)	99	<i>Rhizobiales, Alphaproteobacteria</i>
EF123436	A(1)	665	<i>Hyphomicrobiaceae bacterium</i> (AY711104)	97	<i>Rhizobiales , Alphaproteobacteria</i>
DQ446091	A(1)	670	<i>Hyphomicrobium</i> sp. (AY499905)	95	<i>Rhizobiales, Alphaproteobacteria</i>
DQ446138	B(1)	1451	<i>Ochrobactrum</i> sp. (DQ989292;AY623625)	95	<i>Rhizobiales, Alphaproteobacteria</i>
EF123442	A(1)	660	<i>Phyllobacteriaceae</i> bacterium (AY711355)	96	<i>Rhizobiales, Alphaproteobacteria</i>
EF123458	F(1)	460	<i>Sinorhizobium</i> sp. (AY505141; AY505138)	96	<i>Rhizobiales, Alphaproteobacteria</i>
EF123460	G(1)	713	<i>Delftia acidovorans</i> (AB074256)	99	<i>Betaproteobacteria</i>
EF123463	E(1)	630	<i>Gammaproteobacterium</i> (AF369720)	97	<i>Delta proteobacteria</i>
EF123464	F(1)	701	<i>Gammaproteobacterium</i> (AY580744)	94	<i>Gammaproteobacteria</i>
EF123469	E(1)	455	<i>Gammaproteobacterium</i> (AF24066)	97	<i>Gammaproteobacteria</i>
EF123470	G(1)	689	<i>Gammaproteobacterium</i> (AY499942);	97	<i>Gammaproteobacteria</i>
EF123471	F(1)	612	<i>Gammaproteobacterium</i> (DQ351796)	97	<i>Gammaproteobacteria</i>
EF123472	F(1)	670	<i>Gammaproteobacterium</i> (AY343861)	97	<i>Gammaproteobacteria</i>
EF123473	F(1)	620	<i>Gammaproteobacterium</i> (DQ200552)	93	<i>Gammaproteobacteria</i>
EF123474	F(1)	603	<i>Gammaproteobacterium</i> (AY499948)	99	<i>Gammaproteobacteria</i>
EF123461	D(1)	1466	<i>Congregibacter litoralis</i> (AY00776)	96	<i>Gammaproteobacteria</i>
EF123475	E(1)	580	<i>Chromatiales bacterium</i> (AY711463)	99	<i>Chromatiales, Gammaproteobacteria</i>
EF123476	G(1)	639	<i>Stenotrophomonas</i> sp. AHL 1 (AY379973)	99	<i>Xanthomonadales, Gammaproteobacteria</i>
EF123480	E(1)	619	<i>Oceanospirillaceae</i> bacterium (DQ421584)	90	<i>Oceanospirillales, Gammaproteobacteria</i>
EF123481	F(1)	616	<i>Oceanospirillum</i> sp. MED92 (AY136116)	96	<i>Oceanospirillales, Gammaproteobacteria</i>
EF123482	G(1)	670	<i>Halomonas meridiana</i> (AJ306891; AJ306888)	99	<i>Oceanospirillales, Gammaproteobacteria</i>
EF123483	G(1)	593	<i>Pseudomonas</i> sp. (DQ219372; DQ200851)	99	<i>Pseudomonadales, Gammaproteobacteria</i>
EF123484	A(1)	712	<i>Alteromonas hispanica</i> (AY926460)	96	<i>Alteromonadales, Gammaproteobacteria</i>
DQ446112	A(1)	1428	<i>Ferrimonas marina</i> (AB193751)	97	<i>Alteromonadales, Gammaproteobacteria</i>
EF123489	D(1)	1524	<i>Delta proteobacterium</i> (AB121098)	94	<i>Delta proteobacteria</i>
EF123490	E(1)	561	<i>Delta proteobacterium</i> (DQ200599)	97	<i>Delta proteobacteria</i>
EF123491	E(1)	640	<i>Delta proteobacterium</i> (DQ394898)	97	<i>Delta proteobacteria</i>
EF123492	F(1)	1484	<i>Delta proteobacterium</i> (AY678523)	92	<i>Delta proteobacteria</i>
EF123493	F(1)	709	<i>Delta proteobacterium</i> (AY499989)	96	<i>Delta proteobacteria</i>
EF123494	F(1)	685	<i>Delta proteobacterium</i> (AJ704676)	94	<i>Delta proteobacteria, Delta proteobacteria</i>
EF123503	D(1)	562	<i>Desulfovibrio profundus</i> (IJ90726)	89	<i>Desulfobacterales,</i>
EF123518	D(1)	581	<i>Epsilonproteobacterium</i> (AY038436)	98	<i>Epsilonproteobacteria</i>
EF123519	E(1)	580	<i>Epsilonproteobacterium</i> (AF468737)	95	<i>Epsilonproteobacteria</i>

Appendix 1. (continued)

Accession numbers	Libraries (N similar clones)	Sequence length (bp)	Closest relative (accession number) in GenBank database	Similarity (%)	Phylogenetic affiliation
EF123523	A(1)	688	Low G+C Gram-positive bacterium (AJ241007)	92	<i>Firmicutes</i>
EF123526	F(1)	580	Low G+C Gram-positive bacterium (AJ969455)	91	<i>Firmicutes</i>
EF123525	D(1)	799	<i>Anaerovorax odorifumans</i> (AJ251215)	92	<i>Clostridiales, Firmicutes</i>
EF123524	A(1)	710	<i>Clostridium</i> sp. (AY548783)	90	<i>Clostridiales, Firmicutes</i>
EF123529	A(1)	661	<i>Clostridium disporicum</i> (CDI18176)	97	<i>Clostridiales, Firmicutes</i>
DQ446119	A(1)	659	<i>Desulfobacter alkalitolerans</i> (AY538171)	90	<i>Clostridiales, Firmicutes</i>
EF123535	C(1)	1514	<i>Ruminococcus</i> sp. 5 (AJ315982)	89	<i>Clostridiales</i>
EF123536	A(1)	662	Uncultured spirochete (AY711111)	92	<i>Spirochaetes</i>
DQ446116	A(1)	1442	<i>Leptotilina illini</i> (AY714984)	89	<i>Spirochaetes</i>
DQ446117	A(1)	1471	<i>Leptotilina illini</i> (M88719)	85	<i>Spirochaetes</i>
EF123537	C(1)	1488	<i>Bacteroidetes</i> bacterium JS5 (AY372916)	94	<i>Bacteroidetes</i>
EF123538	D(1)	1456	<i>Bacteroidetes</i> bacterium (DQ351801)	87	<i>Bacteroidetes</i>
EF123539	E(1)	1494	<i>Bacteroidetes</i> bacterium (AJ441221)	92	<i>Bacteroidetes</i>
EF123540	E(1)	1488	<i>Bacteroidetes</i> bacterium (AF449260)	89	<i>Bacteroidetes</i>
EF123541	E(1)	558	<i>Bacteroidetes</i> bacterium (DQ395008)	97	<i>Bacteroidetes</i>
DQ644019	F(1)	655	<i>Bacteroidetes</i> bacterium (AY701462) ^b	98	<i>Bacteroidetes</i>
EF123544	F(1)	696	<i>Bacteroidetes</i> bacterium (DQ330315)	96	<i>Bacteroidetes</i>
EF123547	F(1)	642	<i>Bacteroidetes</i> bacterium (AY711066)	96	<i>Bacteroidetes</i>
EF123548	D(1)	813	<i>Candidatus Cardinium hertigii</i> (AY599768)	89	<i>Bacteroidetes</i>
EF123549	E(1)	564	<i>Croceibacter atlanticus</i> (AY163576)	93	<i>Flavobacterales, Bacteroidetes</i>
EF123550	A(1)	1490	<i>Nonlabens tegetincola</i> (AY987349)	99	<i>Flavobacterales, Bacteroidetes</i>
EF123551	B(1)	1465	<i>Adhaeribacter aquaticus</i> (AJ626894)	88	<i>Sphingobacterales, Bacteroidetes</i>
DQ446173	G(1)	667	<i>Cytophaga</i> bacterium (AY038396)	97	<i>Sphingobacterales, Bacteroidetes</i>
EF123556	A(1)	1489	<i>Cytophaga</i> sp. (AB015260)	94	<i>Sphingobacterales, Bacteroidetes</i>
EF123557	D(1)	1480	<i>Cytophaga</i> sp. (AB017048)	96	<i>Sphingobacterales, Bacteroidetes</i>
EF123558	E(1)	538	<i>Cytophaga</i> sp. (AB189358)	91	<i>Sphingobacterales, Bacteroidetes</i>
EF123559	B(1)	665	<i>Flexibacter tractuosus</i> (AB078076)	91	<i>Sphingobacterales, Bacteroidetes</i>
EF123562	A(1)	671	<i>Hongiella</i> sp. (AY576756)	87	<i>Sphingobacterales, Bacteroidetes</i>
EF123568	F(1)	690	Uncultured actinomycete (AB015539)	96	<i>Actinobacteria</i>
DQ446122	A(1)	707	<i>Verrucomicrobia</i> bacterium (AY499794)	93	<i>Verrucomicrobia</i>
DQ446123	A(1)	1479	<i>Verrucomicrobia</i> bacterium (AY028220)	96	<i>Verrucomicrobia</i>
DQ446124	A(1)	674	<i>Verrucomicrobia</i> bacterium (AY500056)	92	<i>Verrucomicrobia</i>
DQ446125	A(1)	664	<i>Verrucomicrobia</i> Sva0821 (AJ297461)	87	<i>Verrucomicrobia</i>
DQ446176	B(1)	665	<i>Verrucomicrobia</i> bacterium (AF424507)	89	<i>Verrucomicrobia</i>

Appendix 1. (continued)

Accession numbers	Libraries (N similar clones)	Sequence length (bp)	Closest relative (accession number) in GenBank database	Similarity (%)	Phylogenetic affiliation
EF123569	D(1)	584	<i>Verrucomicrobia</i> bacterium (DQ302113)	96	<i>Verrucomicrobia</i>
EF123570	G(1)	664	<i>Verrucomicrobia</i> bacterium (DQ351768)	96	<i>Verrucomicrobia</i>
EF123571	E(1)	595	<i>Verrucomicrobia</i> bacterium (AY222315)	94	<i>Verrucomicrobia</i>
EF123572	F(1)	609	<i>Verrucomicrobia</i> bacterium (DQ302114)	91	<i>Verrucomicrobia</i>
DQ446121	A(1)	1506	<i>Fucophilus fucoidanolyticus</i> (AB073978)	90	<i>Verrucomicrobia</i>
EF123573	E(1)	699	Planctomycete (AB231079)	94	<i>Planctomycetes</i>
EF123574	E(1)	1492	Planctomycete (AY225652)	92	<i>Planctomycetes</i>
EF123575	G(1)	712	Planctomycete (AY921761)	84	<i>Planctomycetes</i>
EF123576	G(1)	656	Planctomycete (AB116406)	93	<i>Planctomycetes</i>
EF123577	F(1)	655	Planctomycete (AY534068)	98	<i>Planctomycetes</i>
DQ446128	A(1)	718	Uncultured cyanobacterium (AF473911)	93	<i>Cyanobacteria</i>
EF123578	E(1)	540	Uncultured cyanobacterium (DG200596)	99	<i>Cyanobacteria</i>
DQ644020	D(1)	1456	Uncultured cyanobacterium LR-3L (AF474001) ^c	98	<i>Cyanobacteria</i>
EF123582	G(1)	605	<i>Geitlerinema</i> sp. PCC 7105 (AB039010)	97	<i>Cyanobacteria</i>
DQ446129-130	A(2)	704, 658	<i>Synechococcus</i> sp. PCC 7001 (AB015058)	97	<i>Cyanobacteria</i>
DQ446177	B(1)	677	Uncultured <i>Coscinodiscophyceae</i> (AY038449)	97	Eukaryota
			Uncultured prasinophyte (AY038432)	89	Eukaryota

^aBacterium associated with juvenile oyster disease (JOD)^bBacterium associated with toxic dinoflagellates^cCyanobacterium associated with toxin