

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees.

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
1	39,097	MP	(18,(17,((15,(13,14)),(16,((5,(4,((1,3),(2,0))))),(12,(10,11)),(6,(8,(7,9))))))));
		ML	(18,(17,((16,(14,15)),(12,((4,(13,(0,(2,(1,3))))),(9,(10,11)),(5,(8,(6,7))))))));
2	11,285	MP	(18,(17,((16,(14,15)),((11,(9,10)),(8,((7,(6,(4,5))),(13,(12,((1,3),(2,0))))))));
		ML	(18,((17,(16,(14,15))),(12,(4,((13,(0,(2,(1,3))))),(10,(9,11)),(5,(6,(7,8))))));
3	13,886	MP	(18,(17,((16,(14,15)),((11,(9,10)),(8,((7,(4,(5,6))),(13,(12,((1,3),(2,0))))))));
		ML	(18,(17,((12,(16,(14,15))),((11,(9,10)),(5,((7,(6,8))),(4,(13,(0,(2,(1,3))))))));
4	1,030	MP	(18,(17,((16,(14,15)),((11,(9,10)),(8,((7,(4,(5,6))),(13,(12,((1,3),(2,0))))))));
		ML	(18,(3,2,1,(0,(13,(4,((11,10,9)),(5,(6,(7,8))),(12,(17,(16,(14,15))))))));
5	4,129	MP	(18,((17,(16,(14,15))),(13,(12,((2,3),(1,0)),(4,((11,(9,10)),(8,(6,(5,7))))))));
		ML	(18,(12,((9,(10,11)),(5,(6,(7,8))),((4,(17,(16,(14,15))),(13,(0,(3,2,1))))));
6	3,801	MP	(18,((14,(12,13)),(16,((15,(4,(0,(3,(1,2))))),(17,((11,(9,10)),(5,(8,(6,7))))))));
		MP	(18,((14,(12,13)),(16,((15,(4,(0,(3,(1,2))))),(17,((9,(10,11)),(5,(8,(6,7))))))));
		ML	(18,((16,(14,15)),(17,(12,((8,(5,(6,7))),((9,(10,11)),(4,(13,(1,0,3,2))))))));
7	7,936	MP	(18,((0,(1,(2,3))),(4,(13,((12,(17,(16,(14,15))),((10,(9,11)),(8,(6,(5,7))))))));
		MP	(18,((17,(16,(14,15))),(13,((0,1,2,3),(4,(12,((11,(9,10)),(8,(5,(6,7))))))));
		ML	(18,((0,(2,(1,3))),(4,(13,((10,(9,11)),(8,(5,(6,7))),(12,(17,(16,(14,15))))))));
8	12,328	MP	(18,((16,(14,15)),(17,(13,((5,(4,(2,(1,(3,0))))),(10,(11,12)),(9,(8,(6,7))))))));
		ML	(18,((9,(10,11)),((6,(5,(7,8))),(12,((17,(16,(14,15))),(4,(13,(0,3,1,2))))))));
9	7,326	MP	(18,((16,(14,15)),(17,(13,((5,(4,(2,(1,(3,0))))),(10,(11,12)),(9,(6,(7,8))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,2,3,1))),(12,((10,(9,11)),(5,(6,(7,8))))))));
10	40,528	MP	(18,(17,((16,(14,15)),((12,13),(2,3),(1,0)),(11,(7,((4,(5,6)),(9,(8,10))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,(2,(1,3))))),(9,(10,11)),(12,(8,(6,(5,7))))))));
11	7,444	MP	(18,((17,(16,(14,15))),((2,(3,(1,0))),(12,(13,(11,(7,((4,(5,6)),(9,(8,10))))))));
		MP	(18,(17,((16,(14,15)),(11,(13,(6,(5,7))))),(4,(10,(8,9))),(12,(2,(1,(3,0))))));
		ML	(18,(17,((16,(14,15)),(12,((4,(13,(0,(3,1,2))))),(11,(9,10)),(7,8),(5,6))))));
12	1,325	MP	(18,(17,((16,(14,15)),(11,(13,(7,(5,6))))),(4,(10,(8,9))),(12,(2,(1,(3,0))))));
		ML	(18,(17,((16,(14,15)),(12,((5,(7,(6,8))),((10,(9,11)),(4,(13,(2,3,0,1))))))));
13	6,619	MP	(18,(17,((16,(14,15)),(11,(13,((12,(3,(2,(1,0))))),(10,(8,9)),(7,(4,(5,6))))))));
		ML	(18,(17,((16,(14,15)),(12,((4,(13,(0,2,(1,3))))),(10,(9,11)),(5,(7,(6,8))))))));
14	6,341	MP	(18,(17,((16,(14,15)),(11,(13,((12,(3,(2,(1,0))))),(10,(8,9)),(4,(6,(5,7))))))));
		ML	(18,((17,(16,(14,15))),(12,((4,(13,(3,1,(0,2))))),(11,(9,10)),(5,(7,(6,8))))));
15	4,806	MP	(18,((16,(14,15)),(17,((8,(9,10)),(7,(4,(5,6))),(11,(12,(13,(0,(3,(1,2))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(2,3,0,1))),(12,((10,(9,11)),(5,(8,(6,7))))))));
16	4,942	MP	(18,((16,(14,15)),(17,((8,(9,10)),(4,(7,(5,6))),(11,(12,(13,(0,(3,(1,2))))))));
		ML	(18,((17,(16,(14,15))),(12,((4,(13,(1,3,(0,2))))),(9,(10,11)),(5,(8,(6,7))))));
17	7,302	MP	(18,(6,((1,(3,(2,0))),(12,(17,((4,16)),(5,(7,8)),(10,(9,11)),(15,(13,14))))));
		ML	(18,(17,((16,(14,15)),(12,((4,(13,(1,0,2,3))),((11,(9,10)),(5,(8,(6,7))))))));
18	4,390	MP	(18,(6,((1,(3,(2,0))),(12,(17,((4,16)),(5,(7,8)),(11,(9,10)),(15,(13,14))))));

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
19	15,459	ML	(18,(13,((4,(0,2,1,3)),(12,((17,(16,(14,15))),((10,(9,11)),(5,(8,(6,7)))))))));
		MP	(18,((14,(17,(15,16))),(13,((12,(4,((2,3),(1,0))),((11,(9,10)),(5,(7,(6,8)))))))));
20	12,293	ML	(18,((17,(16,(14,15))),(12,((4,(13,(0,(2,1,3))),((11,(9,10)),(5,(8,(6,7)))))))));
		MP	(18,(5,(10,((17,(16,(14,15))),((4,(0,(1,(2,3))),((12,(11,13)),(6,(7,(8,9)))))))));
21	19,929	ML	(18,(17,((13,(4,(0,2,3,1))),((11,(9,10)),(8,(6,7)),(5,(12,(16,(14,15)))))))));
		MP	(18,(5,(10,((17,(16,(14,15))),((4,(0,(1,(2,3))),((11,(12,13)),(6,(7,(8,9)))))))));
22	33,541	ML	(18,((13,(0,(3,2,1))),(4,((17,(16,(14,15))),((11,(9,10)),(12,(8,(5,(6,7)))))))));
		MP	(18,(13,((17,(16,(14,15))),(4,(9,((3,(0,(1,2))),((12,(10,11)),(8,(7,(5,6)))))))));
23	151,773	ML	(18,(4,(13,(0,(2,3,1))),((12,(17,(16,(14,15))),((9,(10,11)),(8,(5,(6,7)))))))));
		MP	(18,(13,((17,(16,(14,15))),(4,((3,(0,(1,2))),(9,((12,(10,11)),(8,(7,(5,6)))))))));
24	5,189	ML	(18,((17,(16,(14,15))),(12,((5,(6,(7,8))),((10,(9,11)),(4,(13,(0,(2,3,1)))))))));
		MP	(18,(17,((16,(14,15))),(13,((5,(4,((2,3),(1,0))),((10,(11,12)),(9,(6,(7,8)))))))));
25	6,526	ML	(18,(17,((16,(14,15))),((9,(10,11)),((12,(5,(8,(6,7))),(4,(13,(0,(1,2,3)))))))));
		MP	(18,(15,(14,(16,(17,((13,(12,(0,(2,(1,3))))),((7,(4,(5,6))),(11,(8,(9,10)))))))));
26	42,063	ML	(18,(17,((16,(14,15)),(12,((4,(13,(0,(3,1,2))),((10,(9,11)),(5,(8,(6,7)))))))));
		MP	(18,(15,(14,(16,(17,((13,(12,(0,(2,(1,3))))),((7,(4,(5,6))),(11,(10,(8,9)))))))));
27	11,968	ML	(18,(17,((16,(14,15))),((4,(0,(1,(2,3))),(13,((11,(9,10)),(12,(8,(5,(6,7)))))))));
		MP	(18,((17,(16,(14,15))),((4,(0,(1,(2,3))),(13,((11,(9,10)),(12,(8,(5,(6,7)))))))));
28	15,438	ML	(18,(17,((16,(14,15)),(12,((4,(13,(0,(1,2,3))),((9,(10,11)),(8,(7,(5,6)))))))));
		MP	(18,(5,((17,(16,(14,15))),((4,(1,(0,(2,3))),(13,((12,(10,11)),(9,(6,(7,8)))))))));
29	6,474	ML	(18,((16,(14,15)),(17,(12,((5,(8,(6,7))),((9,(10,11)),(4,(13,(0,(2,3,1)))))))));
		MP	(18,(5,((17,(16,(14,15))),((4,(2,(3,(1,0))),(13,((12,(10,11)),(9,(6,(7,8)))))))));
30	9,101	ML	(18,(17,((16,(14,15))),((4,(13,(0,(3,2,1))),((9,(10,11)),(12,(8,(5,(6,7)))))))));
		MP	(18,(5,((17,(16,(14,15))),((4,((2,3),(1,0))),(13,((12,(10,11)),(9,(6,(7,8)))))))));
31	3,546	ML	(18,(17,((16,(14,15))),((4,(13,(0,(3,2,1))),(12,((10,(9,11)),(5,(8,(6,7)))))))));
		MP	(18,(17,((15,(13,14))),((5,(4,(3,(1,(2,0))),(6,((12,(10,11)),(16,(9,(7,8)))))))));
32	6,854	ML	(18,(17,((15,(13,14))),((4,(5,(3,(1,(2,0))),(6,((12,(10,11)),(16,(9,(7,8)))))))));
		MP	(18,((16,(14,15)),(17,((4,(13,(0,(3,2,1))),(12,((9,(10,11)),(5,(8,(6,7)))))))));
33	2,118	ML	(18,(17,((16,(14,15)),(12,((13,(4,(2,(1,(3,0))),((9,(10,11)),(5,(8,(6,7)))))))));
		MP	(18,(17,((16,(14,15)),(12,((4,(13,(0,(3,2,1))),((11,(9,10)),(5,(6,(7,8)))))))));
34	1,271	ML	(18,(17,((16,(14,15))),((13,(4,(2,(1,(3,0))),(12,((11,(9,10)),(5,(8,(6,7)))))))));
		MP	(18,(5,(8,(6,7))),((12,(17,(16,(14,15))),((11,(9,10)),(13,(4,(1,0,3,2))))));
35	8,075	ML	(18,(17,((16,(14,15))),((13,(4,(2,(1,(3,0))),(12,((9,(10,11)),(5,(8,(6,7)))))))));
		MP	(18,(12,((17,(16,(14,15))),((4,(13,(0,(1,3,2))),((11,(9,10)),(5,(6,(7,8)))))))));
36	13,650	ML	(18,((14,(17,(15,16))),(13,((12,(4,((2,3),(1,0))),((10,(9,11)),(5,(7,(6,8)))))))));
		MP	(18,((16,(14,15)),(17,(12,((5,(6,(7,8))),((10,(9,11)),(4,(13,(0,(2,(1,3)))))))));

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
37	4,652	ML	(18,(17,((16,(14,15)),((4,(13,(0,(1,3,2))))),(12,((10,(9,11)),((6,7),(5,8))))))));
		MP	(18,((17,(15,16)),(((14,(12,13)),(7,(8,(9,10))))),(6,11),(5,(4,((1,3),(2,0))))))));
38	8,966	ML	(18,((10,(9,11)),((13,(0,(2,3,1))),((5,(8,(6,7))),(4,(12,(17,(16,(14,15))))))));
		MP	(18,((17,(15,16)),(((14,(12,13)),(7,(10,(8,9))))),(6,11),(5,(4,((1,3),(2,0))))))));
39	6,294	ML	(18,((17,(16,(14,15))),((10,(9,11)),(12,((7,8),(5,6)),(4,(13,(0,(2,1,3))))))));
		MP	(18,(17,((15,(13,14)),(16,((5,(4,((1,3),(2,0))))),(12,(10,11)),(6,(7,(8,9))))))));
40	13,163	ML	(18,((4,(13,(0,(3,1,2))))),(10,(9,11)),(8,(7,(5,6))),(12,(17,(16,(14,15))))))));
		MP	(18,(14,(13,(15,(16,(17,(11,(12,((0,(3,(1,2))))),(9,(8,10)),(4,(6,(5,7))))))));
41	35,664	ML	(18,(17,((16,(14,15)),(12,((4,(13,(2,(0,(1,3))))),(9,(10,11)),(5,(6,(7,8))))))));
		MP	(18,(14,(13,(15,(16,(17,(11,(12,((0,(3,(1,2))))),(8,(9,10)),(4,(6,(5,7))))))));
42	3,886	ML	(18,((2,(0,(1,3))),4,(13,((17,(16,(14,15))),12,((11,(9,10)),5,(6,(7,8))))))));
		MP	(18,((16,17),(15,((4,(5,13))),14,((2,3),(1,0))),12,(10,11)),9,(6,(7,8))))))));
43	5,522	ML	(18,((10,(9,11)),13,(4,((0,2,3,1)),12,(5,((8,(6,7)),17,(16,(14,15))))))));
		MP	(18,((16,17),(15,((4,(5,13))),14,(3,(1,(2,0))))),(12,(10,11)),9,(6,(7,8))))))));
44	6,663	ML	(18,(17,((16,(14,15)),12,(4,(13,(3,2,0,1))),10,(9,11)),5,(7,(6,8))))))));
		MP	(18,((16,(14,15)),(6,17),(0,(2,(1,3))),9,(5,(7,8))),13,(4,(12,(10,11))))))));
45	9,340	ML	(18,((17,(16,(14,15))),12,(5,(8,(6,7))),11,(9,10)),4,(13,(1,0,3,2))))))));
		MP	(18,((16,(14,15)),(6,17),(0,(2,(1,3))),9,(5,(7,8))),13,(4,(11,(10,12))))))));
46	27,388	ML	(18,((4,(13,(0,(2,(1,3))))),(11,(9,10)),(8,(6,(5,7))),17,(12,(16,(14,15))))))));
		MP	(18,((13,(15,16)),((11,(9,10)),4,(6,(5,7))),14,(17,(12,(8,((1,3),(2,0))))))));
47	8,922	ML	(18,((17,(16,(14,15))),12,(4,(13,(10,(9,11))),6,(5,(7,8))),0,(3,1,2))))))));
		MP	(18,((13,(15,16)),((11,(9,10)),7,(4,(5,6))),14,(17,(12,(8,((1,3),(2,0))))))));
48	11,129	ML	(18,(17,(12,((16,(14,15)),(5,(7,(6,8))),9,(10,11)),4,(13,(3,0,1,2))))))));
		MP	(18,((17,(16,(14,15))),10,(9,(7,8))),11,(12,13)),6,(5,(4,(2,(3,(1,0))))))));
49	18,293	ML	(18,((17,(16,(14,15))),12,(5,(7,(6,8))),10,(9,11)),4,(13,((1,3),(0,2))))))));
		MP	(18,((17,(16,(14,15))),10,(9,(7,8))),13,(11,12)),6,(5,(4,(2,(3,(1,0))))))));
50	7,656	ML	(18,((17,(16,(14,15))),4,(13,((1,3),(0,2))),12,((10,(9,11)),(5,8),(6,7))))))));
		MP	(18,((17,(10,(8,(4,5))),16,(14,15)),12,(1,2),(3,0)),13,((6,7),(9,(11,12))))))));
51	18,272	ML	(18,(17,((16,(14,15)),4,(13,(0,(1,2,3))),12,((11,(9,10)),5,(8,(6,7))))))));
		MP	(18,((17,(10,(5,(4,8))),16,(14,15)),12,(1,2),(3,0)),13,((6,7),(9,(11,12))))))));
52	23,997	ML	(18,((17,(16,(14,15))),12,((4,(13,(0,(1,3,2))))),(10,(9,11)),5,(8,(6,7))))))));
		MP	(18,((17,(16,(14,15))),((0,(1,(2,3))),4,(5,(13,((12,(10,11)),6,(9,(7,8))))))));
53	8,188	ML	(18,(17,((16,(14,15)),4,(12,(5,(8,(6,7))),9,(10,11)),13,(0,3,1,2))))))));
		MP	(18,((17,(16,(14,15))),((0,(1,(2,3))),4,(5,(13,((11,(10,12)),6,(9,(7,8))))))));
54	27,651	ML	(18,((4,(12,(17,(16,(14,15))),13,((1,3),(0,2))),9,(10,11)),8,(5,(6,7))))))));
		MP	(18,((16,17),(6,(9,(7,8))),13,((10,15),(14,(11,12))),5,(4,((2,3),(1,0))))))));
55	8,887	ML	(18,((17,(16,(14,15))),12,((4,(13,(0,(2,(1,3))))),(10,(9,11)),5,(7,(6,8))))))));
		MP	(18,((16,17),(6,(9,(7,8))),13,((10,15),(14,(11,12))),5,(4,(2,(3,(1,0))))))));
		ML	(18,(1,3,((0,2),(13,((4,(12,(17,(16,(14,15))))),(10,(9,11)),8,(7,(5,6))))))));

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
56	18,231	MP	(18,((16,17),(6,(9,(7,8))),13,(((10,15),(14,(11,12))),5,(4,(0,(1,(2,3))))))));
		ML	(18,((17,(16,(14,15))),((9,(10,11)),(5,(8,(6,7))),12,(4,(13,((1,3),(0,2))))));
57	9,123	MP	(18,((17,(16,(14,15))),((13,(4,(2,3),(1,0))),12,((9,(10,11)),5,(6,(7,8))))));
		ML	(18,((11,(9,10)),(4,(13,(0,(2,(1,3))))),(5,(6,(7,8))),12,(17,(16,(14,15)))));
58	2,751	MP	(18,((17,(16,(14,15))),((13,(4,(2,(3,(1,0))))),12,((9,(10,11)),5,(6,(7,8))))));
		ML	(18,((13,(0,(1,3,2))),((17,(16,(14,15))),12,(5,((6,7),(8,(4,(10,(9,11))))))));
59	2,222	MP	(18,((17,(16,(14,15))),((13,(4,(0,(1,(2,3))))),12,((9,(10,11)),5,(6,(7,8))))));
		ML	(18,((0,(3,1,2)),(13,(17,(16,(14,15))),((4,(11,(9,10))),12,(7,(5,(6,8))))));
60	4,774	MP	(18,(17,((5,(4,(3,(2,(1,0))))),(16,(14,15)),10,((13,(11,12)),8,(7,(6,9))))));
		MP	(18,(17,((5,(4,(3,(2,(1,0))))),(16,(14,15)),10,((11,(12,13)),8,(7,(6,9))))));
		ML	(18,((10,(9,11)),(5,(7,(6,8))),((17,(16,(14,15))),12,(4,(13,(3,(2,0,1))))));
61	2,157	MP	(18,(17,((16,(14,15)),13,((5,(4,(2,(1,(3,0))))),12,(10,11)),6,(9,(7,8))))));
		ML	(18,((16,(14,15)),17,(12,((4,(13,(0,1,2,3))),9,(10,11)),5,(6,(7,8))))));
62	9,904	MP	(18,(17,((16,(14,15)),13,((5,(4,(0,(3,(1,2))))),12,(10,11)),6,(9,(7,8))))));
		ML	(18,(17,((16,(14,15)),(4,(13,(0,(3,2,1))),12,(10,(9,11)),5,(8,(6,7))))));
63	2,266	MP	(18,((16,(14,15)),17,((5,(4,(0,(1,(2,3))))),13,((11,(10,12)),6,(9,(7,8))))));
		ML	(18,((0,(2,1,3)),13,((4,(12,(17,(16,(14,15))))),9,(10,11)),7,(8,(5,6))))));
64	2,722	MP	(18,((16,(14,15)),17,((5,(4,(0,(1,(2,3))))),13,((12,(10,11)),6,(9,(7,8))))));
		ML	(18,(13,((0,(3,2,1)),4,((17,(16,(14,15))),10,(9,11)),12,(8,(7,(5,6))))));
65	1,014	MP	(18,((17,(16,(14,15))),13,((5,(4,(0,(3,(1,2))))),10,(11,12)),6,(9,(7,8))))));
		ML	(18,((13,(0,(2,3,1))),4,((12,(17,(16,(14,15))),10,(9,11)),5,(8,(6,7))))));
66	12,082	MP	(18,(14,(17,((15,16)),5,(13,(9,(6,(8,(7,(10,(11,12))),4,(0,(2,(1,3))))))));
		ML	(18,((17,(16,(14,15))),((13,(4,(0,(2,1,3))))),12,((11,(9,10)),5,(6,(7,8))))));
67	8,773	MP	(18,((16,17),(4,(15,(14,(13,((7,(5,6)),8,(10,(9,11)),12,(0,(1,(2,3))))))));
		ML	(18,((17,(16,(14,15))),12,((4,(13,(3,0,2,1))),10,(9,11)),5,(8,(6,7))))));
68	5,049	MP	(18,(14,((16,(15,17)),7,(8,((5,6)),10,(11,12)),9,(13,(4,(3,(0,(1,2))))))));
		ML	(18,((17,(16,(14,15))),((8,(5,(6,7))),12,((11,(9,10)),4,(13,(0,(3,1,2))))));
69	1,146	MP	(18,((10,(11,12)),4,(9,(8,(7,(6,(13,((17,(16,(14,15))),5,(3,(0,(1,2))))))));
		ML	(18,((11,(9,10)),((17,(16,(14,15))),((8,(12,(6,(5,7))),4,(13,(3,1,0,2))))));
70	19,144	MP	(18,(13,(12,(8,(6,(9,(10,11))),7,((4,5),(16,(14,15)),17,(0,(3,(1,2))))))));
		ML	(18,((13,(0,(3,2,1))),4,((10,(9,11)),(5,(8,(6,7))),12,(17,(16,(14,15))))));
71	11,033	MP	(18,((17,(15,16)),14,(8,((6,7),(9,((12,(10,11)),13,(4,(5,(2,(3,(1,0))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,(2,(1,3))))),12,((9,(10,11)),5,(8,(6,7))))));
72	7,215	MP	(18,((17,(16,(14,15))),((9,(10,11)),12,(5,(7,(6,(8,(13,(4,(0,(3,(1,2))))))));
		ML	(18,((17,(16,(14,15))),12,((4,(13,(0,(3,1,2))),10,(9,11)),5,(8,(6,7))))));
73	5,633	MP	(18,((7,(5,6)),10,(11,(12,(9,(13,(4,(8,((17,(16,(14,15))),0,(3,(1,2))))))));
		ML	(18,((16,(14,15)),17,((4,(13,(2,0,1,3))),12,((9,(10,11)),8,(7,(5,6))))));
74	6,206	MP	(18,(17,(8,(7,(6,(5,((13,(14,15))),12,(11,(9,10))),16,(4,(0,(2,(1,3))))))));
		MP	(18,((16,(14,15)),8,(9,((0,(3,(1,2))),13,(6,(5,(7,(4,(17,(12,(10,11))))))));

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
75	4,986	ML	(18,((1,0,2,3),(13,(4,((10,(9,11)),(7,(8,(6,(5,(12,(17,(16,(14,15))))))))))));
		MP	(18,((0,(2,(1,3))),5,((16,(14,15)),(4,(13,(17,(9,(7,(6,(8,(12,(10,11))))))))))));
76	6,270	ML	(18,(6,(5,7),(8,((10,(9,11)),(12,(17,(16,(14,15))),4,(13,(0,(1,2,3))))))));
		MP	(18,(13,((8,(9,10)),(6,(4,(5,(7,(11,(12,(17,(16,(14,15))),1,(0,(2,3))))))))));
77	5,818	ML	(18,((16,(14,15)),(17,(12,((4,(13,(0,(2,(1,3))))),(11,(9,10)),(8,(5,(6,7))))))));
		MP	(18,(13,((2,(1,(3,0))),4,((11,(9,10)),(7,8),(6,(5,(12,(14,(17,(15,16))))))))));
78	2,713	ML	(18,(17,(12,((11,(9,10)),(8,(7,(5,6))),4,(16,(14,15))),13,(3,0,1,2))))));
		MP	(18,((16,17),(15,(14,((5,(6,(7,8))),((11,(9,10)),12,(13,(4,(3,(2,(1,0))))))))));
79	7,416	ML	(18,(13,((3,(1,0,2)),4,((12,(17,(16,(14,15))),((11,(9,10)),5,(6,(7,8))))))));
		MP	(18,((17,(16,(14,15))),12,((10,(8,9)),4,(7,((5,6),(11,(13,(0,(3,(1,2))))))))));
80	1,908	ML	(18,((4,(1,0,3,2)),13,((12,(17,(16,(14,15))),9,(10,11)),7,(8,(5,6))))));
		MP	(18,((16,17),(13,(10,(15,((8,9),(12,((6,(5,7)),4,(11,14)),3,(2,(1,0))))))))));
81	6,785	ML	(18,((17,(16,(14,15))),4,(13,(0,1,2,3))),12,((10,(9,11)),5,(8,(6,7))))));
		MP	(18,((17,(16,(14,15))),13,((10,(11,12)),(7,8),(6,(9,(5,(4,(0,(3,(1,2))))))))));
82	11,551	ML	(18,(12,((10,(9,11)),5,(7,(6,8))),17,(16,(14,15))),4,(13,(0,1,3,2))))));
		MP	(18,(4,(9,(1,(2,(3,0))),8,(5,((6,7),(12,(10,11)),17,(16,(15,(13,14))))))))));
83	3,374	ML	(18,(17,(16,(14,15)),12,((4,(13,(0,2,(1,3))),10,(9,11)),5,(6,(7,8))))));
		MP	(18,(4,((12,(17,(16,(14,15))),9,(11,(10,(8,(7,(5,6)),13,(1,(0,(2,3))))))))));
84	4,934	ML	(18,((17,(16,(14,15))),12,((4,(13,(2,0,3,1)),9,(10,11)),5,(8,(6,7))))));
		MP	(18,((1,3),(2,0)),17,(14,(12,13))),11,(7,(15,(16,(6,(4,(5,(10,(8,9))))))))));
85	3,660	ML	(18,(17,(16,(14,15)),4,(13,(0,3,2,1)),12,((9,(10,11)),5,(8,(6,7))))));
		MP	(18,(17,(16,(14,15)),6,((7,(8,9)),11,(10,12)),13,(5,(4,(0,(3,(1,2))))))))));
86	4,925	ML	(18,(3,1,0,2,(4,(13,((12,(17,(16,(14,15))),10,(9,11)),5,(7,(6,8))))));
		MP	(18,((14,15),(16,(17,(10,(5,((0,(1,2,3))),4,(11,(12,13)),6,(9,(7,8))))))))));
87	2,649	ML	(18,(5,((8,(6,7)),11,(9,10)),12,(4,((17,(16,(14,15))),13,(3,1,0,2))))));
		MP	(18,(16,(17,((14,15)),13,((6,(5,(7,8))),11,(9,10)),12,(4,(0,(2,(1,3))))))))));
88	11,448	ML	(18,(4,((1,0,2,3),(13,(8,(10,(9,11))),17,(16,(14,15))),12,(5,(6,7))))));
		MP	(18,((14,15),(11,((0,(1,2,3))),5,(12,(6,(7,((10,(8,9)),17,(13,(4,16))))))))));
89	1,095	ML	(18,((11,(9,10)),5,(7,(6,8))),12,(17,(16,(14,15))),4,(13,(0,(3,2,1))))));
		MP	(18,((4,(2,(1,(3,0))),17,(13,((16,(14,15)),12,(8,(7,(6,(5,(9,(10,11))))))))));
90	36,613	ML	(18,(17,(16,(14,15)),13,(1,0,2,3)),4,(12,((11,(9,10)),5,(7,(6,8))))));
		MP	(18,((17,(16,(14,15))),9,(8,(7,((5,6),(12,(10,11)),13,(4,(1,(3,(2,0))))))))));
91	68,050	ML	(18,(17,((6,(8,(5,7))),12,(16,(14,15))),11,(9,10)),4,(13,(0,2,3,1))))));
		MP	(18,(17,(12,((11,(9,10)),5,((6,(7,8)),16,(14,15)),13,(4,(3,(0,(1,2))))))))));
92	13,435	ML	(18,(17,((16,(14,15)),4,(13,(2,0,3,1))),12,((11,(9,10)),7,(8),(5,6))))));
		MP	(18,((16,17),(12,(10,11)),14,(13,(9,(6,(7,8))),15,(5,(4,(0,(1,2,3))))))))));
93	15,616	ML	(18,((17,(16,(14,15))),12,(5,(6,(7,8))),9,(10,11)),4,(13,(0,(2,(1,3))))));
		MP	(18,((16,(14,15)),17,(13,(9,((6,(7,8)),12,(10,11)),4,(5,(0,(2,(1,3))))))))));
		ML	(18,((0,3,1,2),(4,(13,((17,(16,(14,15))),12,((11,(9,10)),8,(6,(5,7))))))))));

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
94	18,040	MP	(18,(15,(14,(16,(17,((4,((2,3),(1,0))),((13,(11,12)),(10,(8,(6,(5,(7,9))))))))))));
		ML	(18,((17,(16,(14,15))),((12,((4,(13,(0,(1,2,3))),((10,(9,11)),(8,(5,(6,7))))))))));
95	6,918	MP	(18,(15,((14,(12,13)),((10,(8,9)),(7,((11,17),(4,((5,6),(16,(0,(1,(2,3))))))))))));
		ML	(18,(17,((16,(14,15)),((5,(8,(6,7))),((12,((10,(9,11)),(4,(13,(2,0,3,1))))))))));
96	4,559	MP	(18,((16,17),(14,(15,(13,((5,(4,(2,(1,(3,0))))),((12,(10,11)),(6,(9,(7,8))))))))));
		ML	(18,(5,((7,(6,8)),((4,(13,(0,(1,2,3))),((12,((11,(9,10)),(17,(16,(14,15))))))))));
97	8,226	MP	(18,(17,((16,(14,15)),(12,((11,(8,(9,10))),((7,(5,6)),(13,(4,(0,(1,(2,3))))))))));
		ML	(18,(17,((16,(14,15)),((4,12),((13,(0,1,2,3)),((11,(9,10)),(5,(6,(7,8))))))))));
98	52,599	MP	(18,(17,((16,(14,15)),(12,((11,(9,10)),((0,(2,(1,3))),(4,(13,(5,(8,(6,7))))))))));
		ML	(18,((1,0,2,3),(13,(4,((9,(10,11)),((6,(7,(5,8))),((12,(17,(16,(14,15))))))))));
99	10,475	MP	(18,(17,((2,(1,(3,0))),(8,(12,(13,(6,((4,(5,7)),((11,(9,10)),(16,(14,15))))))))));
		ML	(18,(17,((16,(14,15)),(12,((4,(13,(0,(1,3,2))),((9,(10,11)),(5,(8,(6,7))))))))));
100	3,918	MP	(18,(17,((16,(14,15)),(12,(10,11)),((9,(8,(6,7))),(13,(5,(4,(0,(3,(1,2))))))))));
		ML	(18,(5,(6,(7,8)),((10,(9,11)),((12,(17,(16,(14,15))),((4,13),(0,(2,3,1))))))))));
101	18,186	MP	(18,(17,((16,(14,15)),(9,(5,((8,(6,7)),((12,(10,11)),(13,(4,(2,3),(1,0))))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(1,0,2,3))),((12,((11,(9,10)),(5,(7,(6,8))))))))));
102	4,439	MP	(18,(17,((16,(14,15)),(13,(9,((0,(3,(1,2))),(4,((11,(10,12)),(8,(7,(5,6))))))))));
		ML	(18,(16,((14,15),(12,((5,(8,(6,7))),((10,(9,11)),((4,17),(13,(0,(2,3,1))))))))));
103	4,574	MP	(18,(16,((17,(14,15)),(13,((5,(6,(7,8))),((9,(10,11)),(12,(4,(3,(1,(2,0))))))))));
		MP	(18,((14,15),(16,(17,((10,(8,9)),(4,(7,(5,6))),((11,(12,(13,(1,(3,(2,0))))))))));
		ML	(18,(13,(0,(2,3,1)),(4,((12,(17,(16,(14,15))),((11,(9,10)),(5,(7,(6,8))))))))));
104	9,325	MP	(18,((16,17),(15,((8,(6,7)),((11,(12,(9,10))),((5,13),(14,(4,(0,(3,(1,2))))))))));
		ML	(18,(15,(14,((16,17)),((4,(13,(3,(0,1,2))),((10,(9,11)),(5,(6,(7,(8,12))))))))));
105	37,144	MP	(18,((15,(13,14)),(9,(17,(16,(4,((5,(3,(0,(1,2))),((6,(7,8)),(12,(10,11))))))))));
		ML	(18,((0,(1,3,2)),(4,(13,((17,(16,(14,15))),((12,((10,(9,11)),(5,(8,(6,7))))))))));
106	3,855	MP	(18,(17,((16,(14,15)),((9,(6,(7,8))),((11,(10,12)),(13,(5,(4,(1,(0,(2,3))))))))));
		ML	(18,(12,((17,(16,(14,15))),((5,((6,8),(7,((11,(9,10)),(4,(13,(0,2,1,3))))))))));
107	19,284	MP	(18,(16,(8,((7,(5,6)),((12,(17,(14,15))),(13,((11,(9,10)),(4,(3,(1,(2,0))))))))));
		ML	(18,((13,(4,(0,(3,1,2))),((12,(17,(16,(14,15))),((10,(9,11)),(5,(8,(6,7))))))))));
108	19,382	MP	(18,(17,((11,(9,10)),(5,(13,(4,((3,(0,(1,2))),((12,((8,(6,7)),(16,(14,15))))))))));
		ML	(18,((4,(13,(0,(2,3,1))),((9,(10,11)),(17,16,(14,15)),(12,(5,(8,(6,7))))))))));
109	27,162	MP	(18,((16,17),(14,(15,(13,((5,(4,(1,(3,(2,0))))),((12,(10,11)),((6,7),(8,9))))))))));
		ML	(18,((17,(16,(14,15))),((12,((8,(6,(5,7))),((10,(9,11)),(4,(13,(0,(3,1,2))))))))));
110	8,639	MP	(18,(11,((14,(12,13)),((9,(6,(7,8))),((10,((17,(15,16)),(5,(4,(1,(2,(3,0))))))))));
		ML	(18,(17,((16,(14,15)),((6,(5,7)),(11,(9,10))),((8,12),(4,(13,(0,2,1,3))))))))));
111	37,180	MP	(18,(14,((17,(15,16)),(13,(5,(4,((1,(3,(2,0))),((8,(6,7)),(12,(11,(9,10))))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,((1,3),(0,2))),((12,((10,(9,11)),(5,(6,(7,8))))))))));
112	8,583	MP	(18,(17,((16,(14,15)),((9,(7,(6,8))),(13,((11,(10,12)),(5,(4,(0,(3,(1,2))))))))));
		ML	(18,((17,(16,(14,15))),((13,(4,(0,(2,(1,3))),((12,((9,(10,11)),(5,(6,(7,8))))))))));

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
113	1,132	MP ML	(18,((17,(15,16)),(14,(5,(13,((9,(7,(6,8))),((11,(10,12)),(4,(0,(3,(1,2)))))))))))); (18,((17,(12,((7,8),(5,6))),((4,(13,(16,(14,15))))),((11,(9,10)),(0,(2,1,3))))));
114	14,588	MP ML	(18,((16,(14,15)),(17,((13,(11,12)),((8,(6,(7,9))),((10,(5,(4,(1,(3,(2,0)))))))))))); (18,(17,((16,(14,15)),(12,((4,(13,(0,(3,2,1))))),((10,(9,11)),(5,(6,(7,8))))))));
115	32,461	MP ML	(18,(17,((16,(14,15)),(13,((12,(11,(9,10))),((8,(6,7)),(5,(4,(0,(2,(1,3)))))))))); (18,((17,(16,(14,15))),((4,(13,(0,(2,(1,3))))),((12,(10,(9,11))),(5,(7,(6,8))))));
116	70,298	MP ML	(18,(17,((16,(14,15))),((0,(2,(1,3))),((12,(10,11))),((9,(7,(8,(6,(13,(4,5)))))))))); (18,((17,(16,(14,15))),((4,(13,(0,(1,2,3))))),((12,((11,(9,10)),(5,(8,(6,7))))))));
117	12,581	MP ML	(18,(17,((1,(2,(3,0))),((11,(9,10)),(13,((16,(14,15)),(6,(7,(8,(5,(4,12)))))))))); (18,((17,(16,(14,15))),((4,(13,(0,(3,2,1))))),((12,((9,(10,11)),(5,(6,(7,8))))))));
118	22,480	MP MP ML	(18,(14,((17,(15,16)),((11,(10,12)),((9,(8,(6,7))),((13,(5,(4,(0,(3,(1,2)))))))))); (18,(4,((13,(11,12)),(14,((7,8),(9,10)),((17,(15,16)),(6,(5,(0,(1,(2,3)))))))))); (18,(17,((16,(14,15))),((4,(13,(2,0,(1,3))))),((12,((10,(9,11))),(5,(8,(6,7))))));
119	2,810	MP ML	(18,(17,((16,(14,15)),(4,((0,(3,(1,2))),((13,(9,(8,((7,(5,6))),((12,(10,11)))))))))); (18,(17,((16,(14,15)),(12,((11,(9,10)),((5,(8,(6,7))),((4,(13,(0,1,3,2))))))))));
120	8,667	MP ML	(18,(17,((16,(14,15)),((3,(1,(2,0))),((4,(5,(13,((12,(10,11))),((9,(8,(6,7)))))))))); (18,((17,(16,(14,15))),((12,((4,(13,(0,2,3,1))),((9,(10,11))),((8,(5,(6,7))))))));
121	14,205	MP ML	(18,(13,(17,((16,(14,15)),(12,((5,(8,(6,7))),((11,(9,10)),(4,(0,(1,(2,3)))))))))); (18,(13,((0,(3,1,2)),(4,(12,((17,(16,(14,15))),((10,(9,11))),((6,8),(5,7))))))));
122	13,045	MP ML	(18,((16,(14,15)),(9,(5,((0,(1,(2,3))),((4,((8,(6,7))),((17,(13,(11,(10,12)))))))))); (18,(12,(17,(16,(14,15))),((4,(13,(0,(2,(1,3))))),((9,(10,11))),((5,(7,(6,8))))));
123	16,276	MP ML	(18,(17,((16,(14,15)),((12,(10,11)),((6,(7,(8,9))),((13,(5,(4,(3,(2,(1,0)))))))))); (18,(12,((17,(16,(14,15))),((5,(7,(6,8))),((4,((13,(10,(9,11))),((0,(3,1,2))))))));
124	4,509	MP ML	(18,(17,((15,16),(14,(13,((5,(4,(0,(1,(2,3))))),((12,(10,11))),((9,(7,(6,8)))))))))); (18,(((4,16),(17,(13,(0,(2,1,3))))),((12,(14,15))),((9,(10,11))),((5,(6,(7,8))))));
125	2,681	MP ML	(18,(((2,3),(1,0)),(4,(13,(17,(12,((7,(6,8)),(5,((10,(9,11))),((16,(14,15)))))))))); (18,(17,(16,(14,15))),((13,(2,0,1,3)),((10,(9,11))),((4,12),(5,(7,(6,8))))));
126	15,355	MP ML	(18,(13,((10,(8,9)),(14,((0,(3,(1,2))),((12,(11,((15,(16,17))),((4,(7,(5,6)))))))))); (18,(17,((16,(14,15))),((11,(9,10)),(5,(6,(7,8))),((12,(4,(13,(0,(2,3,1))))))))));
127	4,661	MP ML	(18,(14,(4,(5,(10,((6,(7,8))),((17,(15,16))),((9,(13,(11,12))),((1,2),(3,0)))))))); (18,(13,((0,(3,1,2)),(4,((17,(16,(14,15))),((12,((10,(9,11))),((5,(8,(6,7))))))))));
128	1,950	MP ML	(18,(16,((15,(13,14)),(12,((5,(8,(6,7))),((9,(10,11))),((4,(17,(2,(1,(3,0)))))))))); (18,(17,((16,(14,15)),(12,(8,(5,(6,7))),((10,(9,11))),((4,(13,(0,(1,2,3))))))))));
129	10,960	MP MP ML	(18,((17,(15,16)),(13,((11,(9,10)),((7,(8,(5,6))),((12,(14,(4,(0,(1,(2,3)))))))))); (18,(17,((16,(14,15))),(13,((9,(8,(6,7))),((12,(10,11))),((5,(4,(0,(3,(1,2)))))))))); (18,(17,(13,((0,(1,3,2)),(4,((12,(16,(14,15))),((11,(9,10))),((5,(8,(6,7))))))))));
130	4,163	MP ML	(18,((5,(6,(7,8))),((15,(16,((12,(10,11))),((9,((17,(13,14))),((4,(3,(1,(2,0)))))))))); (18,((13,(0,(2,(1,3))),((4,((12,(17,(16,(14,15))),((10,(9,11))),((5,(8,(6,7))))))))));
131	1,545	MP	(18,(17,(16,(4,(((1,2),(3,0)),(5,((13,(14,15))),((12,(10,11))),((6,(7,(8,9))))))))));

Table S1: Vibrionaceae 19-taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
132	2,576	ML	(18,(4,((13,(0,(2,(1,3))))),(17,(16,(14,15))),(12,((10,(9,11)),(5,(6,(7,8))))))));
		MP	(18,(9,((12,(10,11)),(16,((0,(2,(1,3))),((17,(13,(14,15))),((8,(4,(5,(6,7))))))))));
133	2,054	ML	(18,((17,(16,(14,15))),((10,(9,11)),(5,(8,(6,7))),((12,(4,(13,(0,(2,3,1))))))));
		MP	(18,((17,(15,(13,14))),((7,((4,(10,(8,9))),((5,(6,(16,(11,(12,(0,(3,(1,2))))))))))));
134	13,070	ML	(18,(17,((16,(14,15)),(12,((4,(13,(0,(3,2,1))))),(9,(10,11)),(5,(8,(6,7))))));
		MP	(18,(17,((14,(12,13)),(16,((0,(2,(1,3))),((15,(11,((10,(8,9))),((4,(5,(6,7))))))))));
135	6,032	MP	(18,((17,(16,(14,15))),((13,((10,(8,9))),((7,((4,(5,6))),((11,(12,(0,(1,(2,3))))))))));
		ML	(18,(17,((16,(14,15))),((0,3,2,1),(4,((12,13),((9,(10,11)),(5,(7,(6,8))))))));
136	3,416	MP	(18,(17,((16,(14,15)),(11,((4,(5,(6,7))),((10,(8,9))),(12,(13,(0,(2,(1,3))))))));
		ML	(18,(17,((15,16),(14,(13,((5,(4,((1,2),(3,0))),((10,(11,12)),(9,(8,(6,7))))))))));
137	5,412	MP	(18,((17,(16,(14,15))),((9,(10,11)),(8,(6,(5,7))),((12,(4,(13,(2,0,1,3))))))));
		ML	(18,((16,(14,15)),(4,(8,((7,(5,6))),((9,17),((13,(11,12)),(10,((2,3),(1,0))))))));
138	2,987	MP	(18,(17,((16,(14,15))),((12,(10,(9,11))),((5,(8,(6,7))),((4,(13,(0,1,2,3))))))));
		ML	(18,(16,(17,((15,(13,14)),(12,((11,(0,(3,(1,2))),((10,(8,9))),((7,(6,(4,5))))))));
139	2,730	MP	(18,((0,3,2,1),(13,(4,((12,(17,(16,(14,15))),((10,(9,11)),(5,(7,(6,8))))))));
		ML	(18,((11,((4,5),(10,(8,9))),((15,(13,14)),(17,(16,(12,(7,(6,((2,3),(1,0))))))))));
140	7,943	MP	(18,(4,((13,(0,3,1,2)),((17,(16,(14,15))),(12,((11,(9,10)),((7,8),(5,6))))))));
		ML	(18,(17,((16,(14,15)),(13,((5,(4,(0,(3,(1,2))))),(11,(10,12)),(8,(9,(6,7))))))));
141	6,310	MP	(18,(4,((3,1,0,2),(13,((17,(16,(14,15))),(12,((10,(9,11)),(5,(6,(7,8))))))));
		ML	(18,(17,((16,(14,15)),(13,((4,(5,(0,(2,(1,3))))),(12,(10,11)),(6,(8,(7,9))))))));
142	2,069	MP	(18,((0,2,1,3),(13,(4,((12,(17,(14,(15,16))),((9,(10,11)),(8,(5,(6,7))))))));
		ML	(18,(17,((16,(14,15)),(13,((5,(4,(0,(3,(1,2))))),(12,(10,11)),(9,(6,(7,8))))))));
143	12,239	MP	(18,(17,((16,(14,15)),(12,((4,(13,(0,1,3,2))),((9,(10,11)),(5,(8,(6,7))))))));
		ML	(18,(17,((16,(14,15)),(13,((5,(4,(0,(1,(2,3))))),(12,(10,11)),(6,(7),(8,9))))))));
144	12,487	MP	(18,(4,(13,((2,1,0,3),(12,((7,(5,(6,8))),((9,(10,11)),(17,(16,(14,15))))))));
		ML	(18,(16,((8,(6,7)),((4,(0,(3,(1,2))),((5,(17,((13,(14,15)),(9,(10,(11,12))))))));
145	5,498	MP	(18,((17,(16,(14,15))),((4,(13,(1,3,0,2))),(12,((9,(10,11)),(8,(5,(6,7))))))));
		ML	(18,(17,((16,(14,15)),(12,(13,((4,(0,(1,(2,3))),((10,(9,11)),(5,(8,(6,7))))))));
146	4,223	MP	(18,(17,((16,(14,15))),((9,10,11),(7,(5,(6,8))),((12,(4,(13,(0,2,1,3))))))));
		ML	(18,(13,((16,(14,15)),(17,(8,((4,(0,(2,(1,3))),((5,(6,7)),(9,(12,(10,11))))))));
147	6,886	MP	(18,((12,(4,(13,(2,(0,(1,3))))),(17,(16,(14,15))),((9,(10,11)),(5,(8,(6,7))))))));
		ML	(18,((16,(14,15)),(17,(10,((0,(2,(1,3))),((11,(12,13)),((4,5),(6,(9,(7,8))))))));
148	5,239	MP	(18,(17,((16,(14,15)),(4,(13,(0,2,1,3))),((12,(9,(10,11)),(5,(8,(6,7))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,(3,1,2))),((12,(10,11)),(5,(4,(3,(1,(2,0))))))));
149	7,632	MP	(18,((17,(16,(14,15))),((4,(13,(0,(3,1,2))),((12,(11,(9,10)),(5,(6,(7,8))))))));
		ML	(18,((13,(11,(9,10))),(12,((1,2),(3,0)),(17,((14,(15,16)),(7,(8,(4,(5,6))))))));
149	7,632	MP	(18,((17,(16,(14,15))),((4,(13,(0,(3,1,2))),((12,(10,(9,11)),(7,(6,(5,8))))))));
		ML	(18,((17,(16,(14,15))),((0,(2,(1,3))),((4,(12,(13,((9,(10,11)),(8,(5,(6,7))))))));
		ML	(18,((17,(16,(14,15))),(12,((4,(13,(3,0,2,1))),((9,(10,11)),(5,(8,(6,7))))))));

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
150	17,681	MP	(18,(17,((16,(14,15)),(10,((5,(4,(0,(2,(1,3))))))),(12,(11,13)),(6,(7,(8,9))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,(2,(1,3))))),(12,((10,(9,11))),5,(7,(6,8))))))));
151	3,564	MP	(18,(((4,(5,6)),(12,(11,(9,10))),17,((16,(14,15)),(13,(7,(8,(3,(1,(2,0)))))))))
		MP	(18,(17,((16,(14,15)),((12,(10,11)),((13,(6,(8,(7,9))))(5,(4,(1,(0,(2,3)))))))))
		ML	(18,((17,(16,(14,15))),((8,(12,(5,(6,7))),((10,(9,11)),13,(4,(0,3,2,1))))))
152	4,675	MP	(18,(17,((16,(14,15)),(12,((13,(4,(0,(2,(1,3))))))),(9,(10,11)),5,(6,(7,8))))))
		MP	(18,(8,(16,((11,(9,10))),17,((15,(4,(5,(6,7))))(14,(12,13)),2,(1,(3,0))))))
		ML	(18,((17,(16,(14,15))),12,((4,(13,(0,(3,1,2))))(11,(9,10)),5,(8,(6,7))))))
153	21,898	MP	(18,((17,(16,(14,15))),12,((1,3),(2,0)),13,(4,((11,(9,10)),5,(7,(6,8))))))
		ML	(18,(17,((16,(14,15)),12,((4,(13,(0,(2,(1,3))))(11,(9,10)),5,(8,(6,7))))))
154	8,162	MP	(18,((17,(15,16)),14,(12,((13,(11,(1,(3,(2,0))))(8,(9,10)),7,(6,(4,5))))))
		ML	(18,((17,(16,(14,15))),((4,(13,(0,(3,2,1))))(12,((9,(10,11)),7,(8,(5,6))))))
155	12,301	MP	(18,(13,((17,(16,(14,15))),((9,(8,10)),((7,(5,(4,6))),12,(11,(0,(2,(1,3))))))
		ML	(18,((12,(4,(13,(0,(2,(1,3))))(17,(16,(14,15))),9,(10,11)),5,(6,(7,8))))
156	6,664	MP	(18,((7,(4,(5,6))),17,(15,16)),13,((0,(2,(1,3))),8,(12,(14,(11,(9,10))))))
		ML	(18,((17,(16,(14,15))),((4,(13,(0,(3,1,2))))(12,((10,(9,11)),8,(5,(6,7))))))
157	5,630	MP	(18,((14,(17,(15,16))),10,(9,(2,(1,(3,0))),8,(7,((5,6),(4,(13,(11,12))))))
		ML	(18,(0,(3,1,2),(4,(13,((17,(16,(14,15))),12,((11,(9,10)),5,(8,(6,7))))))
158	7,687	MP	(18,(9,(8,(13,((17,(16,(14,15))),((2,(3,(1,0))),11,(10,12)),4,(5,(6,7))))))
		ML	(18,(6,(8,(5,(7,((10,(9,11)),12,(17,((16,(14,15)),4,(13,(3,(2,1,0))))))
159	23,214	MP	(18,((10,(8,9)),(12,(3,(2,(1,0))),17,(6,(7,((5,(4,11)),16,(15,(13,14))))))
		ML	(18,((17,(16,(14,15))),12,((4,(13,(0,(3,2,1))),11,(9,10)),(6,8),(5,7))))
160	7,274	MP	(18,(17,((16,(14,15)),13,((9,(6,(7,8))),12,(10,11)),(4,5),(3,(0,(1,2))))))
		ML	(18,((1,0,2,3),(4,13),10,(9,11)),(6,(7,8)),5,(12,(17,(16,(14,15))))))
161	7,872	MP	(18,(17,((7,(5,6)),((0,(3,(4,(1,2))))(8,(12,(9,(10,11)),13,(16,(14,15))))))
		ML	(18,(17,((16,(14,15)),4,((12,(5,(8,(6,7))))(11,(9,10)),13,(1,0,2,3))))
162	17,207	MP	(18,(17,((0,(3,(1,2))),12,(13,((11,(16,(14,15))),8,(9,10)),7,(4,(5,6))))))
		MP	(18,(17,((16,(14,15)),8,((13,(12,(0,(3,(1,2))))(11,(9,10)),4,(7,(5,6))))))
		MP	(18,((16,(14,15)),17,(12,((13,(4,(0,(2,(1,3))))(11,(9,10)),8,(7,(5,6))))))
		ML	(18,((16,(14,15)),17,((8,(5,(6,7))),12,((9,(10,11)),4,(13,(0,2,(1,3))))))
163	7,476	MP	(18,(14,((17,(15,16)),13,((4,(5,(2,(3,(1,0))))(11,(10,12)),6,(8,(7,9))))))
		ML	(18,((10,(9,11)),5,(6,(7,8))),12,((17,(16,(14,15))),4,(13,(2,0,3,1))))
164	17,343	MP	(18,(17,((16,(14,15)),10,(8,(9,((2,3),(1,0))),11,(12,13)),4,(6,(5,7))))))
		ML	(18,(17,((16,(14,15)),((4,(13,(0,(3,2,1))))(12,((9,(10,11)),5,(8,(6,7))))))
165	4,416	MP	(18,((16,(14,15)),17,(12,((13,(4,(2,(3,(1,0))))(11,(9,10)),8,(7,(5,6))))))
		ML	(18,(17,((16,(14,15))),4,(13,(0,1,3,2))),12,((11,(9,10)),5,(6,(7,8))))
166	4,744	MP	(18,(17,((16,(14,15)),5,((3,(2,(1,0))),6,(7,8)),(4,13),(9,(12,(10,11))))))
		ML	(18,(13,(0,3,1,2),4,((17,(16,(14,15))),12,((9,(10,11)),5,(6,(7,8))))))
167	9,449	MP	(18,(5,(((1,2),(3,0)),4,((14,(17,(15,16))),13,(6,((7,(8,9)),12,(10,11))))))

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
168	34,043	ML	(18,((4,(13,(0,2,(1,3))))),(17,(16,(14,15))),12,((9,(10,11)),5,(7,(6,8)))));
		MP	(18,(11,((13,14),(17,((15,(3,(0,(1,2))))),(12,((9,(8,10))),((7,16),(4,(5,6))))))));
		MP	(18,((16,(14,15)),(17,(13,((5,(4,(0,(1,(2,3))))),(12,(10,11)),(6,(9,(7,8))))))));
169	17,574	MP	(18,((17,(16,(14,15))),((9,(7,(8,10))),((11,(12,13)),(6,(5,(4,(0,(3,(1,2))))))));
		ML	(18,((4,(13,(0,2,(1,3))))),(17,(16,(14,15))),12,((9,(10,11)),5,(7,(6,8)))));
		MP	(18,((16,17),(14,15),(11,((12,(13,(0,(3,(1,2))))),(8,(9,10))),4,(7,(5,6)))));
170	1,685	ML	(18,(17,((16,(14,15)),12,((4,(13,(0,(2,(1,3))))),(9,(10,11)),5,(8,(6,7)))));
		MP	(18,((16,(14,15)),(17,(13,((5,(4,(0,(3,(1,2))))),(12,(10,11)),9,(7,(6,8))))));
171	15,568	ML	(18,(17,((16,(14,15))),((5,8),(6,7)),12,((11,(9,10)),4,(13,(0,3,1,2)))));
		MP	(18,(14,((17,(15,16)),13,((12,(11,((1,3),(2,0))),((5,7),(6,(4,(8,(9,10))))))));
172	4,279	ML	(18,((17,(16,(14,15))),12,((4,(13,(0,(2,3,1))))),(10,(9,11)),8,(5,(6,7)))));
		MP	(18,(17,((13,(11,12)),14,(15,((4,(5,(6,7))),((8,(9,10)),16,((2,3),(1,0))))));
173	2,574	ML	(18,(17,((16,(14,15)),12,((4,13),(8,(7,(5,6))),((11,10,9),(0,1,3,2)))));
		MP	(18,(4,((0,(2,(1,3))),13,((17,(16,(14,15))),12,((11,(9,10)),8,(5,(6,7))))));
174	30,294	ML	(18,(17,(16,(14,15)),12,((4,(13,(0,2,3,1))),10,(9,11)),8,(7,(5,6)))));
		MP	(18,((17,(16,(14,15))),13,((12,(10,11)),(6,(7,(8,9))),5,(4,(3,(2,(1,0))))));
175	4,739	ML	(18,(17,((16,(14,15)),(4,(13,(2,(0,1,3))))),(12,((9,(10,11)),5,(8,(6,7))))));
		MP	(18,((17,((13,14),(15,16))),12,((7,(5,6)),((11,(9,10)),4,(8,(0,(1,(2,3))))))));
176	8,924	ML	(18,(4,(13,(0,2,(1,3))),((12,(17,(16,(14,15))),10,(9,11)),5,(6,(7,8)))));
		MP	(18,(17,((16,(14,15)),13,((5,(4,(0,(3,(1,2))))),(11,(10,12)),9,(8,(6,7))))));
177	11,027	ML	(18,(17,((16,(14,15)),4,((13,(0,1,2,3)),(11,(9,10)),12,(8,(5,(6,7))))));
		MP	(18,(17,((16,(14,15)),4,((5,(0,(3,(1,2))),13,((12,(10,11)),6,(9,(7,8))))));
178	53,816	ML	(18,((4,(13,(0,(2,1,3))),((17,(16,(14,15))),12,((10,(9,11)),6,(5,(7,8))))));
		MP	(18,((16,(14,15)),17,((0,(2,(1,3))),13,(10,((4,(5,6)),(11,12)),9,(7,8)))));
179	4,791	ML	(18,((17,(16,(14,15))),((4,(13,(0,(2,(1,3))))),(12,((9,(10,11)),5,(7,(6,8))))));
		MP	(18,((17,(15,(13,14))),5,(4,((1,(0,(2,3))),16,((11,(10,12)),9,(6,(7,8))))));
180	11,262	ML	(18,(10,(11,(9,((12,(4,(13,(0,2,3,1))),17,(16,(14,15))),5,(6,(7,8))))));
		MP	(18,(13,((4,(0,(2,(1,3))),12,(17,((16,(14,15)),11,(9,10)),5,(6,(7,8))))));
181	5,463	ML	(18,(17,(16,(14,15)),12,((8,(6,(5,7))),10,(9,11)),4,(13,(0,(3,2,1)))));
		MP	(18,(17,((16,(14,15)),12,((13,(4,(0,(1,(2,3))))),(10,(9,11)),5,(6,(7,8))))));
182	28,543	ML	(18,(13,((4,(0,1,3,2)),12,(17,(16,(14,15))),10,(9,11)),6,(8,(5,7)))));
		MP	(18,(4,((0,(2,(1,3))),16,(14,15)),13,17,12,((9,(10,11)),5,(6,(7,8)))));
183	8,107	ML	(18,(17,((16,(14,15)),(4,(13,(0,2,1,3))),12,((11,(9,10)),5,(8,(6,7)))));
		MP	(18,(13,(17,((8,(9,(6,(5,7))),4,(0,(3,(1,2))),16,(15,(14,(11,(10,12))))));
184	4,562	ML	(18,(17,((12,(16,(14,15))),((5,8),(6,7)),11,(9,10)),4,(13,(0,2,1,3)))));
		MP	(18,(17,(16,(14,15)),10,(9,11)),12,(4,(5,(6,7))),8,13,(0,(3,(1,2)))));
185	39,671	ML	(18,((16,(15,(14,17))),9,(5,(8,(6,7))),13,(4,((12,(10,11)),0,(2,(1,3))))));
		MP	(18,((17,(16,(14,15))),4,(13,(0,(2,1,3))),12,((10,(9,11)),8,(7,(5,6)))));

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
186	28,901	MP	(18,((14,(17,(15,16))),((4,(0,(1,(2,3))))),(13,(8,((6,7),(5,(9,(10,(11,12)))))))));
		ML	(18,(17,((16,(14,15)),((13,(4,(2,0,(1,3))))),(12,((11,(9,10)),(5,(7,(6,8)))))))));
187	7,952	MP	(18,((16,(14,15)),(17,(12,((5,6),(7,8)),((11,(9,10)),(13,(4,((2,3),(1,0)))))))));
		ML	(18,(17,((16,(14,15)),(12,((4,(13,(0,(2,(1,3))))),(9,(10,11)),(5,(6,(7,8)))))))));
188	20,749	MP	(18,(17,((16,(14,15)),(12,((13,(4,(0,(3,(1,2))))),(11,(9,10)),(8,(5,(6,7)))))))));
		ML	(18,(17,((16,(14,15)),(12,((4,(13,(0,(2,(1,3))))),(10,(9,11)),(5,(7),(6,8)))))))));
189	2,134	MP	(18,(16,((5,8),(4,(17,((10,11),(9,(12,(6,7))))),(15,(13,14)),((2,3),(1,0)))))))));
		ML	(18,((4,(13,(0,(2,(1,3))))),(12,(17,(16,(14,15))))),(10,(9,11)),(5,(8,(6,7)))));
190	23,069	MP	(18,(17,((14,(12,13)),((11,(4,(7,(5,6))))),(9,(8,10)),(15,(16,(0,(3,(1,2)))))))));
		ML	(18,(((4,13),(0,1,2,3)),(17,((16,(14,15)),(12,((11,(9,10)),(5,(7,(6,8)))))))));
191	29,839	MP	(18,((14,(17,(15,16))),(11,((1,3),(2,0)),(12,(13,((10,(8,9)),(7,(4,(5,6)))))))));
		ML	(18,((0,(1,2,3)),(13,(4,((12,(17,(16,(14,15))))),(10,(9,11)),(8,(5,(6,7)))))))));
192	5,354	MP	(18,((13,(16,17)),(14,(12,(15,((4,(0,(3,(1,2))))),(8,(6,7)),(5,(11,(9,10)))))))));
		ML	(18,((17,(16,(14,15))),(12,((4,(13,(0,(3,1,2))))),(10,(9,11)),(5,(8,(6,7)))))))));
193	33,253	MP	(18,(16,((17,(15,(13,14))),((0,(3,(1,2))),(4,(5,((10,(11,12)),(6,(9,(7,8)))))))));
		ML	(18,((17,(12,(16,(14,15))),5,((6,(7,8)),(13,(4,((11,(9,10)),(1,3),(0,2)))))))));
194	5,802	MP	(18,((10,(8,9)),(11,(15,((16,(17,(0,(3,(1,2))))),(14,(12,13)),(6,(7,(4,5)))))))));
		ML	(18,((17,(16,(14,15))),(12,((4,(13,((1,3),(0,2))))),(10,(9,11)),(5,(7,(6,8)))))))));
195	26,196	MP	(18,((16,17),(14,15),(13,((5,(4,(0,(2,(1,3))))),(12,(10,11)),(9,(7,(6,8)))))))));
		ML	(18,(17,((16,(14,15)),(12,((4,(13,(3,1,0,2))))),(10,(9,11)),(5,(8,(6,7)))))))));
196	6,517	MP	(18,((4,17),(16,(14,15)),(13,(12,((0,(3,(1,2))),((6,(5,7)),(8,(10,(9,11)))))))));
		ML	(18,(7,(5,6),(8,((11,(9,10)),(12,(17,(16,(14,15))))),(4,(13,(0,(3,1,2)))))))));
197	9,422	MP	(18,(17,((16,(14,15)),((11,(10,12)),(9,(6,(7,8))),(13,(5,(4,(0,(3,(1,2)))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,(2,3,1))))),(12,((10,(9,11)),(5,(6,(7,8)))))))));
198	5,196	MP	(18,(17,((16,(14,15)),(13,((5,(4,(3,(0,(1,2))))),(11,(10,12)),(6,(7,(8,9)))))))));
		ML	(18,(13,((0,3,1,2),(10,(9,11)),(4,((8,(7,(5,6))),(12,(17,(16,(14,15)))))))));
199	10,917	MP	(18,(17,((16,(14,15)),(13,((5,(4,(0,(1,(2,3))))),(12,(10,11)),(9,(6,(7,8)))))))));
		ML	(18,(17,(12,(16,(14,15))),((4,(13,(1,2,0,3))),((9,(10,11)),(5,(6),(7,8)))));
200	9,889	MP	(18,((17,(16,(14,15))),((12,(0,(1,(2,3))))),(9,10),(11,(4,(13,(5,(6,(7,8)))))))));
		ML	(18,(17,((16,(14,15)),(4,(13,(1,0,3,2))),(12,((9,(10,11)),(5,(8,(6,7)))))))));
201	23,891	MP	(18,((16,17),(15,(14,(5,(4,(0,(3,(1,2))))),(13,((12,(10,11)),(9,(6,(7,8)))))))));
		ML	(18,(17,((16,(14,15)),(12,(5,((7,(6,8))),((9,(10,11)),(4,(13,(0,(2,(1,3)))))))))))));
202	848	MP	(18,(17,((16,(14,15)),(13,((5,(4,(0,(1,(2,3))))),(10,(11,12)),(6,(9,(7,8)))))))));
		ML	(18,(17,((16,(14,15)),(12,((4,(13,(0,(2,3,1))))),(11,(9,10)),(5,(6,(7,8)))))))));
203	8,067	MP	(18,(17,((16,(14,15)),(12,((13,(4,(3,(0,(1,2))))),(9,(10,11)),(5,(8,(6,7)))))))));
		ML	(18,(17,((16,(14,15)),(12,((4,(13,(0,(2,(1,3))))),(10,9,11),(6,(5,(7,8)))))))));
204	4,838	MP	(18,(17,((16,(14,15)),((11,(10,12)),(9,(8,(6,7))),(13,(5,(4,(0,(1,(2,3)))))))));
		ML	(18,(((1,3),(0,2)),(13,(4,((10,(9,11)),(8,(6,7)),(5,(12,(17,(16,(14,15)))))))))))));

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
205	9,436	ML	(18,(17,((16,(14,15)),(12,((4,(13,(3,1,(0,2))))),((11,(9,10)),((7,8),(5,6))))))));
		MP	(18,(17,((16,(14,15)),(5,(4,((2,3),(1,0))))),((13,((12,(10,11)),(6,(9,(7,8))))))));
		MP	(18,((14,(17,(15,16))),((13,((11,(12,(0,(3,(1,2))))),((8,(9,10)),((4,7),(5,6))))))));
206	11,145	ML	(18,((17,(16,(14,15))),((12,((4,(13,(0,(2,(1,3))))),((10,(9,11)),(5,(8,(6,7))))))));
		MP	(18,((13,((12,(10,11)),(4,(7,(5,6))))),((17,((16,(14,15)),(8,(9,(0,(3,(1,2))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,(3,1,2))))),((12,((11,(9,10)),(8,(7,(5,6))))))));
207	15,746	MP	(18,((15,(16,17)),(11,(12,(13,14))),((4,7),((10,(8,9)),(6,(5,(0,(1,(2,3))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,(2,1,3))))),((12,((11,(9,10)),(5,(7,(6,8))))))));
208	7,339	MP	(18,(17,((16,(14,15)),(5,(4,(0,(3,(1,2))))),((13,((12,(10,11)),(9,(6,(7,8))))))));
		ML	(18,(17,((16,(14,15)),(4,(13,(0,(1,2,3))))),((12,((11,(9,10)),(5,(7,(6,8))))))));
209	22,240	MP	(18,(17,((16,(14,15)),(5,(4,(0,(3,(1,2))))),((13,((12,(10,11)),(9,(8,(6,7))))))));
		ML	(18,(17,((16,(14,15)),(4,(13,(0,(3,1,2))))),((12,((10,(9,11)),(5,(7,(6,8))))))));
210	17,557	MP	(18,((17,(16,(14,15))),((9,(5,(7,(6,8))))),((13,(11,12)),(10,(4,((1,3),(2,0))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,(2,(1,3))))),((12,((11,(9,10)),(5,(7,(6,8))))))));
211	6,211	MP	(18,((17,(16,(14,15))),((13,(9,(8,(6,7))))),((5,(4,((12,(10,11)),(0,(3,(1,2))))))));
		MP	(18,((16,(14,15)),(17,((5,(4,(0,(2,(1,3))))),((13,((12,(10,11)),(9,(6,(7,8))))))));
		ML	(18,(17,((16,(14,15)),(4,(13,(0,(3,1,2))))),((12,((10,(9,11)),(5,(8,(6,7))))))));
212	847	MP	(18,(17,((13,14)),((4,(15,16))),((12,(0,(2,(1,3))))),((9,(10,11)),((5,6),(7,8))))));
		ML	(18,((17,(16,(14,15))),((11,(9,10)),(12,(5,(7,(6,8))))),((4,(13,(3,1,0,2))))));
213	2,377	MP	(18,((17,(16,(14,15))),((13,((5,(4,(0,(3,(1,2))))),((10,(11,12)),(6,(8,(7,9))))))));
		ML	(18,(17,((16,(14,15)),(12,((5,(6,(7,8))))),((10,(9,11)),(4,(13,(3,0,2,1))))))));
214	3,380	MP	(18,(11,((12,(0,(1,(2,3))))),((13,((17,(16,(14,15))),((8,(9,10)),(7,(4,(5,6))))))));
		ML	(18,(17,((16,(14,15)),(4,((13,(3,0,2,1))),((12,((11,(9,10)),(5,(7,(6,8))))))));
215	11,992	MP	(18,((16,17),((6,(5,(4,(0,(2,(1,3))))),((15,(14,((12,(10,11)),(13,(9,(7,8))))))));
		ML	(18,((13,(2,3,0,1)),((4,(12,(17,(16,(14,15))))),((11,(9,10)),(7,(8,(5,6))))))));
216	11,235	MP	(18,(6,((8,(7,(5,(17,(12,(10,11))))),((9,(4,((16,(14,15)),(13,((2,3),(1,0))))))));
		ML	(18,((17,(16,(14,15))),((11,(9,10)),(5,(6,(7,8))),((12,(4,(13,(0,(1,3,2))))))));
217	4,205	MP	(18,(16,(11,((4,(5,6)),(10,(8,9))),((7,(13,(17,(14,15))),((12,((2,3),(1,0))))))));
		ML	(18,((13,(0,(3,1,2))),((4,((12,((16,17),(14,15))),((10,(9,11)),(8,(7,(5,6))))))));
218	8,844	MP	(18,((17,(15,16)),(14,(13,((5,(4,((1,3),(2,0))))),((10,(11,12)),(6,(9,(7,8))))))));
		ML	(18,((17,(16,(14,15))),((12,((4,(13,(0,(3,2,1))))),((10,(9,11)),(5,(8,(6,7))))))));
219	18,577	MP	(18,(17,((4,(16,(14,15))),((1,3),(2,0))),((12,((11,(9,10)),(13,(5,(8,(6,7))))))));
		ML	(18,((17,(16,(14,15))),((9,(10,11)),(5,(7,(6,8))),((12,(4,(13,(0,(2,(1,3))))))));
220	1,632	MP	(18,(9,(13,((17,(16,(14,15))),((4,((2,3),(1,0))),((11,(10,12)),(8,(7,(5,6))))))));
		MP	(18,(12,((4,(11,(9,10))),((5,(6),(7,8))),((14,(17,(15,16))),(13,(0,(1,(2,3))))))));
		ML	(18,(13,(0,(2,1,3)),(4,((12,(17,(16,(14,15))),((9,(10,11)),(6,(8),(5,7))))))));
221	4,526	MP	(18,((2,(3,(1,0))),((11,(12,((16,(17,(15,(13,14))))),((8,(9,10)),((4,5),(6,7))))))));
		ML	(18,((9,(10,11)),(5,(8,(6,7))),((12,((4,(17,(16,(14,15))),(13,(0,(1,2,3))))))));
222	17,101	MP	(18,((17,(16,(14,15))),((13,((5,(4,(0,(3,(1,2))))),((12,(10,11)),(6,(8,(7,9))))))));

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
223	6,326	ML	(18,((4,(13,(0,(3,2,1))))),(12,(17,(16,(14,15)))),(9,(10,11)),(5,(8,(6,7)))));
		MP	(18,((16,17),(14,15),(13,(12,(0,(2,(1,3))))),(4,7),(5,6),(11,(10,(8,9)))));
224	9,367	ML	(18,(17,(16,(14,15)),(12,(4,(13,(0,(2,(1,3))))),(11,(9,10)),(5,(6,(7,8)))));
		MP	(18,(17,(16,(14,15)),(5,(4,(2,(3,(1,0))))),(13,(10,(9,11)),(8,(12,(6,7)))));
225	9,840	ML	(18,(17,(12,(16,(14,15))),4,(13,(0,(1,3,2))),((10,(9,11)),(5,(6,(7,8)))));
		MP	(18,(17,(16,(14,15)),(5,(4,(3,(0,(1,2))))),(13,(9,(6,(7,8)),(12,(10,11)))));
226	16,444	ML	(18,((9,(10,11)),(12,(17,(16,(14,15)))),(5,(6,(7,8))),4,(13,(0,(3,2,1)))));
		MP	(18,(13,(12,((10,(8,9)),(7,(6,(4,5))))),(1,(2,(3,0))),11,(17,(16,(14,15)))));
227	9,920	ML	(18,(17,(16,(14,15)),(12,(4,(13,(0,(2,3,1))))),(9,(10,11)),(5,(7,(6,8)))));
		MP	(18,(14,(17,(15,16)),(5,(4,(0,(2,(1,3))))),(13,(12,(10,11)),(9,(8,(6,7)))));
228	1,2471	ML	(18,(17,(16,(14,15)),((9,(10,11)),(8,(5,(6,7))),12,(4,(13,(0,(3,2,1)))));
		MP	(18,(17,(16,(14,15)),(5,(4,(3,(0,(1,2))))),(13,(10,(11,12)),(9,(6,(7,8)))));
229	1,7751	ML	(18,((17,(16,(14,15))),12,(5,(7,(6,8))),10,(9,11)),4,(13,(0,(1,2,3)))));
		MP	(18,((17,(16,(14,15))),((11,(9,10)),(7,(6,(4,5))),8,(13,(12,(1,(3,(2,0))))));
230	7,613	MP	(18,(7,((11,(9,10)),(17,(14,(12,13))),8,(4,(5,6))),15,(16,(1,(3,(2,0)))));
		ML	(18,(4,(2,(0,(1,3))),13,(10,(9,11)),(5,(6,(7,8))),12,(17,(16,(14,15)))));
		MP	(18,((17,(16,(14,15))),13,(12,(4,(3,(0,(1,2))))),(9,(10,11)),(5,(8,(6,7)))));
231	22,638	ML	(18,(17,(16,(14,15)),((10,(9,11)),(5,(8,(6,7))),12,(4,(13,(2,(0,(1,3))))));
		MP	(18,((16,(14,15)),17,(4,(13,(2,(3,(1,0))))),(7,(5,6)),12,(8,(11,(9,10)))));
232	9,763	ML	(18,((17,(16,(14,15))),12,(4,(13,(0,(2,(1,3))))),(9,(10,11)),(5,(7,(6,8)))));
		MP	(18,((17,(15,16)),14,(5,(4,(2,3),(1,0))),6,(7,(8,9)),10,(13,(11,12)))));
233	3,923	ML	(18,(17,(16,(14,15)),12,(4,(13,(0,(1,2,3))))),(9,(10,11)),(5,(6,(7,8)))));
		MP	(18,(17,(16,(14,15)),(12,(4,(1,(3,(2,0))))),(13,(11,(9,10)),(5,(8,(6,7)))));
		ML	(18,(17,(16,(14,15)),12,(13,(4,(1,3),(2,0))),11,(9,10)),(5,(6,(7,8)))));
234	14,445	MP	(18,((17,(16,(14,15))),4,(13,(0,2,3,1))),12,(9,(10,11)),(5,(8,(6,7)))));
		ML	(18,(17,(16,(14,15)),13,(11,(12,(2,3),(1,0))),8,(9,10)),4,(6,(5,7)))));
235	6,589	ML	(18,((12,(17,(16,(14,15))),4,(13,(0,(3,1,2))),9,(10,11)),(5,(8,(6,7)))));
		MP	(18,(17,(12,(4,(2,3),(1,0))),13,(5,6),(16,(14,15)),(7,8),(11,(9,10)))));
236	4,760	ML	(18,((5,(8,(6,7))),10,(9,11)),12,(17,(16,(14,15))),4,(13,(1,0,2,3)))));
		MP	(18,(17,(12,(13,14)),6,(15,16),(3,(1,(2,0))),4,(5,7)),9,(10,(8,11)))));
237	4,378	ML	(18,((17,(16,(14,15))),10,(9,11)),12,(5,(8,(6,7))),4,(13,(3,2,0,1)))));
		MP	(18,(16,(15,(13,14)),(4,(0,(3,(1,2))),11,(12,(9,(8,10))),5,(17,(6,7)))));
238	5,168	ML	(18,(17,(16,(14,15)),12,(5,(6,(7,8))),9,(10,11)),4,(13,(2,0,(1,3)))));
		MP	(18,((17,(16,(14,15))),5,(4,(13,(2,(3,(1,0))))),(10,(11,12)),(9,(6,(7,8)))));
239	4,004	ML	(18,((17,(16,(14,15))),12,(4,(13,(0,2,1,3))),9,(10,11)),(5,(6,(7,8)))));
		MP	(18,((17,(16,(14,15))),13,(5,(4,(0,(3,(1,2))))),(12,(10,11)),9,(8,(6,7)))));
240	6,971	ML	(18,(12,(4,(13,(0,1,2,3))),17,(16,(14,15)),10,(9,11)),(5,(8,(6,7)))));
		MP	(18,((17,(16,(14,15))),4,(2,(3,(1,0))),13,(12,(11,(9,10))),8,(7,(5,6)))));
		ML	(18,(17,(16,(14,15)),(5,(7,(6,8))),12,(11,(9,10)),4,(13,(0,2,(1,3)))));

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
241	10,790	MP	(18,((16,(14,15)),((13,(11,((1,2),(3,0))))),(6,7),(5,(4,((12,17),(10,(8,9))))))));
		ML	(18,(17,((16,(14,15)),(12,((5,(6,(7,8))),((10,(9,11)),(4,(13,(2,0,1,3))))))));
242	3,407	MP	(18,((16,17),(8,((9,(10,11)),(4,(7,(5,6))))),(12,(14,15)),(13,(0,(3,(1,2))))));
		ML	(18,(13,((0,2,1,3),(4,((8,(5,(6,7))),((9,(10,11)),((12,17),(16,(14,15))))))));
243	7,533	MP	(18,(17,((16,(14,15)),((5,(4,(0,(3,(1,2))))),(13,(11,12)),(10,(6,(7,(8,9))))))));
		MP	(18,((5,((1,2),(3,0))),((12,(10,11)),((9,(6,(7,8))),(17,(15,(16,(4,(13,14))))))));
		ML	(18,((17,(16,(14,15))),((0,(1,2,3)),((10,(9,11)),((4,13),(12,(5,(7,(6,8))))))));
244	5,858	MP	(18,((16,17),(13,14),(11,(9,10)),(6,(5,(7,8))),((4,(12,15)),(0,(1,(2,3))))));
		ML	(18,((7,(8,(5,6))),((0,(2,1,3)),((13,(4,12)),((10,(9,11)),(17,(16,(14,15))))))));
245	11,791	MP	(18,((16,(14,15)),(13,((10,(11,12)),(9,(8,(6,7))),(5,((4,17),(1,(0,(2,3))))))));
		ML	(18,(17,((16,(14,15)),(12,((4,(13,(3,2,0,1))),((9,(10,11)),(6,(5,(7,8))))))));
246	2,714	MP	(18,(17,((5,((1,2),(3,0))),(13,((6,(10,(8,9))),((7,(11,12)),(4,(16,(14,15))))))));
		ML	(18,(17,((16,(14,15)),(12,((4,(5,(8,(6,7))),((11,(9,10)),(13,(0,(3,1,2))))))));
247	5,800	MP	(18,((17,(15,16)),(14,((13,(12,(1,(3,(2,0))))),(8,((10,(9,11)),(4,(5,(6,7))))))));
		ML	(18,((17,(16,(14,15))),((5,(7,(6,8))),((11,(9,10)),(12,(4,(13,(0,(3,2,1))))))));
248	1,203	MP	(18,((4,(7,(5,6))),(8,((12,(10,11)),((0,(2,(1,3))),((13,(9,14),(17,(15,16))))))));
		ML	(18,((5,(17,(16,(14,15))),((12,((6,(7,8))),(13,(4,((10,(9,11)),(0,1,2,3))))))));
249	8,583	MP	(18,(17,((12,(11,13)),(4,(6,(5,7))),(9,((0,(1,(2,3))),((10,(8,(16,(14,15))))))));
		ML	(18,((17,(16,(14,15))),((12,(8,(6,(5,7))),(4,((10,(9,11)),(13,(0,1,3,2))))))));
250	1,447	MP	(18,((9,(7,(5,6))),((4,(0,(1,(2,3))),((13,((10,(11,12)),(8,(17,(16,(14,15))))))));
		ML	(18,((17,(16,(14,15))),((13,(0,3,1,2)),((4,12),((10,(9,11)),(8,(6,(5,7))))))));
251	23,433	MP	(18,(12,((10,(8,9)),((13,(17,(16,(14,15))),((7,(4,(5,6))),(11,(0,(3,(1,2))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,1,3,2))),((12,((9,(10,11)),(5,(6,(7,8))))))));
252	13,753	MP	(18,((0,(3,(1,2))),((12,((13,(11,(9,10))),((5,(7,(4,6))),(8,(17,(16,(14,15))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,2,(1,3))),((12,((10,(9,11)),(5,(8,(6,7))))))));
253	28,468	MP	(18,((17,(15,(13,14))),((12,((8,(1,(0,(2,3))),((7,(16,((4,(5,6))),(11,(9,10))))))));
		ML	(18,((4,(13,(1,0,2,3))),((10,(9,11)),((5,(6,(7,8))),(12,(17,(16,(14,15))))))));
254	8,722	MP	(18,((17,(16,(14,15))),((13,((12,(4,(0,(3,(1,2))))),(11,(9,10)),(8,(7,(5,6))))))));
		ML	(18,((0,1,2,3),(13,(4,((9,(10,11)),((7,(8,(5,6))),(12,(17,(16,(14,15))))))));
255	19,319	MP	(18,((17,(16,(14,15))),((13,((12,(4,(0,(1,(2,3))))),(11,(9,10)),(5,(8,(6,7))))))));
		ML	(18,((17,(16,(14,15))),((12,((13,(4,(0,3,2,1))),((9,(10,11)),(8,(6,(5,7))))))));
256	4,293	MP	(18,((16,(14,15)),(17,((4,(13,(0,(2,(1,3))))),(12,((9,(10,11)),(5,(8,(6,7))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(1,2,0,3))),((12,((9,(10,11)),(5,(8,(6,7))))))));
257	13,007	MP	(18,((16,(14,15)),(13,((4,17),(0,(3,(1,2))),((12,((11,(9,10)),(5,(8,(6,7))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,1,2,3))),((12,((10,(9,11)),(5,(8,(6,7))))))));
258	9,871	MP	(18,((14,(17,(15,16))),((12,13),((4,(7,(5,6))),((10,(9,11)),(8,(3,(2,(1,0))))))));
		ML	(18,(17,((16,(14,15)),((4,(13,(0,1,2,3))),((12,((9,(10,11)),(5,(8,(6,7))))))));
259	3,647	MP	(18,((17,(0,(1,(2,3))),((13,(8,((12,(16,(14,15))),((11,(9,10)),(7,(5,(4,6))))))));
		MP	(18,(17,((16,(14,15)),((13,(4,(0,(2,(1,3))))),(12,((11,(9,10)),(5,(6,(7,8))))))));

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
260	9,626	ML	(18,(17,((16,(14,15)),((13,(0,(1,2,3))),4,(12,((10,(9,11)),(5,(8,(6,7)))))))));
		MP	(18,(17,((16,(14,15)),(12,((13,(4,((1,3),(2,0))),((9,(10,11)),(8,(7,(5,6)))))))));
261	6,554	ML	(18,(17,((16,(14,15)),((9,(10,11)),(5,(7,(6,8))),12,(4,(13,(0,(3,1,2)))))))));
		MP	(18,((16,17),((1,2),(3,0)),((7,(5,6)),9,((12,(10,11)),13,((4,8),(14,15))))))));
262	1,829	ML	(18,(11,(10,9,((2,1,0,3)),((4,13),(12,((5,(8,(6,7))),17,(16,(14,15)))))))));
		MP	(18,(13,((14,(17,(15,16))),12,((4,(0,(1,(2,3))),5,((8,(6,7)),11,(9,10))))))));
263	22,464	ML	(18,(12,((4,(13,(3,0,1,2))),17,(16,(14,15))),10,(9,11)),5,(7,(6,8))))));
		MP	(18,((17,(13,14)),16,((9,15),(8,(6,7))),10,(11,12)),4,(5,((1,3),(2,0))))));
264	14,861	ML	(18,((17,(16,(14,15))),((4,(13,(0,(2,(1,3))))),12,((10,(9,11)),8,(6,(5,7))))));
		MP	(18,((3,(0,(1,2))),((7,(5,6)),13,(4,((17,(16,(14,15))),8,12),(11,(9,10))))));
265	13,293	ML	(18,((13,(3,0,2,1)),((4,(10,(9,11))),5,(8,(6,7))),12,(17,(16,(14,15))))));
		MP	(18,(13,((0,(3,(1,2))),11,((12,(17,(16,(14,15))),8,(9,10)),7,(4,(5,6))))));
266	2,467	ML	(18,(17,((16,(14,15)),12,((5,8),(6,7)),4,(10,(9,11))),13,(1,3,0,2))))));
		MP	(18,((16,17),((9,(11,(10,12))),6,(5,7)),8,14),4,((2,3),(13,15),(1,0))))));
267	2,260	ML	(18,(17,((16,(14,15)),((4,(13,(0,2,1,3))),12,((10,(9,11)),8,(7,(5,6))))));
		MP	(18,((16,(14,15)),17,(13,((5,(4,((2,3),(1,0))),11,(10,12)),9,(7,(6,8))))));
268	4,118	ML	(18,(17,((16,(14,15)),((4,(13,(0,(3,2,1))),10,(9,11)),12,(5,(8,(6,7))))));
		MP	(18,((11,(10,(8,9))),13,((12,(0,(3,(1,2))),16,(14,15)),7,(17,(4,(5,6))))));
269	13,105	ML	(18,(17,((16,(14,15)),((11,(9,10)),5,(8,(6,7))),12,(13,(4,(0,1,3,2))))));
		MP	(18,((17,(16,(14,15))),13,((5,(4,(1,(2,(3,0))),12,(10,11)),6,(9,(7,8))))));
270	20,985	ML	(18,(17,((16,(14,15)),((4,(2,(0,(1,3))),13,(9,(10,11)),12,((5,6),(7,8))))));
		MP	(18,(17,((16,(14,15)),5,(4,(2,(3,(1,0))),13,((12,(10,11)),9,(6,(7,8))))));
271	10,436	ML	(18,((17,(16,(14,15))),12,((4,(13,(2,(0,(1,3))),10,(9,11)),5,(8,(6,7))))));
		MP	(18,((14,(12,13)),16,((15,(4,(0,(3,(1,2))),17,((11,(9,10)),5,(8,(6,7))))));
272	3,882	ML	(18,((17,(16,(14,15))),12,((4,(13,(1,3),(0,2))),11,(9,10)),8,(5,(6,7))))));
		MP	(18,((14,(12,13)),16,((15,(4,(0,(3,(1,2))),17,((11,(9,10)),5,(8,(6,7))))));
		MP	(18,(17,((16,(14,15)),5,(4,(0,(2,(1,3))),13,((10,(11,12)),9,(6,(7,8))))));
		MP	(18,(13,((5,(4,(0,(2,(1,3))),17,(16,(14,15))),12,(10,11)),9,(7,(6,8))))));
		ML	(18,(15,(14,(16,(17,(12,((4,(13,(1,3),(0,2))),9,(10,11)),5,(8,(6,7)))))))));
273	6,231	MP	(18,((12,(0,(3,(1,2))),17,(13,(16,(14,15))),4,((11,(9,10)),5,(6,(7,8))))));
		ML	(18,((13,(2,0,1,3)),4,((12,(17,(16,(14,15))),10,(9,11)),5,(6,(7,8))))));
274	11,251	MP	(18,((5,(4,(0,(2,(1,3))),9,(6,(7,8))),13,((10,(11,12)),17,(16,(14,15))))));
		ML	(18,((12,(16,(14,15))),17,((4,(13,(1,0,2,3))),9,(10,11)),7,(8,(5,6))))));
275	7,695	MP	(18,((17,(16,(14,15))),4,(5,(0,(1,(2,3))),13,((10,(11,12)),9,(7,(6,8))))));
		MP	(18,((17,(16,(14,15))),5,(4,((2,3),(1,0))),13,((12,(10,11)),6,(9,(7,8))))));
		ML	(18,(17,((12,(16,(14,15))),4,(13,(0,3,2,1))),10,(9,11)),8,(5,(6,7))))));
276	29,440	MP	(18,((17,(16,(14,15))),13,((12,(4,((1,3),(2,0))),10,(9,11)),5,(8,(6,7))))));
		ML	(18,(17,((16,(14,15)),12,((4,(13,(0,(3,1,2))),10,(9,11)),5,(6,(7,8))))));
277	963	MP	(18,((13,(14,(15,(16,17))),((1,2),(3,0)),5,11),7,((12,(4,6)),8,(9,10))))));

Table S1: Vibrionaceae 19–taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
278	16,240	ML	(18,(17,((16,(14,15)),((4,(13,(0,3,1,2))),((5,(8,(6,7))),((12,(11,(9,10)))))))));
		MP	(18,((9,(8,10)),((4,11),(7,(5,6))),((17,(16,(14,15))),((12,13),(0,(3,(1,2)))))))));
		MP	(18,((14,(17,(15,16))),((4,(1,(2,(3,0))))),((11,(9,10)),(5,((12,13),(8,(6,7)))))))));
279	9,934	ML	(18,(17,((16,(14,15)),(12,((4,(13,((1,3),(0,2))),((10,(9,11)),(5,(7,(6,8)))))))));
		MP	(18,((4,(8,(12,(14,(15,16))))),((2,(3,(1,0))),(17,(13,((5,(6,7)),(11,(9,10)))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,(1,2,3))))),((10,(9,11)),(12,((5,6),(7,8))))));
280	25,764	MP	(18,((17,(16,(14,15))),((13,(4,((1,2),(3,0))))),((12,(11,(9,10)),(5,(7,(6,8)))))))));
		ML	(18,((12,(17,(16,(14,15))))),((13,(4,(0,(2,(1,3))))),((10,(9,11)),(8,(5,(6,7))))));
281	6,358	MP	(18,((17,(16,(14,15))),((5,(4,(1,(0,(2,3))))),((13,(12,(10,11)),(9,(8,(6,7)))))))));
		ML	(18,((16,(14,15)),(17,(12,((8,(5,(6,7))),((11,(9,10)),(4,(13,(2,(0,(1,3))))))))));
282	7,806	MP	(18,((5,(4,(0,(3,(1,2))))),((17,(16,(14,15))),((13,((10,(11,12)),(6,(9,(7,8)))))))));
		ML	(18,((17,(16,(14,15))),(12,((5,6),(7,8))),((10,(9,11)),(4,(13,(2,(0,1,3))))));
283	5,314	MP	(18,((17,(16,(14,15))),((5,(4,(3,(0,(1,2))))),((12,(10,11)),(13,(6,(7,(8,9)))))))));
		MP	(18,((17,(16,(14,15))),((5,(4,(0,(1,(2,3))))),((13,(12,(10,11)),(9,(8,(6,7)))))))));
		MP	(18,((13,(17,(16,(14,15))))),((5,(4,(3,(1,(2,0))))),((11,(10,12)),(6,(8,(7,9))))));
284	5,126	ML	(18,((16,(14,15)),(17,(4,((13,(2,(0,(1,3))))),((10,(9,11)),(12,(5,(8,(6,7)))))))));
		MP	(18,(17,((16,(15,(13,14))),((12,(8,((1,2),(3,0))))),((9,(10,11)),(4,(5,(6,7)))))))));
		ML	(18,(17,((16,(14,15)),(12,((13,(4,(0,(2,(1,3))))),((11,(9,10)),(5,(8,(6,7)))))))));
285	1,3804	MP	(18,((17,(16,(14,15))),((12,(10,11)),(6,(7,(8,9))),((13,(5,(4,((1,3),(2,0)))))))));
		ML	(18,((16,(14,15)),(17,(12,((4,(13,(0,(2,3,1))))),((10,(9,11)),(8,(7,(5,6)))))))));
286	30,507	MP	(18,(5,((4,(0,(1,(2,3))))),((13,(14,(17,(15,16))))),((12,(10,11)),(6,(7,(8,9))))));
		ML	(18,((4,(13,(0,(3,2,1))))),((12,(17,(16,(14,15))))),((9,(10,11)),(8,(5,(6,7))))));
287	5,736	MP	(18,((9,(7,((6,8),(13,(10,(11,12))))),((17,(16,(14,15))),(5,(4,(0,(1,(2,3)))))))));
		ML	(18,((17,(16,(14,15))),(12,((8,(7,(5,6))),((11,(9,10)),(4,(13,((1,3),(0,2)))))))));
288	2,046	MP	(18,((17,(16,(14,15))),((5,(4,(0,(3,(1,2))))),((13,(12,(10,11)),(6,(8,(7,9)))))))));
		ML	(18,(3,1,((0,2),(13,(4,((9,(10,11)),((5,(7,(6,8))),((17,(12,(16,(14,15))))))))));
289	1,152	MP	(18,((17,(16,(14,15))),((10,(13,(11,12))),((4,(7,(5,6))),(8,(9,((1,3),(2,0)))))))));
		MP	(18,(5,((6,((13,(11,12)),(7,(10,(8,9))))),((17,((4,(16,(14,15))),((0,(1,(2,3)))))))));
		MP	(18,(17,((6,(4,(11,((1,3),(2,0))))),((16,(14,15)),((5,(7,13)),(12,(10,(8,9)))))))));
		ML	(18,((17,(16,(14,15))),(12,((4,(13,((1,3),(0,2))))),((11,(9,10)),(5,(7,(6,8)))))))));
290	10,570	MP	(18,(17,((16,(14,15)),((9,(4,((2,3),(1,0))))),((8,(5,(6,7))),((13,(11,(10,12)))))))));
		ML	(18,(17,((16,(14,15)),(12,((4,(13,((1,3),(0,2))))),((11,(9,10)),(5,(7,(6,8)))))))));
291	5,713	MP	(18,((16,(14,15))),((10,(11,12)),(9,(7,(6,8))),((13,17),(5,(4,((2,3),(1,0)))))))));
		ML	(18,((17,(16,(14,15))),(12,((4,(13,(2,0,1,3))),((10,(9,11)),(5,(6,(7,8)))))))));
292	7,861	MP	(18,((8,(6,7)),(13,(12,(10,11))),((9,(14,(17,(15,16))))),((5,(4,(0,(1,(2,3)))))))));
		ML	(18,((12,(17,(16,(14,15))))),((4,(13,(0,1,2,3))),((9,(10,11)),(7,(8),(5,6)))));
293	30,825	MP	(18,(11,((4,(5,(6,7))),((17,(10,(8,9))),((0,(2,(1,3))),((12,13),(16,(14,15)))))))));
		ML	(18,((17,(16,(14,15))),((4,(13,(0,(2,(1,3))))),((12,(9,(10,11)),(5,(7,(6,8)))))))));
294	8,398	MP	(18,(17,((4,(7,8)),(12,(10,11))),((6,(3,(2,(1,0))),((9,(5,13),(16,(14,15)))))))));

Table S1: Vibrionaceae 19-taxon large chromosome dataset LCBs and trees (continued).

LCB	Aligned bp	Algorithm	Tree topologies (Newick)
295	3,013	ML	(18,(17,((16,(14,15)),(12,((4,(13,(2,0,1,3))),((11,(9,10)),(5,(8,(6,7)))))))));
		MP	(18,(((10,(8,9)),(12,(7,(5,(4,6))))),(17,(16,((11,(15,(13,14))),(0,(3,(1,2)))))))));
296	29,352	MP	(18,((14,(17,(15,16))),((5,(0,(2,(1,3))),((10,(11,12)),(13,((4,6),(9,(7,8)))))))));
		ML	(18,(6,(8,(7,(5,((10,(9,11)),((12,(16,(14,15))),(17,(4,(13,(3,1,0,2)))))))))))));
297	945	MP	(18,((17,(16,(14,15))),((5,(4,(0,(1,(2,3))))),(13,((12,(10,11)),(6,(7,(8,9)))))))));
		ML	(18,(17,((16,(14,15)),((4,(13,(0,(1,3,2))))),(12,((11,(9,10)),(5,(6,(7,8)))))))));
298	1,916	MP	(18,((17,(16,(14,15))),((13,(4,(0,(3,(1,2))))),(11,(9,10)),(12,(5,(6,(7,8)))))))));
		ML	(18,((16,(14,15)),(17,(12,((4,(13,(0,(2,(1,3))))),(10,(9,11)),(8,(6,(5,7)))))))));
299	24,454	MP	(18,((5,(4,((13,(11,12)),(10,(9,(7,8))))),(17,((16,(14,15)),(6,(3,(1,(2,0)))))))));
		ML	(18,((17,(16,(14,15))),((5,(4,(0,(1,(2,3))))),(6,(7,8)),(13,(12,(11,(9,10)))))))));
300	14,405	MP	(18,((12,(17,(16,(14,15))),((4,(13,(0,3,1,2))),((10,(9,11)),(5,(7,(6,8)))))))));
		ML	(18,((17,(16,(14,15))),(13,((5,(4,(2,3),(1,0))),((11,(10,12)),(6,(7,(8,9)))))))));
301	7,980	MP	(18,((17,(16,(14,15))),((4,(13,(0,(2,(1,3))))),(9,(10,11)),(12,(5,(8,(6,7)))))))));
		ML	(18,((17,(16,(14,15))),((5,(4,(1,(2,(3,0))))),(13,((11,(10,12)),(7,(9,(6,8)))))))));
302	4,579	MP	(18,((17,(16,(14,15))),((13,(4,(0,(1,2,3))),(12,((9,(10,11)),(5,(6,(7,8)))))))));
		ML	(18,((17,(16,(14,15))),((4,(5,(0,(3,(1,2))))),(10,(11,12)),(13,(9,(7,(6,8)))))))));
303	26,356	MP	(18,((13,(4,(0,(2,(1,3))))),(9,(10,11)),(5,(7,(6,8))),(12,(17,(16,(14,15))))))));
		ML	(18,((13,(6,(9,(7,8))),((4,(0,(2,(1,3))),((11,(10,12)),(5,(17,(16,(14,15)))))))));
304	36,797	MP	(18,(17,((16,(14,15)),(12,((4,(13,(0,3,2,1))),((10,(9,11)),(5,(6,(7,8)))))))));
		ML	(18,(((13,(12,(10,11))),(17,(16,(14,15))),((5,(9,(8,(6,7))),(4,(0,(3,(1,2)))))))));
305	9,437	MP	(18,((12,(17,(16,(14,15))),((4,(13,(3,1,(0,2))),((9,(10,11)),(5,(6,(7,8)))))))));
		ML	(18,((17,(4,(0,(2,(1,3))))),(14,((12,13),(15,16))),((11,(9,10)),(7,(5,(6,8)))))))));
306	19,956	MP	(18,((17,(16,(14,15))),((13,(4,(3,(0,1,2))),(12,((10,(9,11)),(8,(6,(5,7)))))))));
		ML	(18,(((16,(14,15)),(17,(2,(1,(3,0))))),(12,(4,13)),((11,(9,10)),(8,(7,(5,6)))))))));
306	19,956	MP	(18,((11,(9,10)),((13,(0,(3,(1,2))),((4,(7,(5,6))),((12,(8,14)),(17,(15,16)))))))));
		ML	(18,((4,(13,(2,1,0,3))),((11,(9,10)),((8,(7,(5,6))),(12,(17,(16,(14,15)))))))));
306	19,956	MP	(18,((17,(16,(14,15))),((9,(10,11)),(5,(8,(6,7))),((4,(12,13)),(0,(1,(2,3)))))))));
		ML	(18,(17,((16,(14,15)),((9,(10,11)),(5,(8,(6,7))),(12,(4,(13,(0,(2,1,3)))))))));