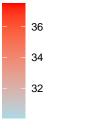


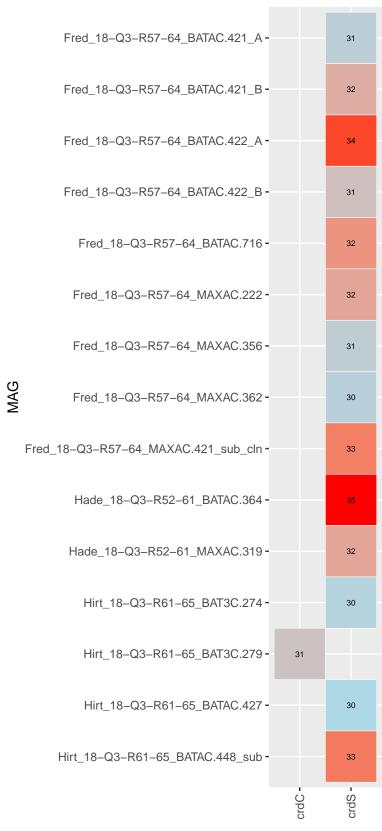




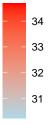
Percent Identity



curdlan Heatmap

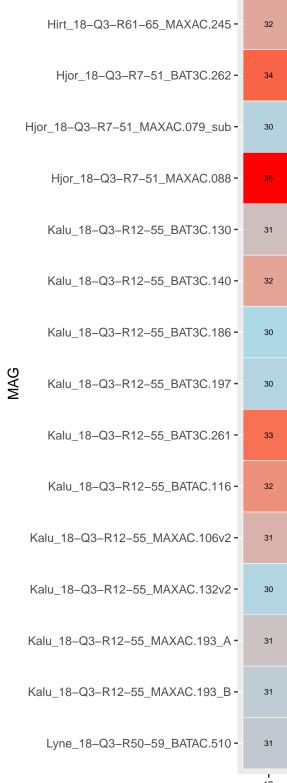


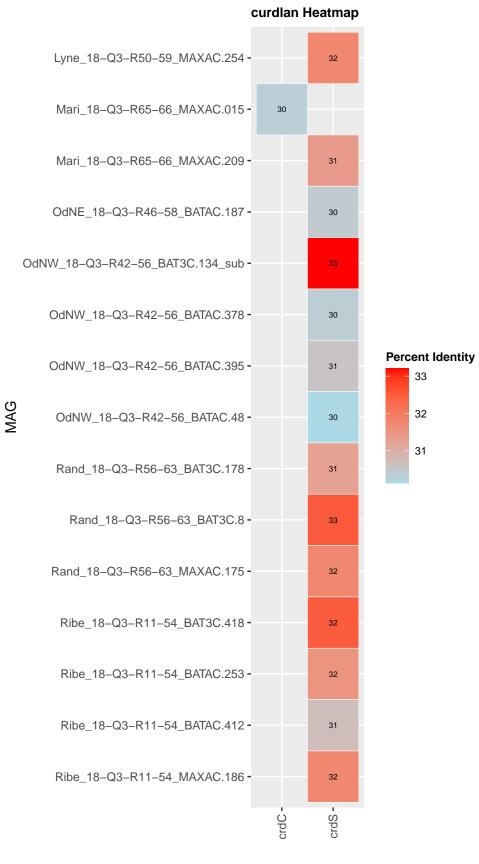
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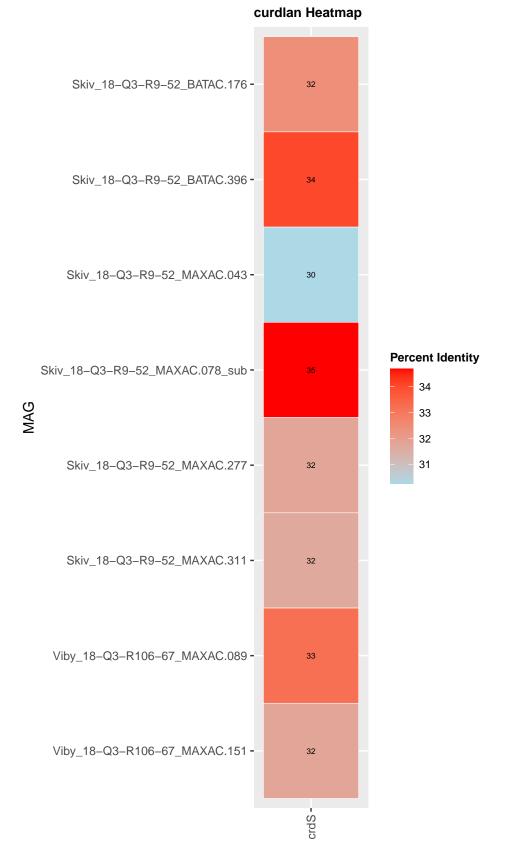


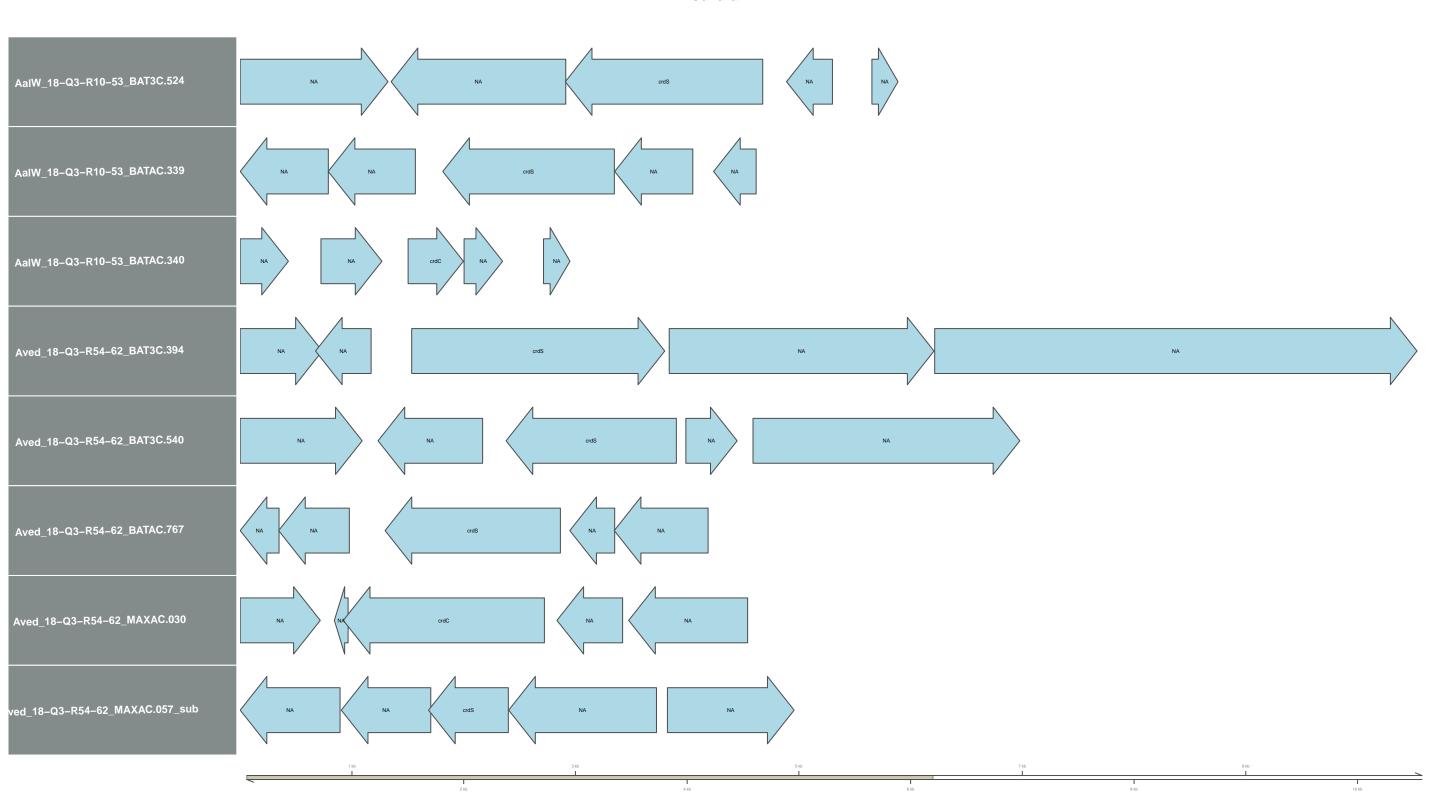
curdlan Heatmap

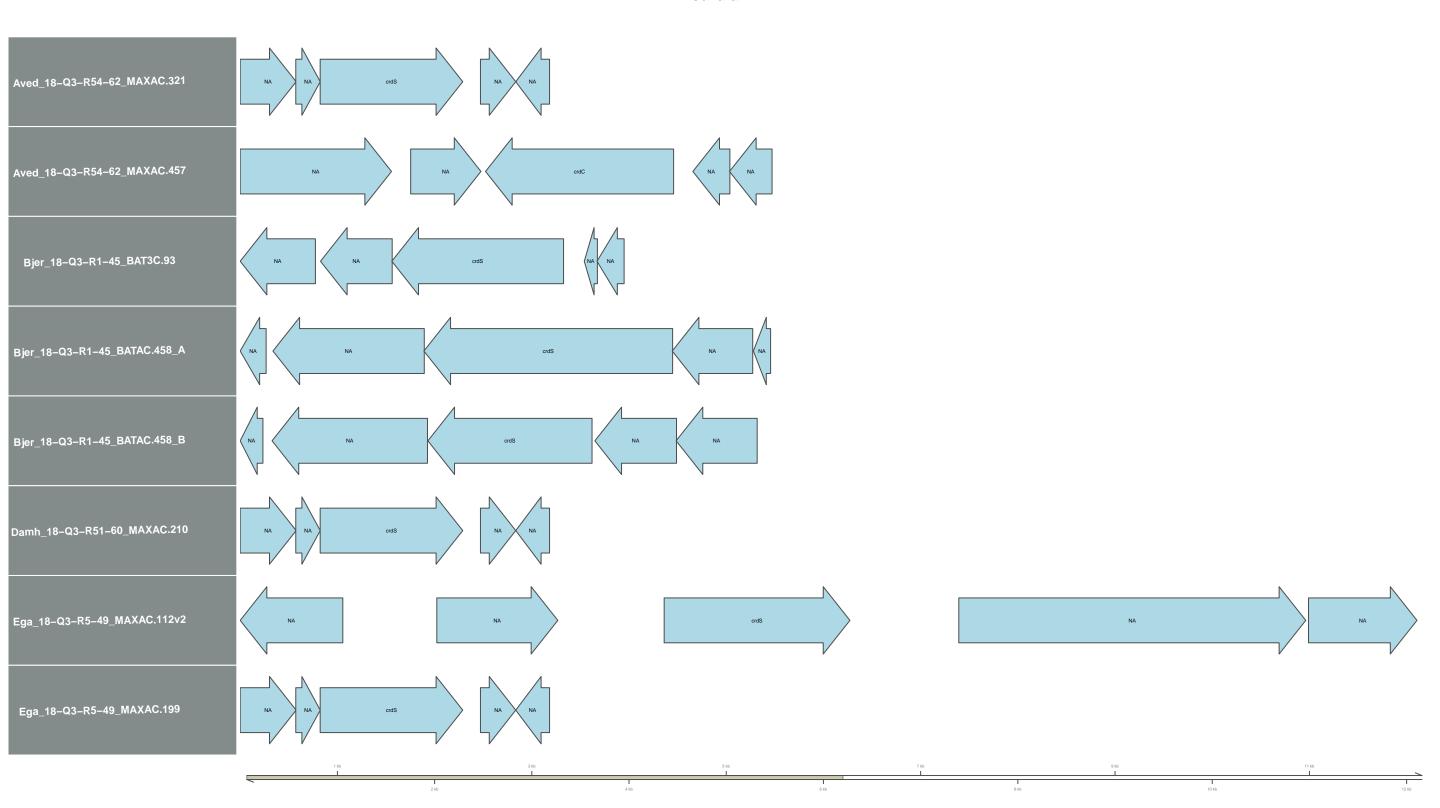
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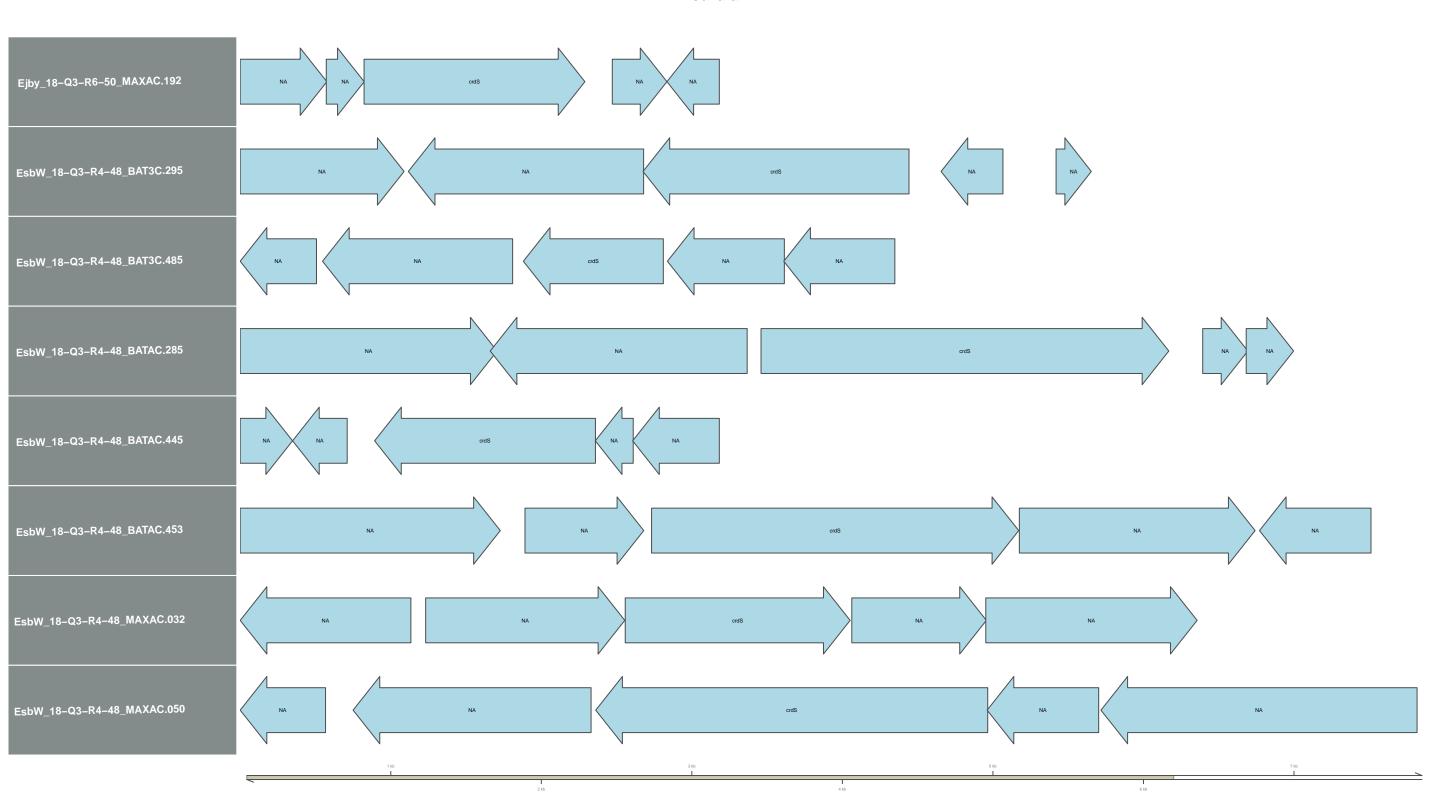


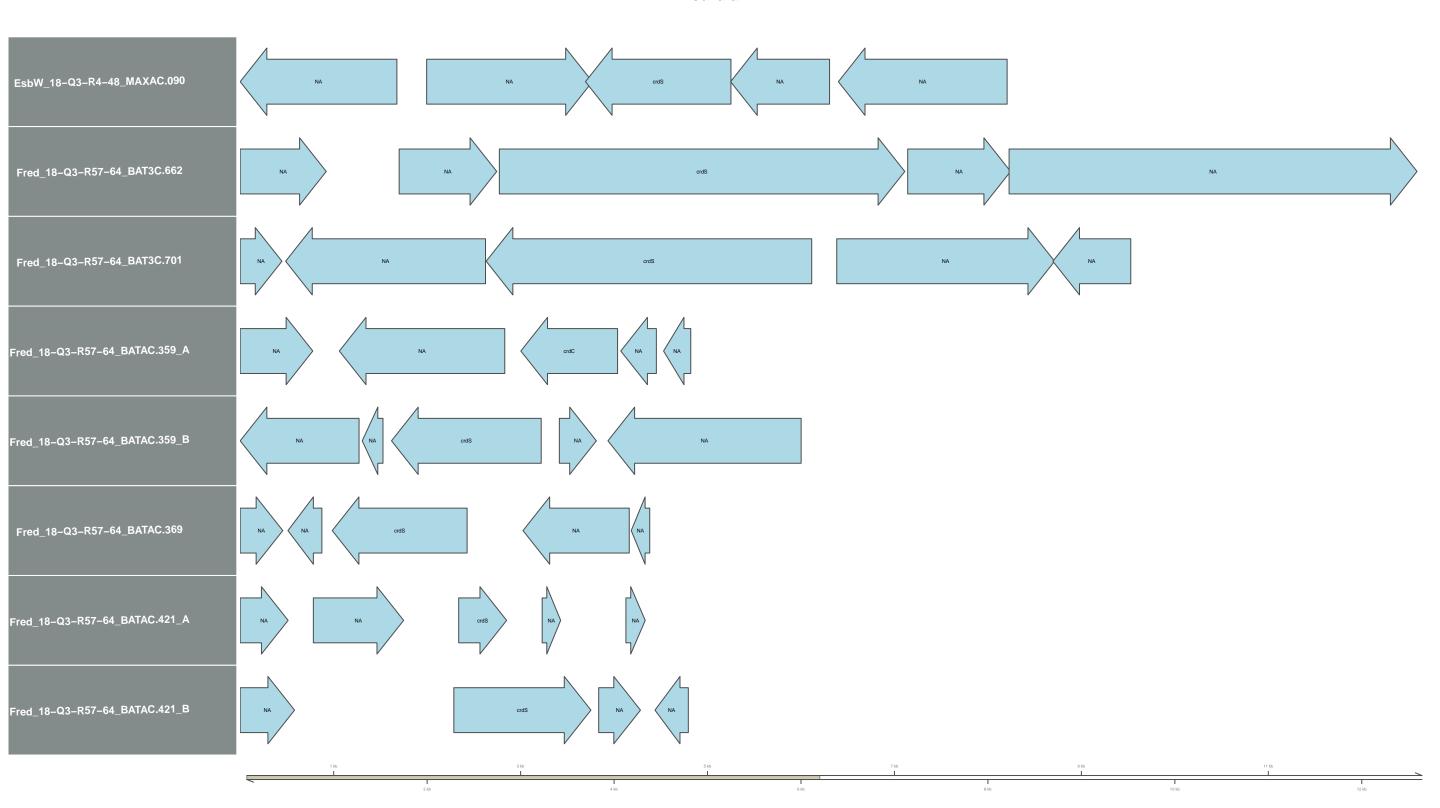


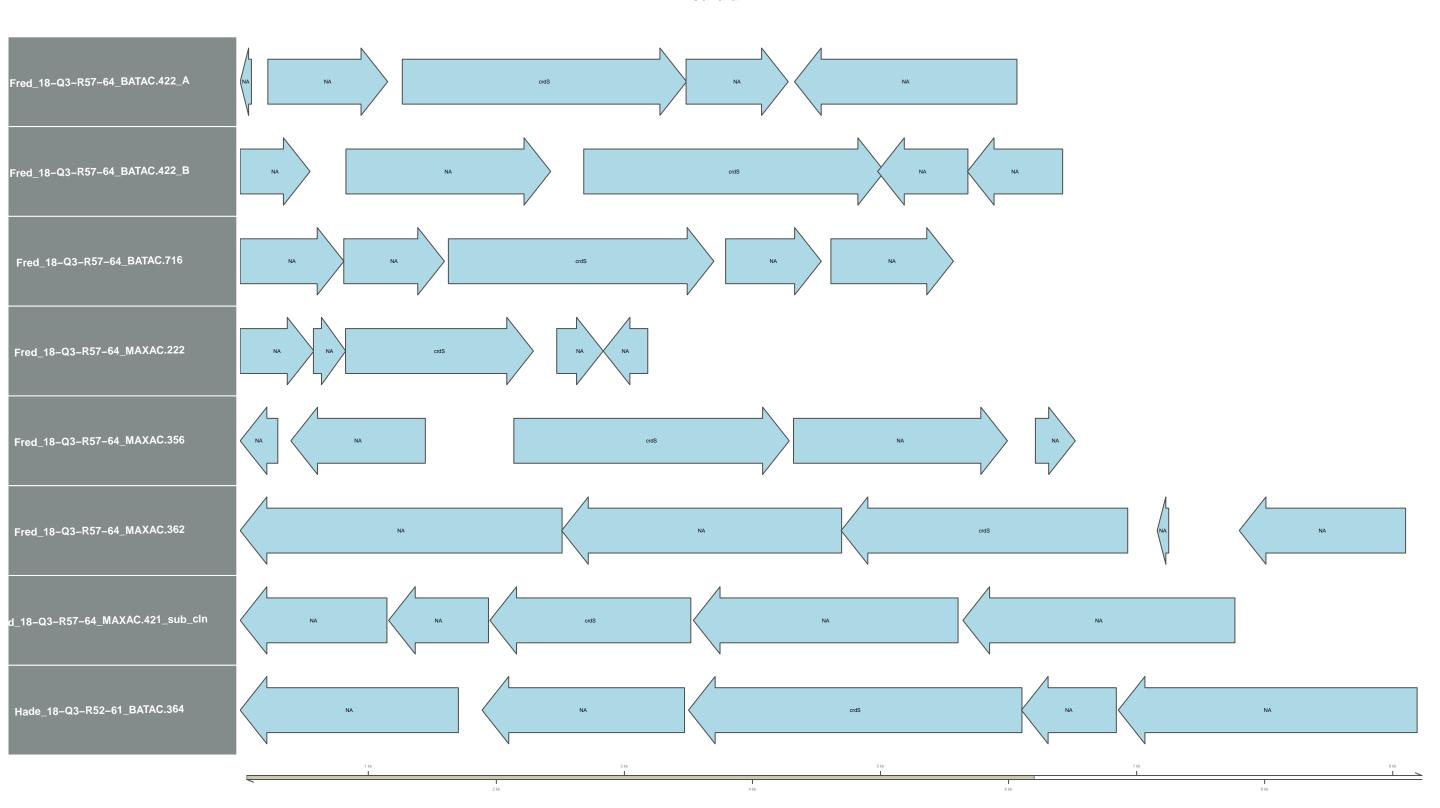


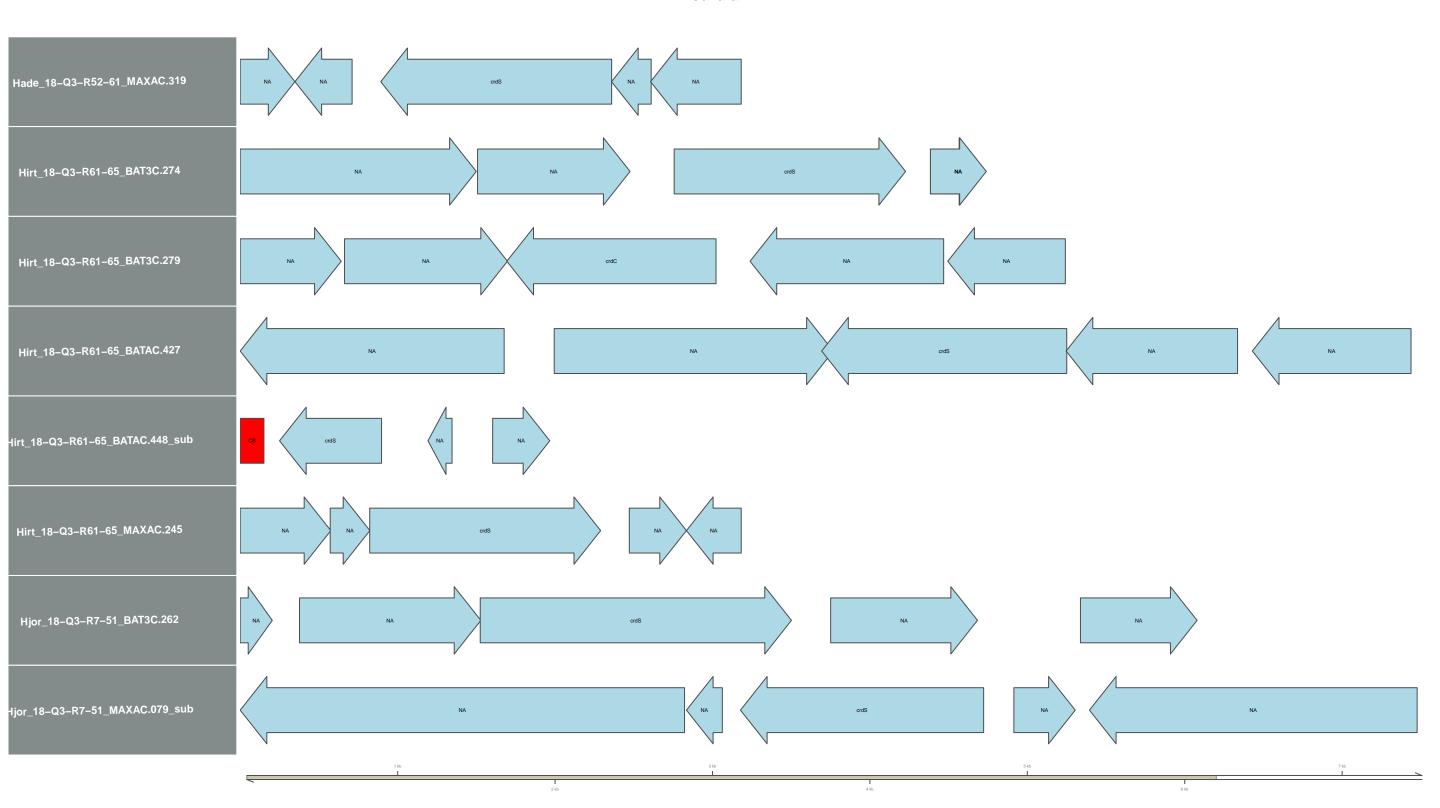


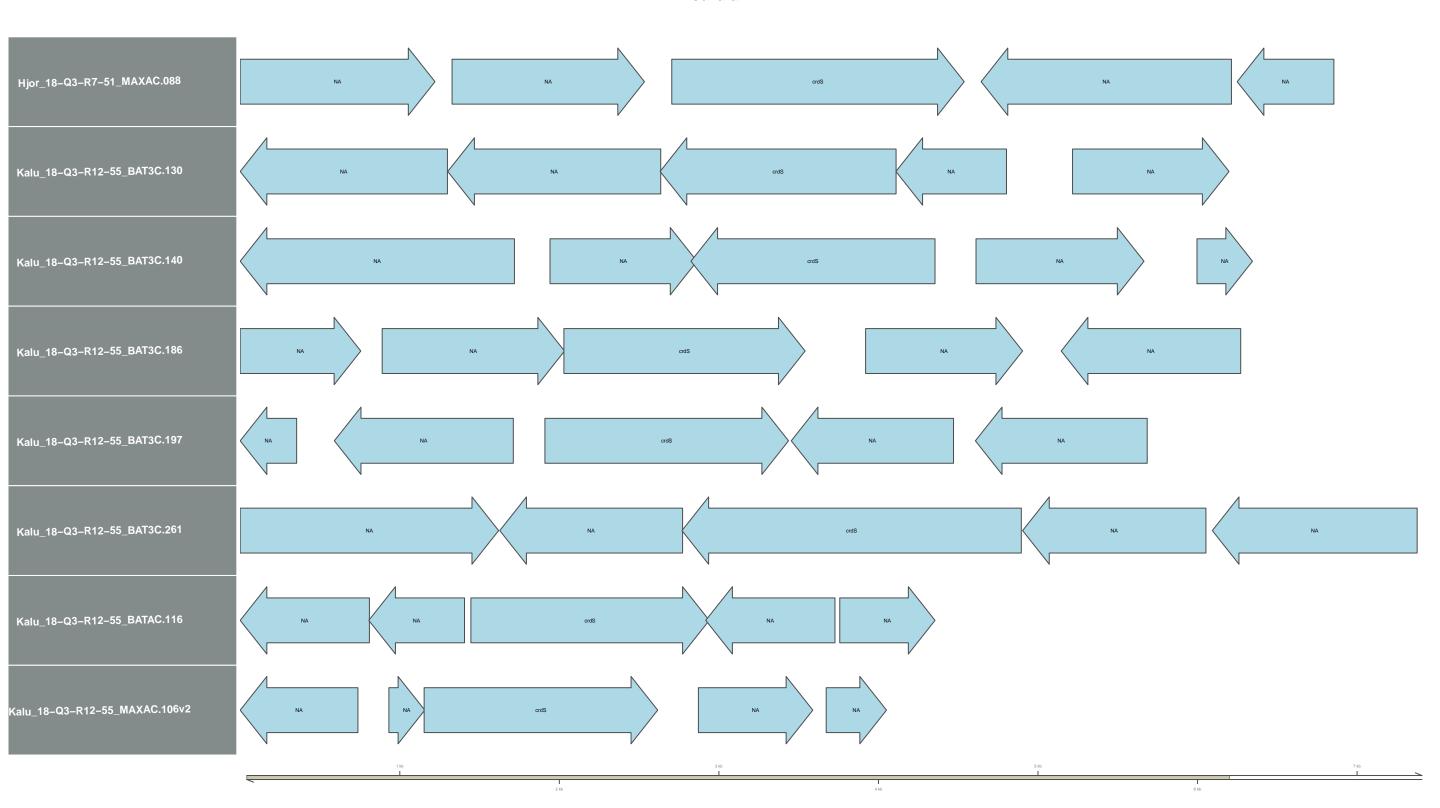


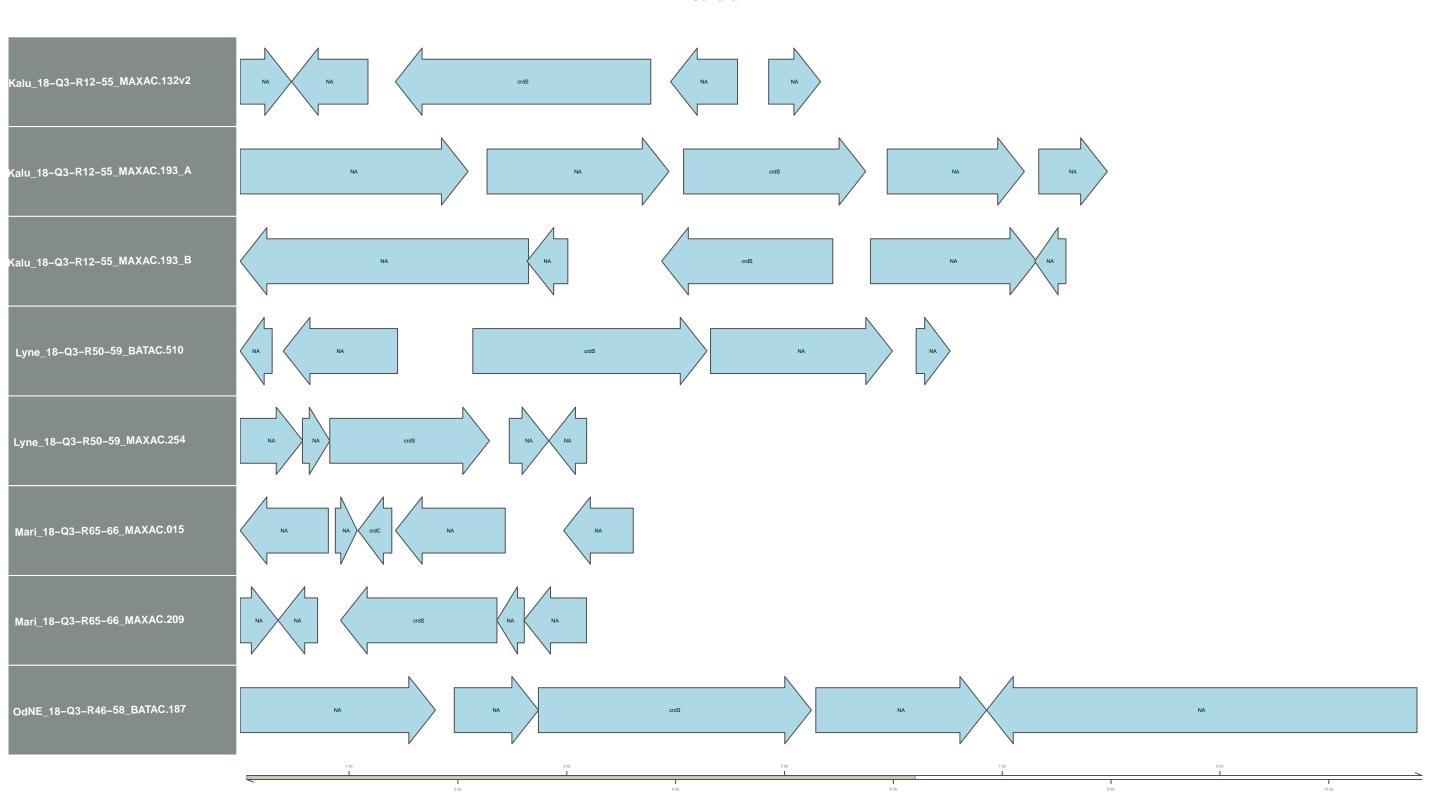


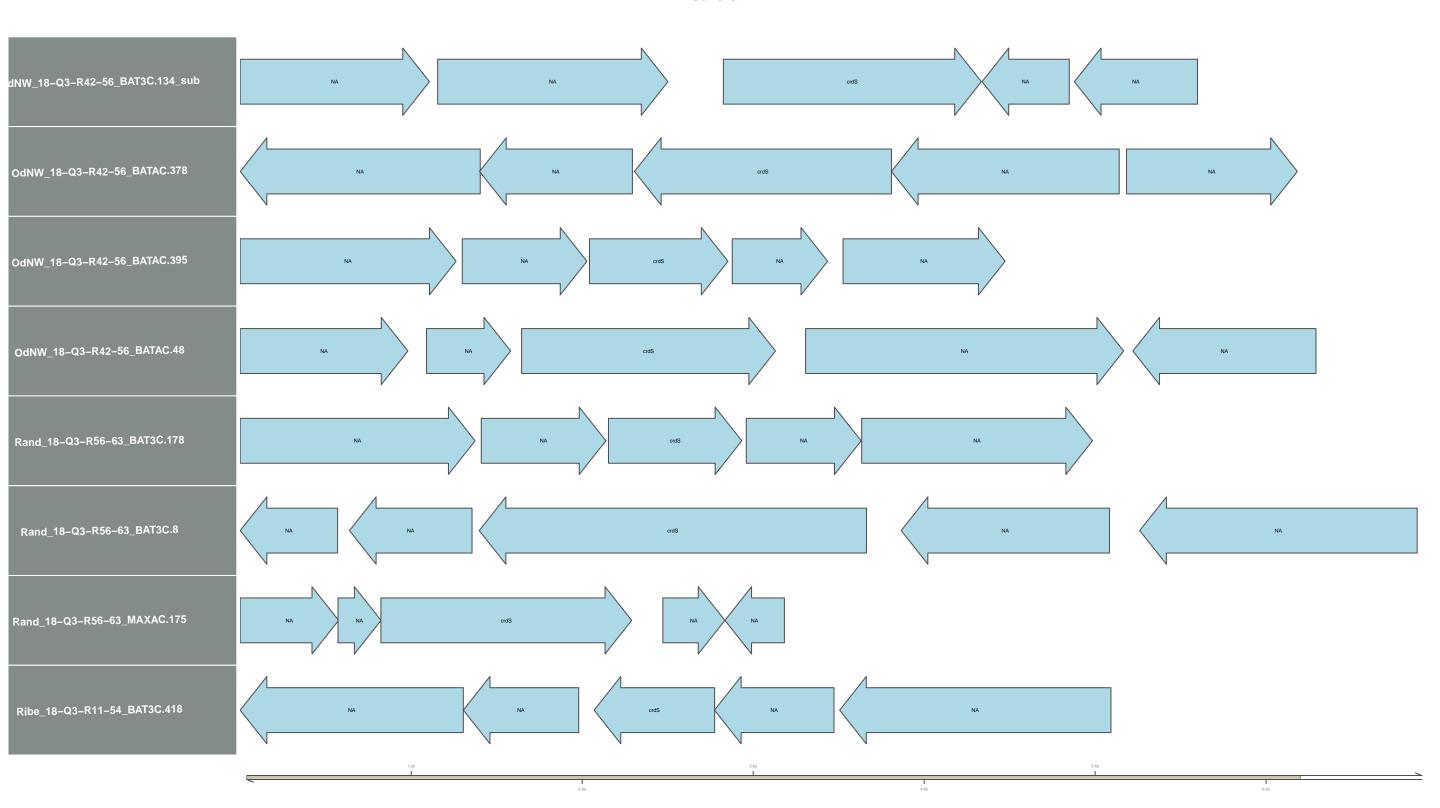


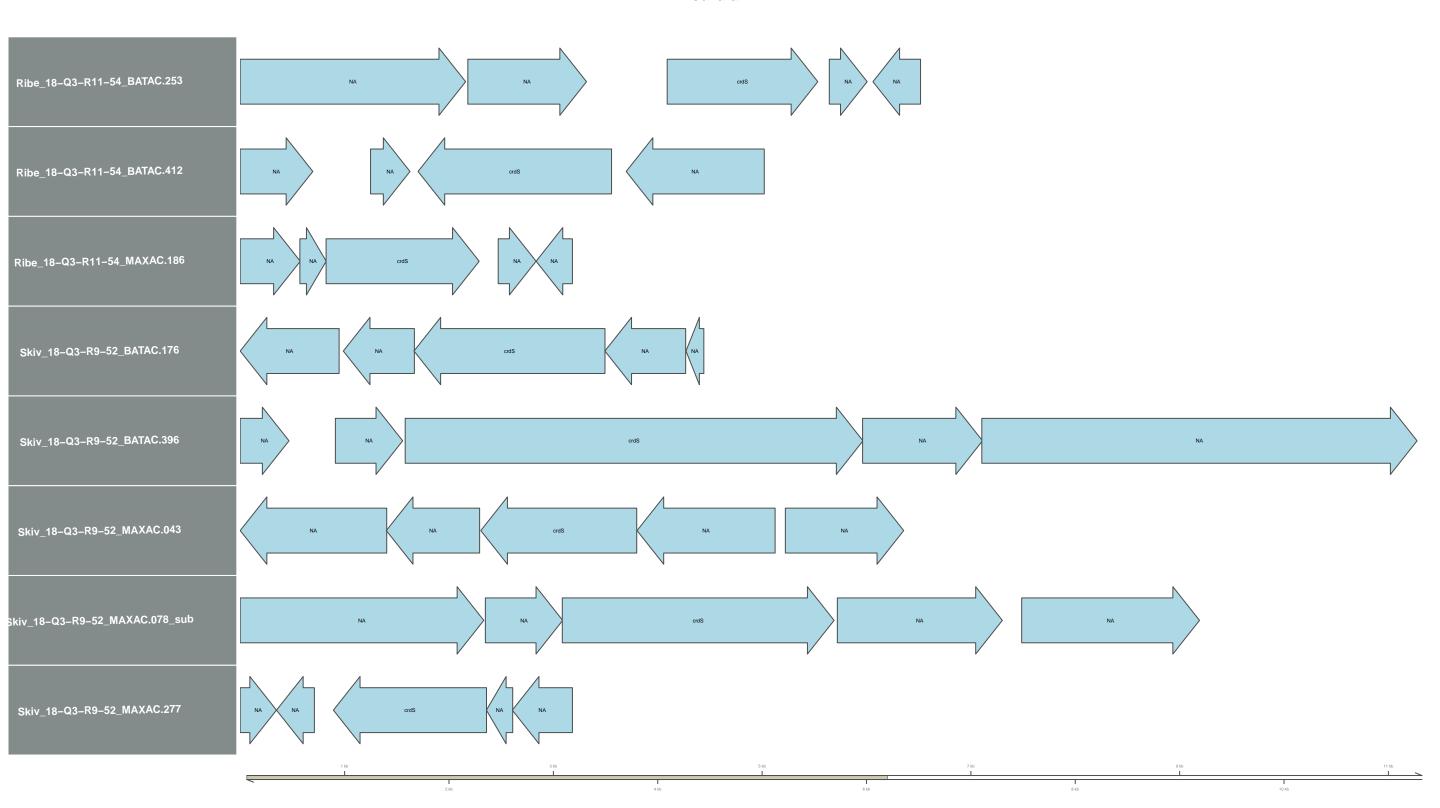


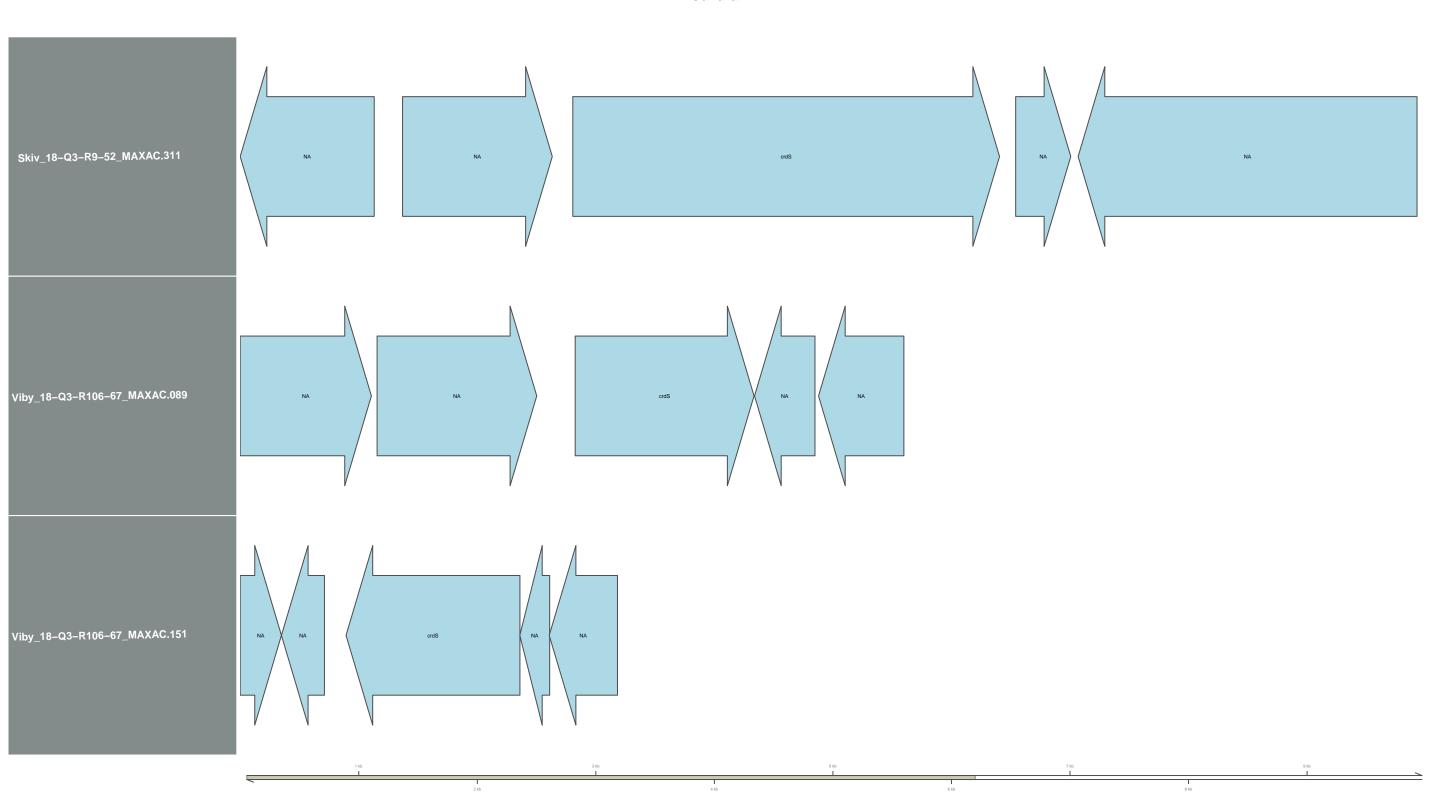












17	EsbW_18-Q3-R4-48_BAT3C.295	d_Bacteria;p_Actinobacteriota;c_Actinobacteria;o_Actinomycetales;1_Dermatophilaceae;g_GCA-2748155;s_	tig00002188-10-9196560	487823	crdS	00724
18	EsbW_18-Q3-R4-48_BAT3C.485	d_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Burkholderiales;f_Burkholderiaceae;g_PHCI01;s_	tig00020141-10-609230	22885	crdS	03737
19	EsbW_18-Q3-R4-48_BATAC.285	d_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Burkholderiales;f_Rhodocyclaceae;g_Accumulibacter;s_	tig00004813-10-4512910	252292	crdS	01588
20	EsbW_18-Q3-R4-48_BATAC.445	d_Bacteria;p_Elusimicrobiota;c_Elusimicrobia;o_F11;(_FEN-1173;g_;s_	tig00002500-10-7312180	144270	crdS	00148
21	EsbW_18-Q3-R4-48_BATAC.453	d_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Burkholderiales;f_Burkholderiaceae;g_Simplicispira_A;s_	tig00014047-10-1285900	106609	crdS	01813
22	EsbW_18-Q3-R4-48_MAXAC.032		tig01102194-10-3390260	19973	crdS	04096
		d_Bacteria.p_Chloroflexota;c_Anaerolineae;o_Anaerolineales;f_envOPS12;g_OLB14;s_				
23	EsbW_18-Q3-R4-48_MAXAC.050 EsbW_18-Q3-R4-48_MAXAC.090	d_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Burkholderiales;f_Rhodocyclaceae;g_;s_	tig00018082-10-889440	83447	crdS	03083
24		d_Bacteria;p_Chloroflexota;c_Anaerolineae;o_;f_;g_;s_	tig00001296-10-13311950	1233231	crdS	
25	Fred_18-Q3-R57-64_BAT3C.662	d_Bacteria;p_Acidobacteriota;c_Acidobacteriae;o_Bryobacterales;t_Bryobacteraceae;g_;s_	tig00006256-10-5425100	396711	crdS	01773
26	Fred_18-Q3-R57-64_BAT3C.701	d_Bacteria;p_Myxococcota;c_UBA9160;o_UBA9160;t_UBA4427;g_;s_	tig00006161-10-5807860	249756	crdS	04544
27	Fred_18-Q3-R57-64_BATAC.359	d_Bacteria;p_Chloroflexota;c_Anaerolineae;o_Caldilineales;f_Caldilineaceae;g_;s_	tig00008971-10-3326960	312313	crdC	00329
28	Fred_18-Q3-R57-64_BATAC.369	d_Bacteria;p_Chloroflexota;c_Anaerolineae;o_SBR1031;f_A4b;g_OLB15;s_	tig00353167-10-1684200	19645	crdS	07384
29	Fred_18-Q3-R57-64_BATAC.421	d_Bacteria;p_Chloroflexota;c_Anaerolineae;o_SBR1031;f_A4b;g_OLB15;s_	tig00048447-10-384060	36035	crdS	05237
30	Fred_18-Q3-R57-64_BATAC.422	d_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Burkholderiales;f_Ga0077523;g_Ga0077526;s_	tig01546677-10-8895580	749757	crdS	05149
31	Fred_18-Q3-R57-64_BATAC.716	d_Bacteria;p_Verrucomicrobiota;c_Verrucomicrobiae;o_Verrucomicrobiales;f_Verrucomicrobiaceae;g_Prosthecobacter;s_	tig00000726-10-9701610	91681	crdS	01550
32	Fred_18-Q3-R57-64_MAXAC.222	d_Bacteria;p_Elusimicrobiota;c_Elusimicrobia;o_F11;f_FEN-1173;g_;s_	tig00000202-10-25454520	583724	crdS	00465
33	Fred_18-Q3-R57-64_MAXAC.356	d_Bacteria;p_Cyanobacteria;c_Vampirovibrionia;o_Obscuribacterales;f_Obscuribacteraceae;g_Obscuribacter;s_	tig00000077-10-70086850	1235022	crdS	01078
34	Fred_18-Q3-R57-64_MAXAC.362	d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Caulobacterales;t_Hyphomonadaceae;g_Hyphomonas;s_	tig00000777-10-25148860	1123506	crdS	01174
35	Fred_18-Q3-R57-64_MAXAC.421_sub_cln	d_Bacteria;p_Patescibacteria;c_Paceibacteria_A;o_Moranbacterales;f_UBA1568;g_;s_	tig00000963-10-10881080	77102	crdS	00084
36	Hade_18-Q3-R52-61_BATAC.364	${\tt d_Bacteria:p_Proteobacteria:c_Gammaproteobacteria:o_Burkholderiales:f_Rhodocyclaceae:g_Dechloromonas:s_decorrections and the support of $	tig00407471-10-3182230	146325	crdS	03000
37	Hade_18-Q3-R52-61_MAXAC.319	d_Bacteria;p_Elusimicrobiota;c_Elusimicrobia;o_F11;f_FEN-1173;g_;s_	tig00000703-10-10596450	1005217	crdS	00935
38	Hirt_18-Q3-R61-65_BAT3C.274	d_Bacteria;p_Myxococcota;c_Polyangia;o_GCA-2747355;f_GCA-2747355;g_;s_	tig00001291-10-13242390	153378	crdS	00116
39	Hirt_18-Q3-R61-65_BAT3C.279	$\label{thm:d_bacteria} \\ d_Bacteria; p_Actinobacteriota; c_Actinobacteria; o_Propionibacteriales; \\ f_Propionibacteriaceae; g_Micropruina; s_Comparison of the propionibacteriales \\ f_Propionibacteriaceae; s_Comparison of the propionibacteriales \\ f_Propionibacteriales \\ f_Propionibacteriaceae; s_Comparison of the propionibacteriales \\ f_Propionibacteriaceae; s_Comparison of the propionibacteriales \\ f_Propionibacteriaceae; s_Comparison of the propionibacteriaceae; s_Comparison of the propionibacteriaceae; s_Comparison of the propionibacteriaceae; s_Comp$	tig00001155-10-14562110	122894	crdC	01804
40	Hirt_18-Q3-R61-65_BATAC.427	d_Bacteria;p_Chloroflexota;c_Anaerolineae;o_:f;g;s	tig00317876-10-1787950	69253	crdS	03602
41	Hirt_18-Q3-R61-65_BATAC.448_sub	$\\ d_Bacteria:p_Proteobacteria;c_Alphaproteobacteria;o_Caulobacterales;f_Hyphomonadaceae;g_SWB02;s_defined and the control of the control of$	tig00016717-10-1660250	679	crdS	01699
42	Hirt_18-Q3-R61-65_MAXAC.245	d_Bacteria;p_Elusimicrobiota;c_Elusimicrobia;o_F11;f_FEN-1173;g_;s_	tig00004079-10-4916730	332594	crdS	00784
43	Hjor_18-Q3-R7-51_BAT3C.262	$\label{eq:d_bacteria} \\ d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae;g_Hyphomicrobium;s_table \\ \textbf{d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae;g_Hyphomicrobium;s_table \\ \textbf{d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae;g_Hyphomicrobium;s_table \\ \textbf{d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae;g_Hyphomicrobium;s_table \\ \textbf{d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae;g_Hyphomicrobium;s_table \\ \textbf{d_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae;g_Hyphomi$	tig00003782-10-3351080	88894	crdS	00521
44	Hjor_18-Q3-R7-51_MAXAC.079_sub	d_Bacteria;p_Chloroflexota;c_Anaerolineae;o_Caldilineales;f_Caldilineaceae;g_Caldilinea;s_	tig00004638-10-2386320	199176	crdS	01433
45	Hjor_18-Q3-R7-51_MAXAC.088	$\label{lem:d_Bacteria} \\ d_Bacteria:p_Actinobacteriota:c_Actinobacteria:o_Actinomycetales:f_Dermatophilaceae:g_GCA-2748155;s_defined and the second actinomycetales:f_Dermatophilaceae:g_GCA-2748155;s_defined actinomycetales:f_GCA-2748155;s_defined actinomycetal$	tig00120094-10-3563900	252625	crdS	02950
46	Kalu_18-Q3-R12-55_BAT3C.130	d_Bacteria;p_Bacteroidota;c_Bacteroidia;o_Flavobacteriales;f_PHOS-HE28;g_PHOS-HE28;s_	tig00000285-10-36554120	534273	crdS	00440
47	Kalu_18-Q3-R12-55_BAT3C.140	d_Bacteria;p_Planctomycetota;c_Phycisphaerae;o_UBA1845;1_Fen=1342;g_Fen=1342;s_	tig00000016-10-42368670	3464226	crdS	02765
48	Kalu_18-Q3-R12-55_BAT3C.186	d_Bacteria;p_Chloroflexota;c_Anaerolineae;o_SBR1031;f_A4b;g_OLB13;s_	tig00442631-10-4027980	341967	crdS	04728
49	Kalu_18-Q3-R12-55_BAT3C.197	d_Bacteria;p_Planctomycetota;c_Phycisphaerae;o_UBA1845;f_Fen=1342;g_Fen=1342;s_	tig00000838-10-15342620	1191470	crdS	02560
50	Kalu_18-Q3-R12-55_BAT3C.261	d_Bacteria;p_Acidobacteriota;c_Acidobacteriae;o_Bryobacterales;f_Bryobacteraceae;g_;s_	tig00004141-10-2319180	89372	crdS	03037
51	Kalu_18-Q3-R12-55_BATAC.116	d_Bacteria;p_Myxococcota;c_Polyangia;o_Polyangiales;f_Polyangiaceae;g_;s_	tig00003199-10-3514140	311636	crdS	03703
52	Kalu_18-Q3-R12-55_MAXAC.106v2	d_Bacteria;p_Chloroflexota;c_Anaerolineae;o_Promineofliales;t_Promineofliaceae;g_GCA-2699125;s_	tig00100734-10-59431720	1790220	crdS	03426
53	Kalu_18-Q3-R12-55_MAXAC.132v2	d_Bacteria;p_Nitrospirota;c_Nitrospiria;o_Nitrospirales;t_Nitrospiraceae;g_Nitrospira;s_	tig00002484-10-4863410	3590	crdS	02057
54	Kalu_18-Q3-R12-55_MAXAC.193	d_Bacteria;p_Planctomycetota;c_Phycisphaerae;o_UBA1845;f_Fen=1342;g_;s_	tig00000220-10-42251120	1900593	crdS	01523
55	Lyne_18-Q3-R50-59_BATAC.510	d_Bacteria;p_Cyanobacteria;c_Vampirovibrionia;o_Obscuribacterales;f_Obscuribacteraceae;g_Obscuribacter;s_	tig00001484-10-13208630	25519	crdS	02574
56	Lyne_18-Q3-R50-59_MAXAC.254	d_Bacteria;p_Elusimicrobiota;c_Elusimicrobia;o_F11;f_FEN-1173;g_;s_	tig00321322-10-6191890	470728	crdS	01957
57	Mari_18-Q3-R65-66_MAXAC.015	d_Bacteria;p_Bacteroidota;c_Bacteroidia;o_Chitinophagales;f_Saprospiraceae;g_OLB8;s_	tig00004287-10-3280880	182314	crdC	01566
58	Mari_18-Q3-R65-66_MAXAC.209	d_Bacteria;p_Elusimicrobiota;c_Elusimicrobia;o_F11;f_FEN-1173;g_;s_	tig00018235-10-733950	35196	crdS	01438
59	OdNE_18-Q3-R46-58_BATAC.187	d_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Burkholderiales;f_Gallionellaceae;g_UBA7399;s_	tig00013603-10-1108760	12689	crdS	01449
60	OdNW_18-Q3-R42-56_BAT3C.134_sub	d_Bacteria.p_Myxococcta.c_Myxococcia;o_Myxococcales;f_Anaeromyxobacteraceae;g_Anaeromyxobacter;s_	tig00000032-10-15659720	974051	crdS	00842
61	OdNW_18-Q3-R42-56_BATAC.378	d_Bacteria.p_Chloroflexota.c_Anaerolineae.o_Anaerolineales.f_envOPS12.g_OLB14:s_	tig00896855-10-3266290	63195	crdS	04539
01	July11_10-Q3-R42-00_BAIAC.378	o_oacona,p_onoconecoa,c_Attationi reate,o_Attationi reateS;t_etrivorS12;g_otb14;s_	ng000300000-10-3200290	03193	Guo	04039