TYPE (STRAIN) GENOME SERVER

JOB SUMMARY

PRINT DATE:	2026-10-15 13:27:59 +0200
JOB ID:	46502028-a629-4cb0-b4ce-47ed172f07b5
RESULT PAGE:	https://tygs.dsmz.de/user_results/show?guid=46502028-a629-4cb0-b4ce-47ed172f07b5

Table 1: Phylogenies

Publication-ready versions of both the genome-scale GBDP tree and the 16S rRNA gene sequence tree can be customized and exported either in SVG (vector graphic) or PNG format from within the phylogeny viewers in your TYGS result page. For publications the **SVG format is recommended** because it is lossless, always keeps its high resolution and can also be easily converted to other popular formats such as PDF or EPS. Please follow the link provided above!

Table 2: Identification

The below list contains the result of the TYGS species identification routine.

Explanation of remarks that might occur in the below table:

remark [R1]: The TYGS type strain database is automatically updated on an almost daily basis. However, if a particular type strain genome is not available in the TYGS database, this can have several reasons which are detailed in the FAQ. You can request an extended 16S rRNA gene analysis via the 16S tree viewer found in your result page to detect **not yet genome-sequenced** type strains relevant for your study.

remark [R2]: > 70% dDDH value (formula d_4) and (almost) minimal dDDH values for gene-content formulae d_0 and d_6 indicate a potentially unreliable identification result and should thus be checked via the 16S rRNA gene sequence similarity. Such strong deviations can, in principle, be caused by sequence contamination.

remark [R3]: G+C content difference of > 1 % indicates a potentially unreliable identification result because within species G+C content varies no more than 1 %, if computed from genome sequences (PMID: 24505073).

Strain	Conclusion	Identification result	Remark
'Paracoccus yeei' (NZ_CP024422)	belongs to known species	*Paracoccus yeei*	
'Paracoccus yeei' (NZ_CP031078)	belongs to known species	*Paracoccus yeei*	
'Paracoccus yeei' (NZ_NIPZ00000000)	belongs to known species	*Paracoccus yeei*	
'Marinovum algicola' (NZ_FWFM00000000)	belongs to known species	*Marinovum algicola*	
'Phaeobacter inhibens' (NZ_CP010623)	belongs to known species	*Phaeobacter inhibens*	
'Phaeobacter inhibens' (NZ_CP010735)	belongs to known species	*Phaeobacter inhibens*	
'Phaeobacter gallaeciensis' (NZ_CP010784)	belongs to known species	*Phaeobacter gallaeciensis*	
'Paracoccus aminophilus JCM 7686' (NC_022041)	belongs to known species	*Paracoccus aminophilus*	
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	belongs to known species	*Cereibacter sphaeroides*	
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	belongs to known species	*Cereibacter sphaeroides*	
'Rhodobacter sphaeroides' (NZ_CP033434)	belongs to known species	*Cereibacter sphaeroides*	
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	belongs to known species	*Cereibacter johrii*	
'Epibacterium mobile' (NZ_LNWF00000000)	belongs to known species	*Tritonibacter mobilis*	

Strain	Conclusion	Identification result	Remark
'Epibacterium mobile' (NZ_LNWN00000000)	belongs to known species	*Tritonibacter mobilis*	
'Epibacterium mobile' (NZ_LNXJ00000000)	belongs to known species	*Tritonibacter mobilis*	
'Phaeobacter piscinae' (NZ_CP010681)	potential new species		see [R1]
'Phaeobacter piscinae' (NZ_CP010656)	potential new species		see [R1]
'Phaeobacter piscinae' (NZ_CP010767)	potential new species		see [R1]
'Phaeobacter gallaeciensis' (NZ_CP015124)	potential new species		see [R1]

Table 3: Pairwise comparisons of user genomes vs. type-strain genomes

The following table contains the pairwise dDDH values between your user genomes and the selected type-strain genomes. The dDDH values are provided along with their confidence intervals (C.I.) for the three different GBDP formulas:

- formula d_0 (a.k.a. GGDC formula 1): length of all HSPs divided by total genome length
- formula d_4 (a.k.a. GGDC formula 2): sum of all identities found in HSPs divided by overall HSP length
- formula d_6 (a.k.a. GGDC formula 3): sum of all identities found in HSPs divided by total genome length

Note: Formula d_4 is independent of genome length and is thus robust against the use of incomplete draft genomes. For other reasons for preferring formula d_4, see the FAQ.

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus yeei* ATCC BAA-599	99.9	[99.7 - 99.9]	100.0	[99.9 - 100.0]	100.0	[99.9 - 100.0]	0.05
'Epibacterium mobile' (NZ_LNWF00000000)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	100.0	[99.9 - 100.0]	100.0	[100.0 - 100.0]	100.0	[100.0 - 100.0]	0.04
'Epibacterium mobile' (NZ_LNWN00000000)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	100.0	[99.9 - 100.0]	100.0	[100.0 - 100.0]	100.0	[100.0 - 100.0]	0.04
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Phaeobacter gallaeciensis* DSM 26640	88.0	[84.5 - 90.8]	99.9	[99.8 - 99.9]	92.6	[90.2 - 94.4]	0.19
'Epibacterium mobile' (NZ_LNWF00000000)	**'Epibacterium mobile' (NZ_LNWN00000000)**	100.0	[100.0 - 100.0]	99.7	[99.5 - 99.8]	100.0	[100.0 - 100.0]	0.0
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Cereibacter sphaeroides* 2.4.1	100.0	[100.0 - 100.0]	98.3	[97.5 - 98.8]	100.0	[100.0 - 100.0]	0.02
'Marinovum algicola' (NZ_FWFM00000000)	*Marinovum algicola* DSM 10251	99.9	[99.7 - 99.9]	97.8	[96.9 - 98.5]	99.9	[99.8 - 100.0]	0.01
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus aminophilus* JCM 7686	76.5	[72.5 - 80.1]	97.8	[96.8 - 98.4]	82.9	[79.6 - 85.8]	0.02
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Cereibacter sphaeroides* 2.4.1	71.7	[67.7 - 75.3]	93.5	[91.7 - 95.0]	77.9	[74.4 - 81.0]	0.22
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)**	71.2	[67.2 - 74.8]	93.4	[91.5 - 94.9]	77.4	[73.9 - 80.5]	0.24
'Paracoccus yeei' (NZ_CP031078)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	53.9	[50.4 - 57.4]	85.6	[82.9 - 87.9]	59.4	[56.2 - 62.6]	0.15
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus yeei* ATCC BAA-599	54.4	[50.8 - 57.8]	85.3	[82.6 - 87.6]	59.8	[56.6 - 63.0]	0.1
'Paracoccus yeei' (NZ_CP024422)	**'Paracoccus yeei' (NZ_CP031078)**	77.1	[73.1 - 80.6]	85.0	[82.3 - 87.4]	81.3	[77.9 - 84.3]	0.24
'Phaeobacter inhibens' (NZ_CP010623)	*Phaeobacter inhibens* DSM 16374	84.5	[80.8 - 87.7]	83.9	[81.1 - 86.3]	87.3	[84.3 - 89.8]	0.01
'Paracoccus yeei' (NZ_CP024422)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	58.2	[54.6 - 61.7]	83.8	[81.0 - 86.2]	63.5	[60.1 - 66.7]	0.1
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus yeei* ATCC BAA-599	58.7	[55.1 - 62.3]	83.5	[80.6 - 85.9]	64.0	[60.7 - 67.2]	0.15
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Rhodobacter megalophilus* DSM 18937	61.3	[57.6 - 64.8]	83.3	[80.5 - 85.8]	66.5	[63.1 - 69.7]	0.23
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Cereibacter johrii* JA192	90.2	[86.9 - 92.7]	83.3	[80.4 - 85.7]	91.7	[89.2 - 93.7]	0.02
'Phaeobacter inhibens' (NZ_CP010623)	**'Phaeobacter inhibens' (NZ_CP010735)**	92.6	[89.8 - 94.7]	83.1	[80.2 - 85.6]	93.5	[91.3 - 95.2]	0.19

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Rhodobacter sphaeroides' (NZ_CP033434)**	95.1	[92.9 - 96.7]	82.3	[79.4 - 84.8]	95.4	[93.5 - 96.7]	0.11
'Rhodobacter sphaeroides' (NZ_CP033434)	*Rhodobacter megalophilus* DSM 18937	59.6	[56.0 - 63.2]	82.0	[79.1 - 84.5]	64.7	[61.3 - 67.9]	0.34
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Rhodobacter sphaeroides' (NZ_CP033434)**	63.7	[59.9 - 67.3]	81.7	[78.8 - 84.3]	68.6	[65.1 - 71.8]	0.34
'Rhodobacter sphaeroides' (NZ_CP033434)	*Cereibacter sphaeroides* 2.4.1	64.1	[60.4 - 67.8]	81.7	[78.8 - 84.3]	69.0	[65.6 - 72.2]	0.32
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Rhodobacter megalophilus* DSM 18937	83.9	[80.1 - 87.1]	81.6	[78.7 - 84.1]	86.4	[83.3 - 89.0]	0.0
'Phaeobacter inhibens' (NZ_CP010735)	*Phaeobacter inhibens* DSM 16374	84.1	[80.3 - 87.3]	79.3	[76.4 - 82.0]	86.2	[83.1 - 88.8]	0.21
'Phaeobacter piscinae' (NZ_CP010656)	**'Phaeobacter piscinae' (NZ_CP010767)**	97.0	[95.4 - 98.1]	78.1	[75.1 - 80.8]	96.3	[94.7 - 97.5]	0.04
'Epibacterium mobile' (NZ_LNWN00000000)	*Tritonibacter mobilis* DSM 23403	84.9	[81.2 - 88.0]	71.1	[68.1 - 74.0]	85.4	[82.2 - 88.0]	0.21
'Epibacterium mobile' (NZ_LNXJ00000000)	*Tritonibacter mobilis* DSM 23403	84.5	[80.7 - 87.6]	71.1	[68.1 - 74.0]	85.0	[81.8 - 87.7]	0.25
'Epibacterium mobile' (NZ_LNWF00000000)	*Ruegeria pelagia* NBRC102038	83.6	[79.8 - 86.8]	71.1	[68.1 - 73.9]	84.3	[81.0 - 87.0]	0.19
'Epibacterium mobile' (NZ_LNXJ00000000)	*Ruegeria pelagia* NBRC102038	83.2	[79.4 - 86.4]	71.1	[68.1 - 73.9]	83.9	[80.7 - 86.7]	0.22
'Epibacterium mobile' (NZ_LNWN00000000)	*Ruegeria pelagia* NBRC102038	83.6	[79.8 - 86.8]	71.1	[68.1 - 73.9]	84.3	[81.0 - 87.0]	0.19
'Epibacterium mobile' (NZ_LNWF00000000)	*Tritonibacter mobilis* DSM 23403	84.9	[81.2 - 88.0]	71.1	[68.1 - 74.0]	85.3	[82.2 - 88.0]	0.22
'Phaeobacter piscinae' (NZ_CP010656)	**'Phaeobacter piscinae' (NZ_CP010681)**	92.4	[89.5 - 94.5]	65.4	[62.5 - 68.3]	90.3	[87.6 - 92.5]	0.11
'Phaeobacter piscinae' (NZ_CP010681)	**'Phaeobacter piscinae' (NZ_CP010767)**	91.8	[88.8 - 94.1]	65.2	[62.3 - 68.0]	89.8	[87.0 - 92.0]	0.07
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Cereibacter johrii* JA192	60.7	[57.0 - 64.2]	60.0	[57.2 - 62.8]	61.9	[58.6 - 65.1]	0.08
'Rhodobacter sphaeroides' (NZ_CP033434)	*Cereibacter johrii* JA192	59.7	[56.1 - 63.3]	59.8	[56.9 - 62.5]	61.0	[57.7 - 64.2]	0.03
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	58.8	[55.1 - 62.3]	59.7	[56.8 - 62.4]	60.1	[56.8 - 63.3]	0.06
'Rhodobacter sphaeroides' (NZ_CP033434)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	58.4	[54.8 - 61.9]	59.4	[56.6 - 62.2]	59.7	[56.5 - 62.9]	0.05
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Cereibacter johrii* JA192	76.0	[72.1 - 79.6]	59.3	[56.5 - 62.1]	75.1	[71.7 - 78.3]	0.32
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	76.5	[72.5 - 80.1]	59.0	[56.1 - 61.7]	75.5	[72.0 - 78.6]	0.3
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Cereibacter sphaeroides* 2.4.1	77.0	[73.0 - 80.5]	59.0	[56.1 - 61.7]	75.8	[72.4 - 79.0]	0.28

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Rhodobacter megalophilus* DSM 18937	78.3	[74.4 - 81.8]	58.9	[56.1 - 61.6]	76.9	[73.5 - 80.1]	0.29
'Phaeobacter piscinae' (NZ_CP010767)	*Phaeobacter gallaeciensis* DSM 26640	71.5	[67.6 - 75.2]	45.5	[42.9 - 48.0]	67.0	[63.6 - 70.3]	0.92
'Phaeobacter piscinae' (NZ_CP010656)	**'Phaeobacter gallaeciensis' (NZ_CP010784)**	89.8	[86.5 - 92.3]	45.5	[42.9 - 48.0]	81.9	[78.6 - 84.9]	0.77
'Phaeobacter piscinae' (NZ_CP010767)	**'Phaeobacter gallaeciensis' (NZ_CP010784)**	88.1	[84.7 - 90.9]	45.5	[42.9 - 48.0]	80.5	[77.1 - 83.5]	0.73
'Phaeobacter piscinae' (NZ_CP010656)	*Phaeobacter gallaeciensis* DSM 26640	73.0	[69.0 - 76.7]	45.4	[42.9 - 48.0]	68.2	[64.8 - 71.5]	0.96
'Phaeobacter piscinae' (NZ_CP010681)	**'Phaeobacter gallaeciensis' (NZ_CP010784)**	87.4	[83.8 - 90.2]	43.9	[41.3 - 46.4]	79.2	[75.8 - 82.3]	0.66
'Phaeobacter piscinae' (NZ_CP010681)	*Phaeobacter gallaeciensis* DSM 26640	71.1	[67.1 - 74.7]	43.8	[41.3 - 46.4]	66.0	[62.6 - 69.3]	0.85
'Phaeobacter piscinae' (NZ_CP010656)	*Phaeobacter inhibens* DSM 16374	80.0	[76.0 - 83.4]	41.5	[39.0 - 44.0]	72.1	[68.6 - 75.3]	0.38
'Phaeobacter piscinae' (NZ_CP010767)	*Phaeobacter inhibens* DSM 16374	80.7	[76.8 - 84.1]	41.5	[39.0 - 44.0]	72.6	[69.1 - 75.8]	0.34
'Phaeobacter inhibens' (NZ_CP010623)	**'Phaeobacter piscinae' (NZ_CP010656)**	90.9	[87.8 - 93.3]	41.1	[38.6 - 43.7]	80.9	[77.5 - 83.8]	0.39
'Phaeobacter inhibens' (NZ_CP010623)	**'Phaeobacter piscinae' (NZ_CP010767)**	89.7	[86.4 - 92.3]	41.1	[38.6 - 43.7]	79.8	[76.4 - 82.9]	0.35
'Phaeobacter inhibens' (NZ_CP010735)	**'Phaeobacter piscinae' (NZ_CP010767)**	88.5	[85.0 - 91.2]	41.0	[38.6 - 43.6]	78.7	[75.3 - 81.8]	0.55
'Phaeobacter piscinae' (NZ_CP010656)	**'Phaeobacter inhibens' (NZ_CP010735)**	88.7	[85.2 - 91.4]	41.0	[38.5 - 43.5]	78.9	[75.5 - 82.0]	0.59
'Phaeobacter piscinae' (NZ_CP010681)	*Phaeobacter inhibens* DSM 16374	78.2	[74.2 - 81.7]	39.9	[37.5 - 42.5]	69.9	[66.5 - 73.2]	0.27
'Phaeobacter inhibens' (NZ_CP010623)	**'Phaeobacter piscinae' (NZ_CP010681)**	88.5	[85.1 - 91.2]	39.6	[37.1 - 42.1]	78.0	[74.5 - 81.1]	0.28
'Phaeobacter piscinae' (NZ_CP010681)	**'Phaeobacter inhibens' (NZ_CP010735)**	85.5	[81.8 - 88.5]	39.5	[37.0 - 42.0]	75.5	[72.0 - 78.6]	0.47
'Phaeobacter inhibens' (NZ_CP010623)	**'Phaeobacter gallaeciensis' (NZ_CP010784)**	87.9	[84.4 - 90.7]	38.0	[35.5 - 40.5]	76.5	[73.1 - 79.7]	0.38
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Phaeobacter inhibens* DSM 16374	77.6	[73.7 - 81.2]	38.0	[35.5 - 40.5]	68.5	[65.1 - 71.7]	0.39
'Phaeobacter inhibens' (NZ_CP010623)	*Phaeobacter gallaeciensis* DSM 26640	71.4	[67.5 - 75.1]	37.9	[35.5 - 40.5]	63.7	[60.4 - 66.9]	0.57
'Phaeobacter inhibens' (NZ_CP010735)	**'Phaeobacter gallaeciensis' (NZ_CP010784)**	86.2	[82.6 - 89.2]	37.9	[35.4 - 40.4]	75.2	[71.7 - 78.3]	0.19
'Phaeobacter inhibens' (NZ_CP010735)	*Phaeobacter gallaeciensis* DSM 26640	70.3	[66.3 - 73.9]	37.9	[35.4 - 40.4]	62.8	[59.5 - 66.0]	0.37
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Cereibacter azotoformans* KA25	46.7	[43.3 - 50.1]	30.6	[28.2 - 33.1]	42.0	[39.0 - 45.0]	0.7
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Cereibacter azotoformans* KA25	48.1	[44.7 - 51.5]	30.4	[28.0 - 32.9]	43.0	[40.0 - 46.0]	0.64

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Cereibacter azotoformans* KA25	48.1	[44.7 - 51.5]	30.3	[28.0 - 32.9]	43.0	[40.0 - 46.0]	0.4
'Rhodobacter sphaeroides' (NZ_CP033434)	*Cereibacter azotoformans* KA25	47.1	[43.7 - 50.5]	30.3	[27.9 - 32.8]	42.2	[39.2 - 45.2]	0.74
'Phaeobacter inhibens' (NZ_CP010735)	*Phaeobacter porticola* P97	59.5	[55.9 - 63.1]	28.9	[26.5 - 31.4]	50.3	[47.3 - 53.4]	1.23
'Phaeobacter inhibens' (NZ_CP010623)	*Phaeobacter porticola* P97	60.0	[56.4 - 63.6]	28.9	[26.5 - 31.4]	50.7	[47.6 - 53.7]	1.42
'Phaeobacter piscinae' (NZ_CP010656)	*Phaeobacter porticola* P97	59.8	[56.1 - 63.3]	27.3	[25.0 - 29.8]	49.5	[46.5 - 52.6]	1.81
'Phaeobacter piscinae' (NZ_CP010767)	*Phaeobacter porticola* P97	61.4	[57.7 - 65.0]	27.3	[24.9 - 29.8]	50.6	[47.5 - 53.6]	1.77
'Phaeobacter piscinae' (NZ_CP010681)	*Phaeobacter porticola* P97	59.4	[55.7 - 62.9]	27.0	[24.7 - 29.5]	49.1	[46.0 - 52.1]	1.7
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Phaeobacter porticola* P97	58.1	[54.5 - 61.6]	26.2	[23.9 - 28.7]	47.7	[44.7 - 50.8]	1.04
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus aminovorans* DSM 8537	33.0	[29.6 - 36.5]	25.6	[23.2 - 28.1]	30.2	[27.2 - 33.3]	0.11
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus aminovorans* DSM 8537	34.1	[30.7 - 37.6]	25.3	[23.0 - 27.8]	30.9	[28.0 - 34.0]	0.21
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus aminovorans* DSM 8537	35.2	[31.8 - 38.7]	25.2	[22.9 - 27.7]	31.7	[28.7 - 34.8]	0.04
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus denitrificans* DSM 413	30.2	[26.8 - 33.8]	24.8	[22.4 - 27.2]	27.9	[24.9 - 31.0]	0.6
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus denitrificans* DSM 413	30.1	[26.7 - 33.7]	24.7	[22.4 - 27.2]	27.8	[24.9 - 30.9]	0.5
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus thiocyanatus* ATCC 700171	35.2	[31.9 - 38.8]	24.5	[22.2 - 27.0]	31.5	[28.6 - 34.6]	0.4
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus denitrificans* DSM 413	30.7	[27.3 - 34.3]	24.5	[22.2 - 27.0]	28.2	[25.3 - 31.3]	0.75
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus thiocyanatus* ATCC 700171	33.6	[30.3 - 37.2]	24.4	[22.1 - 26.9]	30.3	[27.4 - 33.4]	0.16
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus thiocyanatus* ATCC 700171	31.0	[27.7 - 34.6]	24.3	[22.0 - 26.7]	28.4	[25.5 - 31.5]	0.25
'Epibacterium mobile' (NZ_LNWF00000000)	*Tritonibacter scottomollicae* DSM 25328	40.9	[37.5 - 44.4]	24.3	[22.0 - 26.8]	35.4	[32.5 - 38.5]	2.1
'Epibacterium mobile' (NZ_LNWN00000000)	*Tritonibacter scottomollicae* DSM 25328	40.9	[37.6 - 44.4]	24.3	[22.0 - 26.8]	35.4	[32.5 - 38.5]	2.1
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Cereibacter ovatus* JA234	29.5	[26.1 - 33.1]	24.3	[22.0 - 26.7]	27.2	[24.3 - 30.3]	2.24
'Epibacterium mobile' (NZ_LNXJ00000000)	*Tritonibacter scottomollicae* DSM 25328	40.8	[37.4 - 44.2]	24.3	[22.0 - 26.8]	35.3	[32.4 - 38.4]	2.14
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Cereibacter ovatus* JA234	29.2	[25.9 - 32.9]	24.3	[22.0 - 26.7]	27.0	[24.1 - 30.1]	2.54
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Cereibacter ovatus* JA234	33.3	[30.0 - 36.9]	24.2	[21.9 - 26.7]	30.0	[27.1 - 33.1]	2.48
'Rhodobacter sphaeroides' (NZ_CP033434)	*Cereibacter ovatus* JA234	33.8	[30.5 - 37.4]	24.2	[21.9 - 26.6]	30.4	[27.5 - 33.5]	2.58

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus lutimaris* CECT 8525	30.4	[27.0 - 34.0]	23.9	[21.6 - 26.4]	27.8	[24.9 - 30.9]	2.15
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus lutimaris* CECT 8525	29.5	[26.2 - 33.1]	23.7	[21.4 - 26.2]	27.1	[24.2 - 30.2]	2.25
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus lutimaris* CECT 8525	29.6	[26.2 - 33.2]	23.2	[20.9 - 25.7]	27.1	[24.2 - 30.2]	2.4
'Marinovum algicola' (NZ_FWFM00000000)	*Tritonibacter horizontis* O3.65	14.7	[11.9 - 18.1]	23.1	[20.8 - 25.6]	15.0	[12.5 - 17.8]	3.52
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus laeviglucosivorans* DSM 100094	30.1	[26.8 - 33.7]	22.8	[20.6 - 25.3]	27.4	[24.5 - 30.5]	4.47
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus laeviglucosivorans* DSM 100094	29.1	[25.8 - 32.7]	22.8	[20.5 - 25.2]	26.6	[23.7 - 29.7]	4.22
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus laeviglucosivorans* DSM 100094	29.9	[26.5 - 33.5]	22.7	[20.4 - 25.1]	27.1	[24.2 - 30.2]	4.32
'Epibacterium mobile' (NZ_LNWF00000000)	*Tritonibacter horizontis* O3.65	24.5	[21.2 - 28.2]	22.6	[20.3 - 25.0]	23.1	[20.3 - 26.2]	2.73
'Epibacterium mobile' (NZ_LNXJ00000000)	*Tritonibacter horizontis* O3.65	24.4	[21.1 - 28.1]	22.6	[20.3 - 25.0]	23.0	[20.2 - 26.1]	2.77
'Epibacterium mobile' (NZ_LNWN00000000)	*Tritonibacter horizontis* O3.65	24.5	[21.2 - 28.2]	22.6	[20.3 - 25.0]	23.1	[20.3 - 26.2]	2.73
'Epibacterium mobile' (NZ_LNXJ00000000)	*Marinovum algicola* DSM 10251	14.2	[11.4 - 17.6]	22.4	[20.1 - 24.9]	14.5	[12.0 - 17.3]	6.3
'Epibacterium mobile' (NZ_LNWN00000000)	*Marinovum algicola* DSM 10251	14.2	[11.4 - 17.6]	22.4	[20.2 - 24.9]	14.5	[12.0 - 17.3]	6.26
'Marinovum algicola' (NZ_FWFM00000000)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	14.2	[11.4 - 17.6]	22.4	[20.1 - 24.8]	14.5	[12.0 - 17.3]	6.29
'Marinovum algicola' (NZ_FWFM00000000)	**'Epibacterium mobile' (NZ_LNWN00000000)**	14.2	[11.4 - 17.6]	22.4	[20.1 - 24.8]	14.5	[12.0 - 17.3]	6.25
'Epibacterium mobile' (NZ_LNWF00000000)	*Marinovum algicola* DSM 10251	14.2	[11.4 - 17.6]	22.4	[20.2 - 24.9]	14.5	[12.0 - 17.3]	6.26
'Marinovum algicola' (NZ_FWFM00000000)	**'Epibacterium mobile' (NZ_LNWF00000000)**	14.2	[11.4 - 17.6]	22.4	[20.1 - 24.8]	14.5	[12.0 - 17.3]	6.25
'Marinovum algicola' (NZ_FWFM00000000)	*Pseudophaeobacter arcticus* DSM 23566	13.9	[11.1 - 17.2]	22.2	[19.9 - 24.7]	14.1	[11.7 - 17.0]	5.77
'Paracoccus yeei' (NZ_CP024422)	*Haematobacter missouriensis* CCUG 52307	14.1	[11.2 - 17.4]	22.1	[19.8 - 24.5]	14.3	[11.9 - 17.2]	3.02
'Marinovum algicola' (NZ_FWFM00000000)	*Tritonibacter mobilis* DSM 23403	14.3	[11.4 - 17.6]	22.0	[19.7 - 24.4]	14.5	[12.1 - 17.4]	6.04
'Phaeobacter piscinae' (NZ_CP010681)	*Leisingera caerulea* DSM 24564	18.3	[15.2 - 21.8]	22.0	[19.8 - 24.5]	18.0	[15.4 - 21.0]	2.99
'Marinovum algicola' (NZ_FWFM00000000)	*Ruegeria pelagia* NBRC102038	14.2	[11.4 - 17.6]	21.9	[19.7 - 24.4]	14.5	[12.0 - 17.3]	6.06
'Paracoccus yeei' (NZ_CP024422)	*Cereibacter ovatus* JA234	16.5	[13.5 - 20.0]	21.9	[19.6 - 24.3]	16.5	[13.9 - 19.4]	0.8
'Paracoccus yeei' (NZ_CP024422)	*Haematobacter massiliensis* CCUG 47968	14.0	[11.2 - 17.4]	21.8	[19.5 - 24.2]	14.3	[11.9 - 17.1]	2.77
'Phaeobacter piscinae' (NZ_CP010656)	*Leisingera caerulea* DSM 24564	18.7	[15.5 - 22.2]	21.8	[19.5 - 24.2]	18.3	[15.6 - 21.3]	2.88
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus aminophilus* JCM 7686	12.9	[10.2 - 16.2]	21.7	[19.4 - 24.1]	13.3	[10.9 - 16.0]	3.01
'Phaeobacter piscinae' (NZ_CP010767)	*Leisingera caerulea* DSM 24564	18.7	[15.6 - 22.3]	21.7	[19.4 - 24.1]	18.3	[15.7 - 21.3]	2.92

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus sigani* DSM 26381	22.4	[19.2 - 26.1]	21.7	[19.4 - 24.1]	21.3	[18.5 - 24.4]	0.55
'Marinovum algicola' (NZ_FWFM00000000)	*Thalassobius mediterraneus* CECT 5383	13.8	[11.1 - 17.2]	21.7	[19.4 - 24.1]	14.1	[11.7 - 17.0]	6.34
'Phaeobacter piscinae' (NZ_CP010681)	*Leisingera aquimarina* DSM 24565	18.5	[15.4 - 22.1]	21.7	[19.4 - 24.1]	18.1	[15.5 - 21.1]	1.07
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Leisingera aquimarina* DSM 24565	18.2	[15.2 - 21.8]	21.6	[19.4 - 24.1]	17.9	[15.3 - 20.9]	1.73
'Phaeobacter piscinae' (NZ_CP010767)	*Salipiger bermudensis* HTCC2601	13.4	[10.6 - 16.7]	21.6	[19.3 - 24.0]	13.7	[11.3 - 16.5]	6.08
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus sigani* DSM 26381	22.0	[18.7 - 25.6]	21.6	[19.4 - 24.1]	20.9	[18.2 - 24.0]	0.31
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus sigani* DSM 26381	23.0	[19.7 - 26.6]	21.6	[19.3 - 24.0]	21.7	[18.9 - 24.8]	0.46
'Phaeobacter piscinae' (NZ_CP010681)	*Leisingera daeponensis* DSM 23529	19.9	[16.8 - 23.5]	21.6	[19.4 - 24.1]	19.3	[16.6 - 22.4]	4.05
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Leisingera caerulea* DSM 24564	20.9	[17.7 - 24.5]	21.6	[19.4 - 24.0]	20.1	[17.4 - 23.2]	1.76
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Phaeobacter piscinae' (NZ_CP010767)**	13.0	[10.3 - 16.3]	21.6	[19.3 - 24.0]	13.3	[11.0 - 16.1]	3.03
'Phaeobacter inhibens' (NZ_CP010623)	*Leisingera caerulea* DSM 24564	18.5	[15.4 - 22.1]	21.6	[19.3 - 24.0]	18.2	[15.5 - 21.2]	3.27
'Phaeobacter piscinae' (NZ_CP010656)	*Leisingera aquaemixtae* CECT 8399	20.5	[17.3 - 24.1]	21.5	[19.2 - 23.9]	19.8	[17.0 - 22.8]	4.0
'Phaeobacter piscinae' (NZ_CP010767)	*Leisingera aquimarina* DSM 24565	18.3	[15.2 - 21.9]	21.5	[19.2 - 23.9]	18.0	[15.3 - 21.0]	1.0
'Phaeobacter inhibens' (NZ_CP010735)	*Leisingera aquaemixtae* CECT 8399	19.8	[16.6 - 23.4]	21.5	[19.2 - 23.9]	19.2	[16.5 - 22.2]	4.58
'Phaeobacter piscinae' (NZ_CP010681)	*Leisingera aquaemixtae* CECT 8399	20.1	[16.9 - 23.7]	21.5	[19.2 - 23.9]	19.4	[16.7 - 22.5]	4.11
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Leisingera caerulea* DSM 24564	18.4	[15.3 - 22.0]	21.5	[19.3 - 24.0]	18.1	[15.4 - 21.1]	3.65
'Phaeobacter inhibens' (NZ_CP010735)	*Leisingera caerulea* DSM 24564	18.5	[15.4 - 22.1]	21.5	[19.3 - 24.0]	18.1	[15.5 - 21.1]	3.46
'Phaeobacter piscinae' (NZ_CP010767)	*Leisingera aquaemixtae* CECT 8399	20.3	[17.2 - 24.0]	21.5	[19.2 - 23.9]	19.6	[16.9 - 22.7]	4.03
'Phaeobacter inhibens' (NZ_CP010623)	*Leisingera aquaemixtae* CECT 8399	20.1	[16.9 - 23.7]	21.4	[19.2 - 23.8]	19.4	[16.7 - 22.5]	4.39
'Phaeobacter piscinae' (NZ_CP010656)	*Leisingera daeponensis* DSM 23529	20.2	[17.0 - 23.8]	21.4	[19.2 - 23.9]	19.5	[16.8 - 22.6]	3.94
'Phaeobacter piscinae' (NZ_CP010656)	*Leisingera aquimarina* DSM 24565	18.6	[15.5 - 22.2]	21.4	[19.2 - 23.9]	18.2	[15.6 - 21.2]	0.96
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Leisingera daeponensis* DSM 23529	23.1	[19.9 - 26.8]	21.4	[19.1 - 23.8]	21.8	[19.0 - 24.9]	2.82
'Phaeobacter inhibens' (NZ_CP010623)	*Leisingera daeponensis* DSM 23529	19.8	[16.6 - 23.4]	21.4	[19.1 - 23.8]	19.2	[16.5 - 22.2]	4.33
'Phaeobacter inhibens' (NZ_CP010735)	*Leisingera daeponensis* DSM 23529	19.5	[16.3 - 23.1]	21.4	[19.2 - 23.8]	19.0	[16.3 - 22.0]	4.53
'Phaeobacter inhibens' (NZ_CP010623)	*Leisingera methylohalidivorans* DSM 14336	19.2	[16.0 - 22.7]	21.3	[19.0 - 23.7]	18.7	[16.0 - 21.7]	2.32

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Phaeobacter inhibens' (NZ_CP010735)	*Leisingera aquimarina* DSM 24565	18.0	[14.9 - 21.6]	21.3	[19.1 - 23.8]	17.7	[15.1 - 20.7]	1.55
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Phaeobacter inhibens' (NZ_CP010735)**	13.0	[10.3 - 16.3]	21.3	[19.1 - 23.7]	13.3	[11.0 - 16.1]	3.58
'Phaeobacter piscinae' (NZ_CP010767)	*Leisingera methylohalidivorans* DSM 14336	19.3	[16.1 - 22.9]	21.3	[19.0 - 23.7]	18.8	[16.1 - 21.8]	1.97
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Leisingera aquaemixtae* CECT 8399	22.9	[19.6 - 26.5]	21.3	[19.0 - 23.7]	21.6	[18.8 - 24.7]	2.88
'Phaeobacter inhibens' (NZ_CP010735)	*Leisingera methylohalidivorans* DSM 14336	19.2	[16.0 - 22.8]	21.3	[19.0 - 23.7]	18.7	[16.0 - 21.7]	2.52
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Leisingera daeponensis* DSM 23529	19.7	[16.5 - 23.3]	21.3	[19.1 - 23.8]	19.1	[16.4 - 22.1]	4.71
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Leisingera methylohalidivorans* DSM 14336	18.4	[15.3 - 22.0]	21.3	[19.1 - 23.8]	18.0	[15.4 - 21.0]	2.7
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Leisingera methylohalidivorans* DSM 14336	20.9	[17.7 - 24.5]	21.3	[19.0 - 23.7]	20.1	[17.3 - 23.1]	0.81
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Leisingera aquaemixtae* CECT 8399	19.6	[16.4 - 23.2]	21.3	[19.0 - 23.7]	19.0	[16.3 - 22.0]	4.77
'Phaeobacter piscinae' (NZ_CP010681)	*Haematobacter missouriensis* CCUG 52307	12.8	[10.1 - 16.1]	21.2	[18.9 - 23.6]	13.2	[10.8 - 15.9]	4.03
'Phaeobacter inhibens' (NZ_CP010623)	*Leisingera aquimarina* DSM 24565	18.0	[14.9 - 21.5]	21.2	[19.0 - 23.6]	17.7	[15.0 - 20.7]	1.35
'Phaeobacter piscinae' (NZ_CP010767)	*Leisingera daeponensis* DSM 23529	20.5	[17.3 - 24.1]	21.2	[19.0 - 23.7]	19.7	[17.0 - 22.8]	3.98
'Phaeobacter piscinae' (NZ_CP010656)	*Leisingera methylohalidivorans* DSM 14336	19.6	[16.4 - 23.2]	21.2	[19.0 - 23.7]	19.0	[16.3 - 22.0]	1.93
'Phaeobacter piscinae' (NZ_CP010681)	*Leisingera methylohalidivorans* DSM 14336	19.3	[16.2 - 22.9]	21.2	[19.0 - 23.7]	18.8	[16.1 - 21.8]	2.04
'Marinovum algicola' (NZ_FWFM00000000)	*Phaeobacter gallaeciensis* DSM 26640	14.1	[11.3 - 17.5]	21.2	[19.0 - 23.7]	14.3	[11.9 - 17.2]	5.6
'Marinovum algicola' (NZ_FWFM00000000)	*Thalassobius mediterraneus* DSM 16398	13.8	[11.0 - 17.2]	21.2	[18.9 - 23.6]	14.1	[11.7 - 16.9]	6.3
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus marinus* NBRC 100637	20.1	[16.9 - 23.7]	21.1	[18.8 - 23.5]	19.4	[16.7 - 22.4]	2.05
'Phaeobacter piscinae' (NZ_CP010656)	*Thalassobius mediterraneus* CECT 5383	14.1	[11.3 - 17.5]	21.1	[18.9 - 23.5]	14.4	[11.9 - 17.2]	1.7
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus aminophilus* JCM 7686	12.9	[10.2 - 16.2]	21.1	[18.9 - 23.5]	13.3	[10.9 - 16.1]	3.55
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus marinus* NBRC 100637	20.0	[16.8 - 23.6]	21.1	[18.8 - 23.5]	19.3	[16.6 - 22.3]	1.95
'Phaeobacter piscinae' (NZ_CP010681)	*Thalassobius mediterraneus* CECT 5383	14.0	[11.2 - 17.3]	21.1	[18.8 - 23.5]	14.2	[11.8 - 17.1]	1.58
'Paracoccus yeei' (NZ_NIPZ00000000)	*Cereibacter ovatus* JA234	16.2	[13.2 - 19.7]	21.1	[18.9 - 23.5]	16.2	[13.6 - 19.1]	0.9
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus zhejiangensis* J6	19.6	[16.4 - 23.2]	21.0	[18.8 - 23.4]	19.0	[16.3 - 22.0]	1.99

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus chinensis* CGMCC 1.7655	20.3	[17.1 - 23.9]	21.0	[18.8 - 23.4]	19.5	[16.8 - 22.6]	0.69
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Phaeobacter inhibens' (NZ_CP010623)**	13.0	[10.3 - 16.3]	21.0	[18.8 - 23.4]	13.4	[11.0 - 16.2]	3.38
'Phaeobacter piscinae' (NZ_CP010656)	*Thalassobius mediterraneus* DSM 16398	14.1	[11.3 - 17.5]	21.0	[18.7 - 23.4]	14.3	[11.9 - 17.2]	1.66
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Leisingera aquimarina* DSM 24565	19.9	[16.7 - 23.5]	21.0	[18.7 - 23.4]	19.2	[16.5 - 22.2]	0.16
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus contaminans* LMG 29738	20.8	[17.5 - 24.4]	21.0	[18.8 - 23.5]	19.9	[17.2 - 23.0]	1.37
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus alcaliphilus* DSM 8512	18.8	[15.7 - 22.4]	20.9	[18.7 - 23.3]	18.4	[15.7 - 21.4]	3.03
'Phaeobacter piscinae' (NZ_CP010656)	*Salipiger bermudensis* HTCC2601	13.4	[10.7 - 16.7]	20.9	[18.7 - 23.3]	13.7	[11.3 - 16.5]	6.04
'Phaeobacter piscinae' (NZ_CP010656)	**'Phaeobacter gallaeciensis' (NZ_CP015124)**	19.7	[16.6 - 23.3]	20.9	[18.6 - 23.3]	19.1	[16.4 - 22.1]	1.12
'Phaeobacter inhibens' (NZ_CP010735)	*Thalassobius mediterraneus* CECT 5383	14.0	[11.2 - 17.3]	20.9	[18.6 - 23.3]	14.2	[11.8 - 17.1]	1.11
'Phaeobacter inhibens' (NZ_CP010735)	*Pseudophaeobacter arcticus* DSM 23566	15.9	[13.0 - 19.4]	20.9	[18.7 - 23.3]	15.9	[13.4 - 18.8]	0.54
'Phaeobacter inhibens' (NZ_CP010623)	*Thalassobius mediterraneus* CECT 5383	14.0	[11.2 - 17.4]	20.9	[18.6 - 23.3]	14.3	[11.9 - 17.1]	1.3
'Phaeobacter inhibens' (NZ_CP010623)	**'Phaeobacter gallaeciensis' (NZ_CP015124)**	18.8	[15.7 - 22.4]	20.9	[18.7 - 23.4]	18.4	[15.7 - 21.4]	1.51
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus aminophilus* JCM 7686	13.0	[10.3 - 16.3]	20.9	[18.6 - 23.3]	13.4	[11.0 - 16.1]	3.36
'Marinovum algicola' (NZ_FWFM00000000)	*Salipiger bermudensis* HTCC2601	16.7	[13.7 - 20.2]	20.9	[18.7 - 23.3]	16.6	[14.0 - 19.6]	1.41
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus contaminans* LMG 29738	19.7	[16.5 - 23.3]	20.9	[18.6 - 23.3]	19.0	[16.3 - 22.0]	1.28
'Phaeobacter piscinae' (NZ_CP010681)	*Thalassobius mediterraneus* DSM 16398	14.0	[11.2 - 17.3]	20.9	[18.7 - 23.3]	14.2	[11.8 - 17.1]	1.55
'Epibacterium mobile' (NZ_LNWN00000000)	*Leisingera daeponensis* DSM 23529	16.3	[13.3 - 19.7]	20.8	[18.5 - 23.2]	16.2	[13.7 - 19.1]	5.55
'Paracoccus yeei' (NZ_CP024422)	*Phaeovulum vinaykumarii* DSM 18714	16.8	[13.8 - 20.3]	20.8	[18.6 - 23.2]	16.7	[14.1 - 19.6]	0.92
'Epibacterium mobile' (NZ_LNWF00000000)	*Leisingera daeponensis* DSM 23529	16.3	[13.3 - 19.7]	20.8	[18.5 - 23.2]	16.2	[13.7 - 19.1]	5.55
'Phaeobacter piscinae' (NZ_CP010767)	**'Phaeobacter gallaeciensis' (NZ_CP015124)**	19.7	[16.5 - 23.3]	20.8	[18.5 - 23.2]	19.1	[16.4 - 22.1]	1.16
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus alcaliphilus* DSM 8512	19.0	[15.9 - 22.6]	20.8	[18.6 - 23.3]	18.5	[15.8 - 21.5]	3.12
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Phaeobacter inhibens* DSM 16374	18.5	[15.4 - 22.0]	20.8	[18.6 - 23.2]	18.1	[15.4 - 21.1]	1.5
'Epibacterium mobile' (NZ_LNXJ00000000)	*Leisingera daeponensis* DSM 23529	16.2	[13.3 - 19.7]	20.8	[18.5 - 23.2]	16.2	[13.7 - 19.1]	5.59
'Epibacterium mobile' (NZ_LNWN00000000)	*Phaeobacter gallaeciensis* DSM 26640	15.3	[12.4 - 18.8]	20.8	[18.6 - 23.2]	15.4	[12.9 - 18.3]	0.65

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Epibacterium mobile' (NZ_LNXJ00000000)	*Phaeobacter gallaeciensis* DSM 26640	15.3	[12.4 - 18.8]	20.8	[18.6 - 23.2]	15.4	[12.9 - 18.3]	0.69
'Paracoccus yeei' (NZ_NIPZ00000000)	*Cereibacter johrii* JA192	15.1	[12.2 - 18.5]	20.8	[18.6 - 23.3]	15.2	[12.7 - 18.1]	1.66
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Phaeobacter piscinae' (NZ_CP010681)**	13.0	[10.3 - 16.3]	20.8	[18.6 - 23.3]	13.4	[11.0 - 16.1]	3.1
'Phaeobacter piscinae' (NZ_CP010767)	*Thalassobius mediterraneus* CECT 5383	14.3	[11.4 - 17.6]	20.8	[18.6 - 23.3]	14.5	[12.0 - 17.3]	1.66
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Thalassobius mediterraneus* CECT 5383	13.9	[11.1 - 17.3]	20.8	[18.6 - 23.2]	14.2	[11.8 - 17.0]	0.92
'Epibacterium mobile' (NZ_LNWF00000000)	*Phaeobacter gallaeciensis* DSM 26640	15.3	[12.4 - 18.8]	20.8	[18.6 - 23.2]	15.4	[12.9 - 18.3]	0.65
'Marinovum algicola' (NZ_FWFM00000000)	*Ruegeria meteori* CECT 4293	13.3	[10.6 - 16.7]	20.8	[18.5 - 23.2]	13.7	[11.3 - 16.5]	8.56
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus subflavus* GY0581	21.0	[17.8 - 24.7]	20.8	[18.6 - 23.2]	20.1	[17.4 - 23.2]	1.71
'Phaeobacter inhibens' (NZ_CP010623)	*Pseudophaeobacter arcticus* DSM 23566	15.9	[13.0 - 19.4]	20.7	[18.5 - 23.2]	15.9	[13.4 - 18.9]	0.73
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Thalassobius mediterraneus* CECT 5383	14.4	[11.6 - 17.8]	20.7	[18.4 - 23.1]	14.6	[12.2 - 17.5]	2.82
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus alcaliphilus* DSM 8512	19.1	[15.9 - 22.7]	20.7	[18.5 - 23.1]	18.5	[15.9 - 21.6]	3.27
'Phaeobacter piscinae' (NZ_CP010767)	*Thalassobius mediterraneus* DSM 16398	14.2	[11.4 - 17.6]	20.7	[18.5 - 23.1]	14.5	[12.0 - 17.3]	1.62
'Phaeobacter piscinae' (NZ_CP010681)	*Salipiger bermudensis* HTCC2601	13.5	[10.8 - 16.9]	20.7	[18.5 - 23.2]	13.8	[11.5 - 16.6]	6.16
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Ruegeria pelagia* NBRC102038	15.4	[12.5 - 18.9]	20.7	[18.5 - 23.1]	15.5	[13.0 - 18.4]	0.65
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Phaeobacter gallaeciensis* DSM 26640	18.1	[15.1 - 21.7]	20.7	[18.5 - 23.1]	17.8	[15.1 - 20.8]	2.08
'Phaeobacter inhibens' (NZ_CP010735)	*Thalassobius mediterraneus* DSM 16398	14.0	[11.2 - 17.3]	20.7	[18.5 - 23.1]	14.2	[11.8 - 17.1]	1.08
'Phaeobacter piscinae' (NZ_CP010681)	**'Phaeobacter gallaeciensis' (NZ_CP015124)**	19.7	[16.5 - 23.3]	20.7	[18.5 - 23.2]	19.0	[16.3 - 22.0]	1.23
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus chinensis* CGMCC 1.7655	20.5	[17.3 - 24.2]	20.7	[18.4 - 23.1]	19.7	[17.0 - 22.7]	0.79
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus aminophilus* JCM 7686	13.0	[10.3 - 16.3]	20.7	[18.5 - 23.1]	13.4	[11.0 - 16.1]	2.97
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Phaeobacter piscinae' (NZ_CP010656)**	13.1	[10.4 - 16.4]	20.7	[18.4 - 23.1]	13.4	[11.1 - 16.2]	2.99
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Tritonibacter mobilis* DSM 23403	16.2	[13.2 - 19.7]	20.7	[18.4 - 23.1]	16.2	[13.6 - 19.1]	2.52
'Phaeobacter gallaeciensis' (NZ_CP010784)	**'Phaeobacter gallaeciensis' (NZ_CP015124)**	18.9	[15.8 - 22.5]	20.7	[18.5 - 23.1]	18.4	[15.7 - 21.4]	1.89
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Pseudophaeobacter arcticus* DSM 23566	19.6	[16.5 - 23.2]	20.7	[18.4 - 23.1]	19.0	[16.3 - 22.0]	2.25
'Paracoccus yeei' (NZ_CP024422)	*Rhodobacter megalophilus* DSM 18937	15.1	[12.2 - 18.5]	20.7	[18.4 - 23.1]	15.2	[12.7 - 18.1]	1.44

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus subflavus* GY0581	20.3	[17.1 - 23.9]	20.7	[18.5 - 23.1]	19.5	[16.8 - 22.6]	1.81
'Phaeobacter gallaeciensis' (NZ_CP010784)	**'Epibacterium mobile' (NZ_LNWN00000000)**	15.5	[12.5 - 18.9]	20.6	[18.3 - 23.0]	15.5	[13.0 - 18.4]	0.84
'Phaeobacter inhibens' (NZ_CP010735)	**'Phaeobacter gallaeciensis' (NZ_CP015124)**	18.9	[15.8 - 22.5]	20.6	[18.4 - 23.1]	18.4	[15.7 - 21.4]	1.71
'Phaeobacter piscinae' (NZ_CP010767)	*Pseudophaeobacter arcticus* DSM 23566	16.3	[13.3 - 19.8]	20.6	[18.4 - 23.1]	16.3	[13.7 - 19.2]	1.09
'Phaeobacter gallaeciensis' (NZ_CP010784)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	15.4	[12.5 - 18.9]	20.6	[18.3 - 23.0]	15.5	[13.0 - 18.4]	0.88
'Epibacterium mobile' (NZ_LNWF00000000)	*Salipiger bermudensis* HTCC2601	13.6	[10.9 - 17.0]	20.6	[18.3 - 23.0]	13.9	[11.5 - 16.7]	7.66
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus zhejiangensis* J6	19.6	[16.4 - 23.2]	20.6	[18.4 - 23.0]	18.9	[16.2 - 22.0]	1.75
'Phaeobacter gallaeciensis' (NZ_CP010784)	**'Epibacterium mobile' (NZ_LNWF00000000)**	15.5	[12.5 - 18.9]	20.6	[18.3 - 23.0]	15.5	[13.0 - 18.4]	0.84
'Phaeobacter piscinae' (NZ_CP010656)	*Tritonibacter mobilis* DSM 23403	15.9	[12.9 - 19.3]	20.6	[18.3 - 23.0]	15.9	[13.3 - 18.8]	1.4
'Phaeobacter piscinae' (NZ_CP010767)	*Tritonibacter mobilis* DSM 23403	16.0	[13.0 - 19.5]	20.6	[18.4 - 23.0]	16.0	[13.4 - 18.9]	1.36
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Thalassobius mediterraneus* DSM 16398	13.9	[11.1 - 17.3]	20.6	[18.4 - 23.0]	14.2	[11.8 - 17.0]	0.89
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus marinus* NBRC 100637	19.6	[16.4 - 23.2]	20.6	[18.3 - 23.0]	18.9	[16.2 - 21.9]	1.8
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Leisingera daeponensis* DSM 23529	13.2	[10.5 - 16.5]	20.6	[18.4 - 23.0]	13.6	[11.2 - 16.3]	0.95
'Epibacterium mobile' (NZ_LNXJ00000000)	*Thalassobius mediterraneus* CECT 5383	13.7	[11.0 - 17.1]	20.6	[18.4 - 23.0]	14.0	[11.6 - 16.8]	0.05
'Phaeobacter inhibens' (NZ_CP010735)	*Ruegeria pelagia* NBRC102038	15.5	[12.5 - 18.9]	20.6	[18.4 - 23.0]	15.5	[13.0 - 18.4]	0.84
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Phaeobacter porticola* P97	12.9	[10.2 - 16.2]	20.6	[18.4 - 23.1]	13.3	[10.9 - 16.0]	4.8
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus contaminans* LMG 29738	19.7	[16.5 - 23.3]	20.6	[18.4 - 23.1]	19.0	[16.3 - 22.1]	1.13
'Paracoccus yeei' (NZ_NIPZ00000000)	*Haematobacter missouriensis* CCUG 52307	13.8	[11.0 - 17.2]	20.6	[18.4 - 23.0]	14.1	[11.7 - 16.9]	3.11
'Epibacterium mobile' (NZ_LNWF00000000)	*Thalassobius mediterraneus* CECT 5383	13.7	[11.0 - 17.1]	20.6	[18.4 - 23.0]	14.0	[11.6 - 16.8]	0.08
'Paracoccus yeei' (NZ_CP024422)	*Cereibacter johrii* JA192	15.0	[12.1 - 18.4]	20.6	[18.4 - 23.0]	15.1	[12.6 - 18.0]	1.75
'Phaeobacter piscinae' (NZ_CP010656)	*Pseudophaeobacter arcticus* DSM 23566	16.4	[13.4 - 19.9]	20.6	[18.4 - 23.0]	16.4	[13.8 - 19.3]	1.13
'Phaeobacter inhibens' (NZ_CP010623)	*Thalassobius mediterraneus* DSM 16398	14.0	[11.2 - 17.4]	20.6	[18.4 - 23.0]	14.3	[11.9 - 17.1]	1.27
'Epibacterium mobile' (NZ_LNWN00000000)	*Thalassobius mediterraneus* CECT 5383	13.7	[11.0 - 17.1]	20.6	[18.4 - 23.0]	14.0	[11.6 - 16.8]	0.09
'Phaeobacter piscinae' (NZ_CP010656)	*Ruegeria pelagia* NBRC102038	15.8	[12.9 - 19.3]	20.5	[18.3 - 22.9]	15.8	[13.3 - 18.7]	1.43

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Phaeobacter inhibens' (NZ_CP010623)	*Ruegeria lacuscaerulensis* ITI-1157	15.1	[12.2 - 18.5]	20.5	[18.3 - 22.9]	15.2	[12.7 - 18.1]	2.97
'Phaeobacter piscinae' (NZ_CP010681)	*Pseudophaeobacter arcticus* DSM 23566	16.6	[13.6 - 20.1]	20.5	[18.2 - 22.9]	16.5	[13.9 - 19.4]	1.02
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus chinensis* CGMCC 1.7655	20.9	[17.7 - 24.5]	20.5	[18.3 - 22.9]	20.0	[17.2 - 23.0]	0.54
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Haematobacter missouriensis* CCUG 52307	12.8	[10.1 - 16.1]	20.5	[18.2 - 22.9]	13.2	[10.8 - 15.9]	4.69
'Paracoccus yeei' (NZ_CP031078)	*Cereibacter johrii* JA192	14.9	[12.0 - 18.3]	20.5	[18.2 - 22.9]	15.1	[12.6 - 17.9]	1.51
'Epibacterium mobile' (NZ_LNWN00000000)	*Salipiger bermudensis* HTCC2601	13.6	[10.9 - 17.0]	20.5	[18.3 - 23.0]	13.9	[11.5 - 16.7]	7.65
'Phaeobacter inhibens' (NZ_CP010735)	*Ruegeria denitrificans* CECT 5091	13.9	[11.1 - 17.3]	20.5	[18.2 - 22.9]	14.2	[11.8 - 17.0]	3.07
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus aminophilus* JCM 7686	13.0	[10.3 - 16.3]	20.5	[18.3 - 23.0]	13.3	[11.0 - 16.1]	3.08
'Epibacterium mobile' (NZ_LNWN00000000)	*Thalassobius mediterraneus* DSM 16398	13.7	[10.9 - 17.1]	20.5	[18.2 - 22.9]	14.0	[11.6 - 16.8]	0.05
'Epibacterium mobile' (NZ_LNXJ00000000)	*Thalassobius mediterraneus* DSM 16398	13.7	[10.9 - 17.1]	20.5	[18.2 - 22.9]	14.0	[11.6 - 16.8]	0.01
'Rhodobacter sphaeroides' (NZ_CP033434)	*Phaeovulum vinaykumarii* DSM 18714	17.0	[13.9 - 20.5]	20.5	[18.2 - 22.9]	16.8	[14.2 - 19.7]	0.86
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus aminovorans* DSM 8537	13.1	[10.4 - 16.4]	20.5	[18.2 - 22.9]	13.4	[11.1 - 16.2]	7.54
'Marinovum algicola' (NZ_FWFM00000000)	*Tritonibacter scottomollicae* DSM 25328	14.9	[12.1 - 18.4]	20.5	[18.2 - 22.9]	15.1	[12.6 - 17.9]	4.15
'Paracoccus yeei' (NZ_NIPZ00000000)	*Haematobacter massiliensis* CCUG 47968	13.9	[11.1 - 17.3]	20.5	[18.2 - 22.9]	14.2	[11.7 - 17.0]	2.87
'Epibacterium mobile' (NZ_LNXJ00000000)	*Salipiger bermudensis* HTCC2601	13.6	[10.9 - 17.0]	20.5	[18.3 - 23.0]	13.9	[11.5 - 16.7]	7.69
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Tritonibacter mobilis* DSM 23403	15.6	[12.7 - 19.1]	20.5	[18.3 - 22.9]	15.7	[13.1 - 18.6]	0.62
'Paracoccus yeei' (NZ_NIPZ00000000)	*Phaeovulum vinaykumarii* DSM 18714	16.4	[13.4 - 19.9]	20.5	[18.3 - 22.9]	16.3	[13.8 - 19.3]	0.83
'Paracoccus yeei' (NZ_CP024422)	*Pseudophaeobacter arcticus* DSM 23566	12.9	[10.2 - 16.2]	20.5	[18.3 - 22.9]	13.3	[10.9 - 16.0]	8.06
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Phaeobacter porticola* P97	17.3	[14.3 - 20.9]	20.5	[18.3 - 22.9]	17.1	[14.5 - 20.0]	2.93
'Epibacterium mobile' (NZ_LNWF00000000)	*Thalassobius mediterraneus* DSM 16398	13.7	[10.9 - 17.1]	20.5	[18.2 - 22.9]	14.0	[11.6 - 16.8]	0.05
'Phaeobacter inhibens' (NZ_CP010623)	*Cereibacter johrii* JA192	13.0	[10.3 - 16.3]	20.4	[18.1 - 22.8]	13.4	[11.0 - 16.2]	9.08
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Pseudophaeobacter arcticus* DSM 23566	12.9	[10.2 - 16.1]	20.4	[18.2 - 22.8]	13.2	[10.9 - 16.0]	9.5
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Ruegeria denitrificans* CECT 5091	14.6	[11.8 - 18.0]	20.4	[18.2 - 22.8]	14.8	[12.3 - 17.7]	4.78
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Ruegeria lacuscaerulensis* ITI-1157	17.5	[14.4 - 21.0]	20.4	[18.2 - 22.8]	17.2	[14.6 - 20.2]	1.46

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Phaeobacter inhibens' (NZ_CP010735)	*Tritonibacter mobilis* DSM 23403	15.8	[12.8 - 19.2]	20.4	[18.2 - 22.8]	15.8	[13.3 - 18.7]	0.81
'Phaeobacter piscinae' (NZ_CP010656)	**'Epibacterium mobile' (NZ_LNWN00000000)**	15.8	[12.9 - 19.3]	20.4	[18.1 - 22.8]	15.8	[13.3 - 18.7]	1.61
'Phaeobacter inhibens' (NZ_CP010623)	**'Paracoccus yeei' (NZ_CP024422)**	13.1	[10.4 - 16.4]	20.4	[18.2 - 22.8]	13.5	[11.1 - 16.3]	7.33
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Thalassobius mediterraneus* DSM 16398	14.4	[11.6 - 17.8]	20.4	[18.2 - 22.8]	14.6	[12.2 - 17.5]	2.78
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Ruegeria pelagia* NBRC102038	16.5	[13.5 - 20.0]	20.4	[18.2 - 22.9]	16.4	[13.8 - 19.3]	2.54
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Salipiger bermudensis* HTCC2601	13.4	[10.7 - 16.8]	20.4	[18.2 - 22.8]	13.7	[11.4 - 16.5]	6.82
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Ruegeria arenilitoris* CECT 8715	14.6	[11.8 - 18.0]	20.4	[18.2 - 22.8]	14.8	[12.3 - 17.6]	1.66
'Phaeobacter piscinae' (NZ_CP010656)	*Tritonibacter horizontis* O3.65	16.3	[13.3 - 19.7]	20.4	[18.1 - 22.8]	16.2	[13.6 - 19.1]	1.12
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus denitrificans* DSM 413	15.5	[12.6 - 18.9]	20.4	[18.1 - 22.8]	15.5	[13.0 - 18.4]	2.29
'Phaeobacter piscinae' (NZ_CP010767)	*Haematobacter missouriensis* CCUG 52307	12.9	[10.2 - 16.2]	20.4	[18.2 - 22.8]	13.3	[10.9 - 16.0]	3.96
'Epibacterium mobile' (NZ_LNWF00000000)	*Leisingera aquaemixtae* CECT 8399	16.3	[13.3 - 19.8]	20.4	[18.2 - 22.8]	16.2	[13.7 - 19.2]	5.61
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus aminovorans* DSM 8537	15.0	[12.2 - 18.5]	20.4	[18.1 - 22.8]	15.2	[12.7 - 18.0]	1.23
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus sigani* DSM 26381	15.3	[12.4 - 18.8]	20.4	[18.2 - 22.8]	15.4	[12.9 - 18.3]	1.23
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Pseudophaeobacter arcticus* DSM 23566	16.2	[13.2 - 19.6]	20.4	[18.1 - 22.8]	16.1	[13.6 - 19.0]	0.35
'Epibacterium mobile' (NZ_LNXJ00000000)	*Leisingera aquaemixtae* CECT 8399	16.3	[13.3 - 19.8]	20.4	[18.2 - 22.8]	16.2	[13.7 - 19.2]	5.65
'Phaeobacter gallaeciensis' (NZ_CP015124)	**'Epibacterium mobile' (NZ_LNWN00000000)**	16.3	[13.4 - 19.8]	20.4	[18.2 - 22.8]	16.3	[13.7 - 19.2]	2.73
'Phaeobacter piscinae' (NZ_CP010656)	**'Epibacterium mobile' (NZ_LNWF00000000)**	15.8	[12.9 - 19.3]	20.4	[18.1 - 22.8]	15.8	[13.3 - 18.7]	1.61
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus aminovorans* DSM 8537	15.1	[12.3 - 18.6]	20.4	[18.1 - 22.8]	15.2	[12.8 - 18.1]	1.47
'Phaeobacter piscinae' (NZ_CP010767)	*Tritonibacter horizontis* O3.65	16.1	[13.1 - 19.6]	20.4	[18.2 - 22.8]	16.1	[13.5 - 19.0]	1.16
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus zhejiangensis* J6	19.3	[16.2 - 22.9]	20.4	[18.2 - 22.8]	18.7	[16.0 - 21.7]	1.84
'Phaeobacter gallaeciensis' (NZ_CP015124)	**'Epibacterium mobile' (NZ_LNWF00000000)**	16.3	[13.4 - 19.8]	20.4	[18.2 - 22.8]	16.3	[13.7 - 19.2]	2.73
'Phaeobacter inhibens' (NZ_CP010735)	*Ruegeria meonggei* CECT 8411	13.9	[11.1 - 17.3]	20.4	[18.1 - 22.8]	14.2	[11.8 - 17.0]	2.51
'Phaeobacter piscinae' (NZ_CP010681)	*Ruegeria arenilitoris* CECT 8715	14.9	[12.0 - 18.3]	20.4	[18.2 - 22.8]	15.0	[12.5 - 17.9]	1.0

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Epibacterium mobile' (NZ_LNWN00000000)	*Leisingera aquaemixtae* CECT 8399	16.3	[13.3 - 19.8]	20.4	[18.2 - 22.8]	16.2	[13.7 - 19.2]	5.61
'Phaeobacter piscinae' (NZ_CP010656)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	15.8	[12.9 - 19.3]	20.4	[18.1 - 22.8]	15.8	[13.3 - 18.7]	1.65
'Phaeobacter inhibens' (NZ_CP010623)	*Salipiger bermudensis* HTCC2601	13.5	[10.7 - 16.8]	20.4	[18.2 - 22.8]	13.8	[11.4 - 16.6]	6.44
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Ruegeria arenilitoris* CECT 8715	16.2	[13.2 - 19.7]	20.4	[18.2 - 22.9]	16.1	[13.6 - 19.0]	0.23
'Phaeobacter piscinae' (NZ_CP010656)	*Haematobacter missouriensis* CCUG 52307	12.9	[10.2 - 16.2]	20.4	[18.1 - 22.8]	13.2	[10.9 - 16.0]	3.92
'Phaeobacter gallaeciensis' (NZ_CP015124)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	16.3	[13.4 - 19.8]	20.4	[18.2 - 22.8]	16.3	[13.7 - 19.2]	2.77
'Phaeobacter piscinae' (NZ_CP010656)	*Ruegeria lacuscaerulensis* ITI-1157	15.3	[12.4 - 18.8]	20.4	[18.1 - 22.8]	15.4	[12.9 - 18.3]	2.58
'Phaeobacter piscinae' (NZ_CP010767)	*Ruegeria pelagia* NBRC102038	16.0	[13.0 - 19.5]	20.4	[18.2 - 22.8]	16.0	[13.4 - 18.9]	1.39
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Phaeovulum vinaykumarii* DSM 18714	16.5	[13.5 - 20.0]	20.3	[18.1 - 22.7]	16.4	[13.8 - 19.3]	0.52
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Tritonibacter scottomollicae* DSM 25328	18.5	[15.4 - 22.1]	20.3	[18.1 - 22.7]	18.0	[15.4 - 21.0]	0.63
'Phaeobacter piscinae' (NZ_CP010656)	*Tritonibacter scottomollicae* DSM 25328	17.0	[14.0 - 20.5]	20.3	[18.1 - 22.8]	16.8	[14.2 - 19.8]	0.49
'Phaeobacter piscinae' (NZ_CP010681)	*Tritonibacter scottomollicae* DSM 25328	16.9	[13.9 - 20.4]	20.3	[18.0 - 22.7]	16.7	[14.2 - 19.7]	0.6
'Phaeobacter inhibens' (NZ_CP010735)	*Ruegeria arenilitoris* CECT 8715	14.8	[11.9 - 18.2]	20.3	[18.1 - 22.7]	14.9	[12.4 - 17.8]	1.47
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus subflavus* GY0581	20.7	[17.5 - 24.3]	20.3	[18.1 - 22.7]	19.8	[17.1 - 22.8]	1.96
'Epibacterium mobile' (NZ_LNXJ00000000)	*Pseudophaeobacter arcticus* DSM 23566	15.2	[12.3 - 18.6]	20.3	[18.1 - 22.7]	15.3	[12.8 - 18.1]	0.52
'Phaeobacter inhibens' (NZ_CP010623)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	15.7	[12.7 - 19.1]	20.3	[18.1 - 22.7]	15.7	[13.2 - 18.6]	1.26
'Phaeobacter piscinae' (NZ_CP010681)	*Ruegeria pelagia* NBRC102038	15.9	[13.0 - 19.4]	20.3	[18.0 - 22.7]	15.9	[13.4 - 18.8]	1.31
'Epibacterium mobile' (NZ_LNXJ00000000)	*Leisingera caerulea* DSM 24564	16.3	[13.3 - 19.8]	20.3	[18.1 - 22.7]	16.2	[13.7 - 19.1]	4.53
'Phaeobacter piscinae' (NZ_CP010767)	**'Paracoccus yeei' (NZ_CP024422)**	13.1	[10.4 - 16.4]	20.3	[18.1 - 22.7]	13.5	[11.1 - 16.3]	6.97
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus chinensis* CGMCC 1.7655	15.3	[12.4 - 18.7]	20.3	[18.1 - 22.7]	15.3	[12.8 - 18.2]	1.0
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Phaeobacter inhibens* DSM 16374	13.0	[10.3 - 16.3]	20.3	[18.1 - 22.7]	13.3	[11.0 - 16.1]	3.37
'Phaeobacter inhibens' (NZ_CP010623)	*Tritonibacter scottomollicae* DSM 25328	16.7	[13.7 - 20.2]	20.3	[18.1 - 22.7]	16.6	[14.0 - 19.5]	0.88
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Haematobacter massiliensis* CCUG 47968	13.3	[10.5 - 16.6]	20.3	[18.1 - 22.7]	13.6	[11.2 - 16.4]	1.18
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Ruegeria meteori* CECT 4293	14.4	[11.5 - 17.7]	20.3	[18.1 - 22.7]	14.6	[12.1 - 17.4]	5.04

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Phaeobacter piscinae' (NZ_CP010767)	**'Epibacterium mobile' (NZ_LNWN00000000)**	16.0	[13.1 - 19.5]	20.3	[18.1 - 22.7]	16.0	[13.5 - 18.9]	1.57
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus marinus* NBRC 100637	12.9	[10.2 - 16.2]	20.3	[18.1 - 22.7]	13.2	[10.9 - 16.0]	9.57
'Phaeobacter piscinae' (NZ_CP010681)	*Ruegeria denitrificans* CECT 5091	14.0	[11.2 - 17.4]	20.3	[18.1 - 22.7]	14.2	[11.8 - 17.1]	3.55
'Phaeobacter inhibens' (NZ_CP010623)	*Ruegeria pelagia* NBRC102038	15.6	[12.7 - 19.1]	20.3	[18.0 - 22.7]	15.7	[13.1 - 18.6]	1.03
'Paracoccus yeei' (NZ_CP031078)	*Phaeovulum vinaykumarii* DSM 18714	16.3	[13.3 - 19.7]	20.3	[18.0 - 22.7]	16.2	[13.6 - 19.1]	0.68
'Phaeobacter inhibens' (NZ_CP010623)	**'Epibacterium mobile' (NZ_LNWN00000000)**	15.7	[12.8 - 19.2]	20.3	[18.1 - 22.7]	15.7	[13.2 - 18.6]	1.22
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Phaeobacter gallaeciensis* DSM 26640	13.0	[10.3 - 16.3]	20.3	[18.1 - 22.7]	13.4	[11.0 - 16.1]	3.95
'Phaeobacter inhibens' (NZ_CP010623)	*Ruegeria lacuscaerulensis* DSM 11314	15.1	[12.2 - 18.5]	20.3	[18.1 - 22.8]	15.2	[12.7 - 18.1]	3.0
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Haematobacter missouriensis* CCUG 52307	13.3	[10.6 - 16.6]	20.3	[18.1 - 22.7]	13.6	[11.2 - 16.4]	0.93
'Phaeobacter inhibens' (NZ_CP010735)	**'Epibacterium mobile' (NZ_LNWF00000000)**	15.7	[12.7 - 19.1]	20.3	[18.0 - 22.7]	15.7	[13.2 - 18.6]	1.03
'Paracoccus yeei' (NZ_CP031078)	*Pseudophaeobacter arcticus* DSM 23566	12.9	[10.2 - 16.2]	20.3	[18.1 - 22.7]	13.3	[10.9 - 16.0]	8.31
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Ruegeria lacuscaerulensis* ITI-1157	15.2	[12.3 - 18.7]	20.3	[18.1 - 22.7]	15.3	[12.8 - 18.2]	3.35
'Phaeobacter piscinae' (NZ_CP010656)	*Ruegeria arenilitoris* CECT 8715	15.0	[12.2 - 18.5]	20.3	[18.1 - 22.7]	15.2	[12.7 - 18.0]	0.88
'Phaeobacter inhibens' (NZ_CP010623)	*Ruegeria arenilitoris* CECT 8715	14.9	[12.0 - 18.3]	20.3	[18.1 - 22.7]	15.0	[12.5 - 17.9]	1.28
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus contaminans* LMG 29738	12.9	[10.2 - 16.2]	20.3	[18.1 - 22.7]	13.3	[10.9 - 16.0]	8.42
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus aminophilus* JCM 7686	13.0	[10.3 - 16.3]	20.3	[18.1 - 22.7]	13.4	[11.0 - 16.1]	3.74
'Phaeobacter piscinae' (NZ_CP010767)	**'Epibacterium mobile' (NZ_LNWF00000000)**	16.0	[13.1 - 19.5]	20.3	[18.1 - 22.7]	16.0	[13.5 - 18.9]	1.57
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Phaeovulum vinaykumarii* DSM 18714	16.5	[13.5 - 20.0]	20.3	[18.1 - 22.7]	16.4	[13.8 - 19.3]	0.81
'Epibacterium mobile' (NZ_LNXJ00000000)	*Phaeobacter inhibens* DSM 16374	15.5	[12.6 - 19.0]	20.3	[18.1 - 22.7]	15.6	[13.1 - 18.5]	1.27
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Ruegeria lacuscaerulensis* DSM 11314	17.5	[14.5 - 21.1]	20.3	[18.1 - 22.7]	17.2	[14.6 - 20.2]	1.49
'Paracoccus yeei' (NZ_CP031078)	**'Rhodobacter sphaeroides' (NZ_CP033434)**	15.3	[12.4 - 18.7]	20.3	[18.1 - 22.7]	15.4	[12.9 - 18.2]	1.54
'Epibacterium mobile' (NZ_LNWN00000000)	*Phaeobacter inhibens* DSM 16374	15.5	[12.6 - 19.0]	20.3	[18.1 - 22.7]	15.6	[13.1 - 18.5]	1.23
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Tritonibacter horizontis* O3.65	17.4	[14.3 - 20.9]	20.3	[18.1 - 22.7]	17.1	[14.5 - 20.1]	0.0
'Phaeobacter inhibens' (NZ_CP010735)	*Ruegeria atlantica* CECT 4292	13.9	[11.1 - 17.3]	20.3	[18.1 - 22.7]	14.2	[11.8 - 17.0]	3.43

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Epibacterium mobile' (NZ_LNWF00000000)	*Phaeobacter inhibens* DSM 16374	15.5	[12.6 - 19.0]	20.3	[18.1 - 22.7]	15.6	[13.1 - 18.5]	1.23
'Epibacterium mobile' (NZ_LNWN00000000)	*Pseudophaeobacter arcticus* DSM 23566	15.2	[12.3 - 18.6]	20.3	[18.1 - 22.7]	15.3	[12.8 - 18.2]	0.48
'Epibacterium mobile' (NZ_LNWF00000000)	*Pseudophaeobacter arcticus* DSM 23566	15.2	[12.3 - 18.6]	20.3	[18.1 - 22.7]	15.3	[12.8 - 18.2]	0.49
'Phaeobacter piscinae' (NZ_CP010767)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	16.0	[13.1 - 19.5]	20.3	[18.1 - 22.7]	16.0	[13.5 - 18.9]	1.61
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Phaeobacter gallaeciensis' (NZ_CP010784)**	13.1	[10.3 - 16.4]	20.3	[18.1 - 22.7]	13.4	[11.0 - 16.2]	3.76
'Epibacterium mobile' (NZ_LNWN00000000)	*Leisingera caerulea* DSM 24564	16.3	[13.3 - 19.8]	20.3	[18.1 - 22.7]	16.2	[13.7 - 19.2]	4.49
'Phaeobacter inhibens' (NZ_CP010623)	**'Epibacterium mobile' (NZ_LNWF00000000)**	15.7	[12.8 - 19.2]	20.3	[18.1 - 22.7]	15.7	[13.2 - 18.6]	1.22
'Epibacterium mobile' (NZ_LNWF00000000)	*Leisingera caerulea* DSM 24564	16.3	[13.3 - 19.8]	20.3	[18.1 - 22.7]	16.2	[13.7 - 19.2]	4.49
'Phaeobacter inhibens' (NZ_CP010735)	*Salipiger bermudensis* HTCC2601	13.5	[10.7 - 16.8]	20.3	[18.1 - 22.7]	13.8	[11.4 - 16.6]	6.63
'Phaeobacter piscinae' (NZ_CP010767)	*Tritonibacter scottomollicae* DSM 25328	16.9	[13.9 - 20.4]	20.3	[18.1 - 22.7]	16.7	[14.2 - 19.7]	0.53
'Phaeobacter piscinae' (NZ_CP010656)	*Phaeovulum vinaykumarii* DSM 18714	13.2	[10.5 - 16.5]	20.3	[18.1 - 22.7]	13.5	[11.1 - 16.3]	7.86
'Phaeobacter piscinae' (NZ_CP010767)	*Ruegeria denitrificans* CECT 5091	14.0	[11.2 - 17.4]	20.3	[18.1 - 22.7]	14.3	[11.9 - 17.1]	3.62
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus aminovorans* DSM 8537	13.1	[10.4 - 16.4]	20.3	[18.0 - 22.7]	13.4	[11.1 - 16.2]	7.18
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus marinus* NBRC 100637	12.9	[10.2 - 16.2]	20.3	[18.1 - 22.7]	13.3	[10.9 - 16.1]	9.76
'Paracoccus yeei' (NZ_CP024422)	*Cereibacter azotoformans* KA25	15.5	[12.6 - 19.0]	20.2	[18.0 - 22.6]	15.6	[13.1 - 18.5]	1.04
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Tropicibacter naphthalenivorans* DSM 19561	14.5	[11.6 - 17.9]	20.2	[18.0 - 22.6]	14.7	[12.2 - 17.5]	1.69
'Phaeobacter inhibens' (NZ_CP010623)	*Tritonibacter mobilis* DSM 23403	15.8	[12.8 - 19.2]	20.2	[18.0 - 22.6]	15.8	[13.2 - 18.7]	1.0
'Paracoccus yeei' (NZ_CP031078)	*Haematobacter missouriensis* CCUG 52307	14.1	[11.3 - 17.5]	20.2	[18.0 - 22.6]	14.3	[11.9 - 17.2]	3.26
'Epibacterium mobile' (NZ_LNWN00000000)	*Leisingera aquimarina* DSM 24565	15.6	[12.7 - 19.1]	20.2	[18.0 - 22.6]	15.7	[13.1 - 18.6]	2.57
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Phaeovulum vinaykumarii* DSM 18714	17.0	[13.9 - 20.5]	20.2	[18.0 - 22.6]	16.8	[14.2 - 19.7]	0.75
'Phaeobacter piscinae' (NZ_CP010656)	*Ruegeria denitrificans* CECT 5091	14.1	[11.3 - 17.5]	20.2	[18.0 - 22.6]	14.4	[11.9 - 17.2]	3.66
'Paracoccus yeei' (NZ_NIPZ00000000)	*Rhodobacter megalophilus* DSM 18937	15.0	[12.1 - 18.4]	20.2	[18.0 - 22.6]	15.1	[12.6 - 18.0]	1.35
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus laeviglucosivorans* DSM 100094	13.0	[10.2 - 16.2]	20.2	[17.9 - 22.6]	13.3	[11.0 - 16.1]	3.3
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus marinus* NBRC 100637	14.7	[11.9 - 18.1]	20.2	[18.0 - 22.6]	14.9	[12.4 - 17.7]	0.61
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus aminovorans* DSM 8537	13.1	[10.4 - 16.4]	20.2	[18.0 - 22.6]	13.5	[11.1 - 16.2]	7.26

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Phaeobacter piscinae' (NZ_CP010767)	*Tropicibacter naphthalenivorans* DSM 19561	13.8	[11.0 - 17.2]	20.2	[17.9 - 22.6]	14.1	[11.7 - 16.9]	2.85
'Phaeobacter piscinae' (NZ_CP010656)	*Ruegeria meteori* CECT 4293	14.0	[11.2 - 17.3]	20.2	[18.0 - 22.6]	14.2	[11.8 - 17.0]	3.92
'Phaeobacter inhibens' (NZ_CP010735)	**'Epibacterium mobile' (NZ_LNWN00000000)**	15.7	[12.7 - 19.1]	20.2	[18.0 - 22.7]	15.7	[13.2 - 18.6]	1.02
'Phaeobacter inhibens' (NZ_CP010623)	*Ruegeria denitrificans* CECT 5091	14.0	[11.2 - 17.4]	20.2	[18.0 - 22.6]	14.2	[11.8 - 17.1]	3.27
'Phaeobacter piscinae' (NZ_CP010681)	*Tritonibacter horizontis* O3.65	16.3	[13.4 - 19.8]	20.2	[18.0 - 22.6]	16.3	[13.7 - 19.2]	1.23
'Paracoccus yeei' (NZ_CP024422)	**'Rhodobacter sphaeroides' (NZ_CP033434)**	15.3	[12.4 - 18.8]	20.2	[18.0 - 22.7]	15.4	[12.9 - 18.3]	1.78
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus marinus* NBRC 100637	13.0	[10.3 - 16.3]	20.2	[18.0 - 22.6]	13.3	[11.0 - 16.1]	9.02
'Phaeobacter inhibens' (NZ_CP010735)	*Ruegeria lacuscaerulensis* ITI-1157	15.2	[12.3 - 18.7]	20.2	[18.0 - 22.6]	15.3	[12.8 - 18.2]	3.16
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus chinensis* CGMCC 1.7655	15.2	[12.3 - 18.6]	20.2	[18.0 - 22.6]	15.3	[12.8 - 18.2]	0.89
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus chinensis* CGMCC 1.7655	12.9	[10.2 - 16.2]	20.2	[18.0 - 22.7]	13.2	[10.9 - 16.0]	8.12
'Phaeobacter piscinae' (NZ_CP010681)	*Phaeovulum vinaykumarii* DSM 18714	13.1	[10.4 - 16.4]	20.2	[18.0 - 22.7]	13.4	[11.1 - 16.2]	7.97
'Phaeobacter piscinae' (NZ_CP010767)	**'Paracoccus yeei' (NZ_CP031078)**	13.2	[10.5 - 16.5]	20.2	[18.0 - 22.6]	13.5	[11.1 - 16.3]	7.22
'Paracoccus yeei' (NZ_CP031078)	*Phaeobacter porticola* P97	13.0	[10.3 - 16.3]	20.2	[18.0 - 22.6]	13.3	[11.0 - 16.1]	8.99
'Phaeobacter inhibens' (NZ_CP010735)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	15.7	[12.7 - 19.1]	20.2	[18.0 - 22.7]	15.7	[13.2 - 18.6]	1.06
'Phaeobacter piscinae' (NZ_CP010656)	*Ruegeria lacuscaerulensis* DSM 11314	15.3	[12.4 - 18.8]	20.2	[18.0 - 22.6]	15.4	[12.9 - 18.3]	2.61
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus aminovorans* DSM 8537	15.3	[12.4 - 18.7]	20.2	[18.0 - 22.6]	15.3	[12.8 - 18.2]	1.58
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus aminovorans* DSM 8537	13.1	[10.3 - 16.3]	20.2	[18.0 - 22.6]	13.4	[11.0 - 16.2]	7.73
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus contaminans* LMG 29738	14.2	[11.4 - 17.6]	20.2	[17.9 - 22.6]	14.4	[12.0 - 17.3]	0.36
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus chinensis* CGMCC 1.7655	15.1	[12.2 - 18.5]	20.2	[17.9 - 22.6]	15.2	[12.7 - 18.1]	0.65
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Ruegeria atlantica* CECT 4292	13.8	[11.0 - 17.1]	20.2	[18.0 - 22.6]	14.0	[11.6 - 16.9]	3.24
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus contaminans* LMG 29738	14.4	[11.6 - 17.8]	20.2	[18.0 - 22.6]	14.6	[12.2 - 17.5]	0.3
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus contaminans* LMG 29738	14.5	[11.6 - 17.9]	20.2	[17.9 - 22.6]	14.6	[12.2 - 17.5]	0.41
'Phaeobacter inhibens' (NZ_CP010735)	*Ruegeria meteori* CECT 4293	14.0	[11.2 - 17.4]	20.2	[18.0 - 22.6]	14.2	[11.8 - 17.1]	3.33
'Epibacterium mobile' (NZ_LNWF00000000)	*Leisingera aquimarina* DSM 24565	15.6	[12.7 - 19.1]	20.2	[17.9 - 22.6]	15.7	[13.1 - 18.6]	2.57

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Phaeobacter piscinae' (NZ_CP010681)	*Tritonibacter mobilis* DSM 23403	16.1	[13.1 - 19.6]	20.2	[18.0 - 22.6]	16.0	[13.5 - 19.0]	1.28
'Phaeobacter piscinae' (NZ_CP010681)	*Tropicibacter naphthalenivorans* DSM 19561	13.7	[10.9 - 17.1]	20.2	[18.0 - 22.6]	14.0	[11.6 - 16.8]	2.93
'Phaeobacter piscinae' (NZ_CP010767)	*Ruegeria meteori* CECT 4293	14.1	[11.3 - 17.5]	20.1	[17.9 - 22.5]	14.4	[11.9 - 17.2]	3.88
'Paracoccus yeei' (NZ_CP024422)	*Paracoccus aminophilus* JCM 7686	17.9	[14.8 - 21.5]	20.1	[17.9 - 22.5]	17.5	[14.9 - 20.5]	3.97
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus laeviglucosivorans* DSM 100094	13.0	[10.3 - 16.3]	20.1	[17.9 - 22.5]	13.3	[11.0 - 16.1]	3.11
'Epibacterium mobile' (NZ_LNWN00000000)	*Phaeobacter porticola* P97	15.4	[12.5 - 18.9]	20.1	[17.9 - 22.5]	15.5	[13.0 - 18.4]	0.2
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Tritonibacter horizontis* O3.65	15.9	[13.0 - 19.4]	20.1	[17.9 - 22.5]	15.9	[13.4 - 18.8]	1.89
'Phaeobacter piscinae' (NZ_CP010681)	*Ruegeria meonggei* CECT 8411	14.3	[11.4 - 17.6]	20.1	[17.9 - 22.5]	14.5	[12.0 - 17.3]	2.98
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Ruegeria lacuscaerulensis* DSM 11314	15.3	[12.3 - 18.7]	20.1	[17.9 - 22.5]	15.3	[12.8 - 18.2]	3.38
'Phaeobacter inhibens' (NZ_CP010735)	*Tritonibacter scottomollicae* DSM 25328	16.9	[13.9 - 20.4]	20.1	[17.9 - 22.5]	16.7	[14.1 - 19.7]	1.08
'Epibacterium mobile' (NZ_LNXJ00000000)	*Phaeobacter porticola* P97	15.4	[12.5 - 18.9]	20.1	[17.9 - 22.5]	15.5	[13.0 - 18.4]	0.16
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus aminovorans* DSM 8537	13.1	[10.4 - 16.4]	20.1	[17.9 - 22.5]	13.4	[11.1 - 16.2]	7.14
'Epibacterium mobile' (NZ_LNWF00000000)	*Ruegeria meteori* CECT 4293	13.6	[10.8 - 16.9]	20.1	[17.9 - 22.5]	13.8	[11.5 - 16.7]	2.31
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Paracoccus yeei' (NZ_CP024422)**	15.1	[12.2 - 18.6]	20.1	[17.8 - 22.5]	15.2	[12.7 - 18.1]	1.44
'Phaeobacter inhibens' (NZ_CP010623)	*Tritonibacter horizontis* O3.65	16.1	[13.2 - 19.6]	20.1	[17.9 - 22.6]	16.1	[13.5 - 19.0]	1.51
'Epibacterium mobile' (NZ_LNXJ00000000)	*Leisingera methylohalidivorans* DSM 14336	16.1	[13.1 - 19.6]	20.1	[17.9 - 22.5]	16.0	[13.5 - 18.9]	3.58
'Epibacterium mobile' (NZ_LNWF00000000)	*Leisingera methylohalidivorans* DSM 14336	16.1	[13.1 - 19.6]	20.1	[17.9 - 22.5]	16.0	[13.5 - 19.0]	3.54
'Phaeobacter inhibens' (NZ_CP010735)	*Tropicibacter naphthalenivorans* DSM 19561	13.6	[10.9 - 17.0]	20.1	[17.9 - 22.5]	13.9	[11.5 - 16.7]	3.4
'Phaeobacter piscinae' (NZ_CP010681)	**'Epibacterium mobile' (NZ_LNWF00000000)**	15.8	[12.9 - 19.3]	20.1	[17.9 - 22.5]	15.8	[13.3 - 18.7]	1.5
'Phaeobacter piscinae' (NZ_CP010681)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	15.8	[12.9 - 19.3]	20.1	[17.9 - 22.5]	15.8	[13.3 - 18.7]	1.54
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Ruegeria atlantica* CECT 4292	14.4	[11.6 - 17.8]	20.1	[17.9 - 22.5]	14.6	[12.1 - 17.4]	5.14
'Epibacterium mobile' (NZ_LNXJ00000000)	*Leisingera aquimarina* DSM 24565	15.6	[12.7 - 19.1]	20.1	[17.9 - 22.5]	15.7	[13.1 - 18.6]	2.61
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus marinus* NBRC 100637	15.0	[12.1 - 18.5]	20.1	[17.9 - 22.5]	15.1	[12.7 - 18.0]	0.37

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus contaminans* LMG 29738	14.2	[11.4 - 17.6]	20.1	[17.9 - 22.6]	14.4	[12.0 - 17.3]	0.07
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Phaeobacter inhibens' (NZ_CP010623)**	13.0	[10.3 - 16.3]	20.1	[17.9 - 22.5]	13.4	[11.0 - 16.1]	8.77
'Phaeobacter piscinae' (NZ_CP010681)	**'Epibacterium mobile' (NZ_LNWN00000000)**	15.8	[12.9 - 19.3]	20.1	[17.9 - 22.5]	15.8	[13.3 - 18.7]	1.5
'Epibacterium mobile' (NZ_LNXJ00000000)	*Ruegeria meteori* CECT 4293	13.6	[10.8 - 16.9]	20.1	[17.9 - 22.5]	13.8	[11.5 - 16.6]	2.27
'Phaeobacter inhibens' (NZ_CP010735)	**'Paracoccus yeei' (NZ_CP024422)**	13.1	[10.4 - 16.4]	20.1	[17.8 - 22.5]	13.5	[11.1 - 16.3]	7.52
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Tritonibacter scottomollicae* DSM 25328	16.6	[13.6 - 20.1]	20.1	[17.9 - 22.5]	16.5	[13.9 - 19.4]	1.26
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Pseudophaeobacter arcticus* DSM 23566	12.9	[10.2 - 16.2]	20.1	[17.9 - 22.5]	13.2	[10.9 - 16.0]	9.74
'Phaeobacter piscinae' (NZ_CP010767)	*Ruegeria atlantica* CECT 4292	14.1	[11.2 - 17.4]	20.1	[17.8 - 22.5]	14.3	[11.9 - 17.1]	3.98
'Phaeobacter piscinae' (NZ_CP010767)	*Phaeovulum vinaykumarii* DSM 18714	13.1	[10.4 - 16.4]	20.1	[17.9 - 22.5]	13.5	[11.1 - 16.2]	7.9
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Ruegeria meonggei* CECT 8411	14.1	[11.3 - 17.5]	20.1	[17.9 - 22.5]	14.3	[11.9 - 17.2]	2.32
'Epibacterium mobile' (NZ_LNWF00000000)	*Phaeobacter porticola* P97	15.4	[12.5 - 18.9]	20.1	[17.9 - 22.5]	15.5	[13.0 - 18.4]	0.2
'Phaeobacter inhibens' (NZ_CP010623)	**'Paracoccus yeei' (NZ_CP031078)**	13.2	[10.4 - 16.5]	20.1	[17.9 - 22.5]	13.5	[11.1 - 16.3]	7.57
'Phaeobacter piscinae' (NZ_CP010656)	*Ruegeria meonggei* CECT 8411	14.3	[11.4 - 17.6]	20.1	[17.9 - 22.5]	14.5	[12.0 - 17.3]	3.1
'Epibacterium mobile' (NZ_LNWN00000000)	*Ruegeria meteori* CECT 4293	13.5	[10.8 - 16.9]	20.1	[17.8 - 22.5]	13.8	[11.4 - 16.6]	2.31
'Phaeobacter piscinae' (NZ_CP010767)	*Ruegeria lacuscaerulensis* ITI-1157	15.4	[12.5 - 18.8]	20.1	[17.9 - 22.5]	15.4	[12.9 - 18.3]	2.62
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus denitrificans* DSM 413	15.4	[12.5 - 18.8]	20.1	[17.9 - 22.5]	15.4	[12.9 - 18.3]	1.94
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Leisingera methylohalidivorans* DSM 14336	13.2	[10.5 - 16.5]	20.1	[17.9 - 22.6]	13.5	[11.2 - 16.3]	1.06
'Epibacterium mobile' (NZ_LNWN00000000)	*Leisingera methylohalidivorans* DSM 14336	16.1	[13.1 - 19.6]	20.1	[17.9 - 22.5]	16.0	[13.5 - 19.0]	3.54
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Paracoccus yeei' (NZ_CP024422)**	15.4	[12.5 - 18.9]	20.1	[17.9 - 22.5]	15.5	[13.0 - 18.4]	1.68
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus denitrificans* DSM 413	15.3	[12.4 - 18.7]	20.1	[17.9 - 22.5]	15.4	[12.9 - 18.2]	2.18
'Paracoccus yeei' (NZ_CP024422)	*Cereibacter sphaeroides* 2.4.1	15.1	[12.2 - 18.6]	20.1	[17.8 - 22.5]	15.2	[12.7 - 18.1]	1.46
'Phaeobacter inhibens' (NZ_CP010623)	*Cereibacter sphaeroides* 2.4.1	13.0	[10.3 - 16.3]	20.1	[17.9 - 22.5]	13.4	[11.0 - 16.1]	8.79
'Paracoccus yeei' (NZ_CP024422)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	15.1	[12.2 - 18.6]	20.1	[17.9 - 22.5]	15.2	[12.7 - 18.1]	1.74

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus denitrificans* DSM 413	15.4	[12.5 - 18.9]	20.1	[17.9 - 22.5]	15.5	[13.0 - 18.4]	2.24
'Paracoccus yeei' (NZ_CP031078)	*Rhodobacter megalophilus* DSM 18937	15.0	[12.1 - 18.4]	20.1	[17.9 - 22.5]	15.1	[12.6 - 18.0]	1.2
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus marinus* NBRC 100637	15.1	[12.2 - 18.5]	20.1	[17.9 - 22.6]	15.2	[12.7 - 18.1]	0.26
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Paracoccus yeei' (NZ_CP031078)**	15.3	[12.4 - 18.7]	20.0	[17.8 - 22.4]	15.4	[12.9 - 18.3]	1.19
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Ruegeria meteori* CECT 4293	13.9	[11.1 - 17.3]	20.0	[17.8 - 22.4]	14.2	[11.8 - 17.0]	3.15
'Phaeobacter piscinae' (NZ_CP010767)	*Cereibacter johrii* JA192	13.1	[10.3 - 16.4]	20.0	[17.7 - 22.4]	13.4	[11.0 - 16.2]	8.73
'Phaeobacter inhibens' (NZ_CP010623)	*Ruegeria meonggei* CECT 8411	14.0	[11.2 - 17.4]	20.0	[17.8 - 22.4]	14.2	[11.8 - 17.1]	2.7
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus chinensis* CGMCC 1.7655	15.2	[12.3 - 18.7]	20.0	[17.8 - 22.4]	15.3	[12.8 - 18.2]	0.95
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus marinus* NBRC 100637	13.0	[10.3 - 16.3]	20.0	[17.8 - 22.5]	13.4	[11.0 - 16.1]	9.1
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus lutimaris* CECT 8525	13.0	[10.3 - 16.2]	20.0	[17.8 - 22.4]	13.3	[11.0 - 16.1]	6.39
'Phaeobacter piscinae' (NZ_CP010767)	*Marinovum algicola* DSM 10251	13.8	[11.0 - 17.2]	20.0	[17.8 - 22.4]	14.1	[11.7 - 16.9]	4.69
'Phaeobacter piscinae' (NZ_CP010681)	*Ruegeria meteori* CECT 4293	14.1	[11.3 - 17.5]	20.0	[17.8 - 22.5]	14.3	[11.9 - 17.2]	3.81
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus sigani* DSM 26381	15.2	[12.3 - 18.7]	20.0	[17.8 - 22.4]	15.3	[12.8 - 18.2]	1.12
'Paracoccus yeei' (NZ_CP024422)	*Phaeovulum veldkampii* DSM 11550	15.4	[12.5 - 18.9]	20.0	[17.8 - 22.4]	15.5	[13.0 - 18.4]	2.19
'Phaeobacter inhibens' (NZ_CP010623)	*Tropicibacter naphthalenivorans* DSM 19561	13.7	[10.9 - 17.1]	20.0	[17.8 - 22.4]	14.0	[11.6 - 16.8]	3.21
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus aminophilus* JCM 7686	14.0	[11.2 - 17.3]	20.0	[17.8 - 22.4]	14.2	[11.8 - 17.0]	5.75
'Phaeobacter inhibens' (NZ_CP010735)	*Cereibacter johrii* JA192	13.0	[10.3 - 16.3]	20.0	[17.8 - 22.4]	13.4	[11.0 - 16.1]	9.28
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Paracoccus yeei' (NZ_CP031078)**	19.6	[16.4 - 23.2]	20.0	[17.7 - 22.4]	18.8	[16.2 - 21.9]	4.19
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Paracoccus yeei' (NZ_CP031078)**	15.5	[12.6 - 19.0]	20.0	[17.8 - 22.5]	15.6	[13.1 - 18.5]	1.43
'Phaeobacter piscinae' (NZ_CP010656)	**'Paracoccus yeei' (NZ_CP024422)**	13.2	[10.4 - 16.5]	20.0	[17.8 - 22.4]	13.5	[11.1 - 16.3]	6.93
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus denitrificans* DSM 413	19.4	[16.2 - 23.0]	20.0	[17.8 - 22.4]	18.7	[16.0 - 21.7]	3.44
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus aminophilus* JCM 7686	13.2	[10.5 - 16.5]	20.0	[17.8 - 22.4]	13.5	[11.2 - 16.3]	1.85
'Paracoccus yeei' (NZ_CP031078)	*Cereibacter sphaeroides* 2.4.1	15.3	[12.4 - 18.8]	20.0	[17.8 - 22.4]	15.4	[12.9 - 18.3]	1.21

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Marinovum algicola' (NZ_FWFM00000000)	*Ruegeria lacuscaerulensis* ITI-1157	15.7	[12.8 - 19.2]	20.0	[17.8 - 22.4]	15.7	[13.2 - 18.6]	2.06
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus yeei* ATCC BAA-599	15.2	[12.3 - 18.7]	20.0	[17.8 - 22.4]	15.3	[12.8 - 18.2]	1.64
'Phaeobacter piscinae' (NZ_CP010767)	*Ruegeria arenilitoris* CECT 8715	15.2	[12.3 - 18.7]	20.0	[17.7 - 22.4]	15.3	[12.8 - 18.2]	0.92
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus laeviglucosivorans* DSM 100094	13.2	[10.5 - 16.5]	20.0	[17.8 - 22.4]	13.5	[11.1 - 16.3]	1.59
'Paracoccus yeei' (NZ_CP031078)	*Paracoccus aminophilus* JCM 7686	18.4	[15.3 - 22.0]	20.0	[17.8 - 22.4]	17.9	[15.3 - 20.9]	4.21
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus lutimaris* CECT 8525	13.0	[10.3 - 16.2]	20.0	[17.8 - 22.4]	13.3	[11.0 - 16.1]	6.4
'Marinovum algicola' (NZ_FWFM00000000)	*Leisingera aquimarina* DSM 24565	14.7	[11.9 - 18.2]	20.0	[17.8 - 22.5]	14.9	[12.4 - 17.8]	3.68
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus lutimaris* CECT 8525	13.0	[10.2 - 16.2]	20.0	[17.8 - 22.4]	13.3	[11.0 - 16.1]	6.43
'Rhodobacter sphaeroides' (NZ_CP033434)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	15.2	[12.3 - 18.6]	20.0	[17.8 - 22.5]	15.3	[12.8 - 18.2]	1.69
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Leisingera caerulea* DSM 24564	13.5	[10.7 - 16.8]	20.0	[17.8 - 22.4]	13.8	[11.4 - 16.6]	5.79
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Paracoccus yeei' (NZ_CP024422)**	18.8	[15.7 - 22.4]	20.0	[17.8 - 22.4]	18.3	[15.6 - 21.3]	3.95
'Phaeobacter piscinae' (NZ_CP010656)	*Cereibacter johrii* JA192	13.0	[10.3 - 16.3]	20.0	[17.8 - 22.4]	13.4	[11.0 - 16.2]	8.69
'Phaeobacter piscinae' (NZ_CP010767)	*Cereibacter sphaeroides* 2.4.1	13.0	[10.3 - 16.3]	20.0	[17.7 - 22.4]	13.4	[11.0 - 16.2]	8.43
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus lutimaris* CECT 8525	13.1	[10.4 - 16.4]	20.0	[17.8 - 22.4]	13.5	[11.1 - 16.2]	4.9
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus sigani* DSM 26381	15.3	[12.4 - 18.7]	20.0	[17.8 - 22.4]	15.3	[12.8 - 18.2]	0.89
'Phaeobacter gallaeciensis' (NZ_CP015124)	**'Paracoccus yeei' (NZ_CP024422)**	13.4	[10.7 - 16.7]	20.0	[17.8 - 22.4]	13.7	[11.3 - 16.5]	5.82
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus alcaliphilus* DSM 8512	13.8	[11.0 - 17.1]	20.0	[17.8 - 22.4]	14.1	[11.6 - 16.9]	4.47
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus zhejiangensis* J6	13.1	[10.4 - 16.4]	20.0	[17.8 - 22.4]	13.5	[11.1 - 16.2]	5.19
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Rhodobacter sphaeroides' (NZ_CP033434)**	14.2	[11.4 - 17.6]	20.0	[17.8 - 22.4]	14.4	[12.0 - 17.2]	5.73
'Paracoccus yeei' (NZ_CP031078)	*Haematobacter massiliensis* CCUG 47968	13.8	[11.0 - 17.2]	20.0	[17.8 - 22.4]	14.1	[11.7 - 16.9]	3.01
'Phaeobacter piscinae' (NZ_CP010681)	*Ruegeria lacuscaerulensis* ITI-1157	15.4	[12.5 - 18.8]	20.0	[17.8 - 22.4]	15.4	[12.9 - 18.3]	2.69
'Paracoccus yeei' (NZ_CP024422)	*Tritonibacter horizontis* O3.65	13.3	[10.5 - 16.6]	20.0	[17.8 - 22.4]	13.6	[11.2 - 16.4]	5.82
'Phaeobacter inhibens' (NZ_CP010735)	*Ruegeria lacuscaerulensis* DSM 11314	15.3	[12.4 - 18.7]	20.0	[17.8 - 22.4]	15.3	[12.8 - 18.2]	3.2
'Marinovum algicola' (NZ_FWFM00000000)	*Phaeobacter inhibens* DSM 16374	14.0	[11.2 - 17.3]	20.0	[17.8 - 22.4]	14.2	[11.8 - 17.0]	5.02

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Paracoccus yeei' (NZ_CP024422)	*Leisingera caerulea* DSM 24564	13.6	[10.8 - 16.9]	20.0	[17.8 - 22.4]	13.9	[11.5 - 16.7]	4.06
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Phaeobacter piscinae' (NZ_CP010767)**	13.0	[10.3 - 16.3]	20.0	[17.7 - 22.4]	13.4	[11.0 - 16.2]	8.41
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus contaminans* LMG 29738	12.9	[10.2 - 16.2]	20.0	[17.8 - 22.5]	13.2	[10.9 - 16.0]	8.9
'Phaeobacter inhibens' (NZ_CP010623)	*Ruegeria atlantica* CECT 4292	14.0	[11.2 - 17.4]	19.9	[17.7 - 22.3]	14.3	[11.8 - 17.1]	3.62
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Leisingera caerulea* DSM 24564	13.6	[10.8 - 16.9]	19.9	[17.7 - 22.3]	13.9	[11.5 - 16.7]	5.5
'Phaeobacter inhibens' (NZ_CP010735)	*Tritonibacter horizontis* O3.65	16.3	[13.3 - 19.8]	19.9	[17.7 - 22.3]	16.2	[13.6 - 19.1]	1.7
'Marinovum algicola' (NZ_FWFM00000000)	*Ruegeria arenilitoris* CECT 8715	15.1	[12.2 - 18.6]	19.9	[17.7 - 22.3]	15.2	[12.7 - 18.1]	3.75
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus zhejiangensis* J6	15.0	[12.1 - 18.4]	19.9	[17.7 - 22.3]	15.1	[12.6 - 18.0]	3.53
'Phaeobacter piscinae' (NZ_CP010681)	**'Paracoccus yeei' (NZ_CP024422)**	13.2	[10.5 - 16.5]	19.9	[17.7 - 22.3]	13.5	[11.2 - 16.3]	7.05
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus aminovorans* DSM 8537	13.1	[10.4 - 16.4]	19.9	[17.7 - 22.3]	13.4	[11.1 - 16.2]	7.92
'Paracoccus yeei' (NZ_CP024422)	*Phaeobacter porticola* P97	13.0	[10.3 - 16.3]	19.9	[17.7 - 22.3]	13.3	[11.0 - 16.1]	8.75
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus lutimaris* CECT 8525	20.2	[17.0 - 23.8]	19.9	[17.6 - 22.3]	19.3	[16.6 - 22.4]	1.8
'Paracoccus yeei' (NZ_CP031078)	*Phaeobacter gallaeciensis* DSM 26640	13.0	[10.3 - 16.3]	19.9	[17.7 - 22.3]	13.4	[11.0 - 16.2]	8.14
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus laeviglucosivorans* DSM 100094	13.0	[10.3 - 16.3]	19.9	[17.7 - 22.3]	13.4	[11.0 - 16.1]	2.71
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus alcaliphilus* DSM 8512	13.9	[11.1 - 17.2]	19.9	[17.7 - 22.4]	14.1	[11.7 - 16.9]	4.7
'Paracoccus yeei' (NZ_NIPZ00000000)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	15.0	[12.1 - 18.4]	19.9	[17.7 - 22.3]	15.1	[12.6 - 18.0]	1.64
'Marinovum algicola' (NZ_FWFM00000000)	*Haematobacter massiliensis* CCUG 47968	13.3	[10.5 - 16.6]	19.9	[17.7 - 22.3]	13.6	[11.2 - 16.4]	0.47
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Haematobacter missouriensis* CCUG 52307	14.1	[11.3 - 17.5]	19.9	[17.7 - 22.3]	14.3	[11.9 - 17.1]	4.46
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Marinovum algicola* DSM 10251	13.9	[11.1 - 17.2]	19.9	[17.7 - 22.3]	14.1	[11.7 - 16.9]	5.42
'Paracoccus yeei' (NZ_NIPZ00000000)	*Cereibacter azotoformans* KA25	15.6	[12.7 - 19.1]	19.9	[17.7 - 22.3]	15.6	[13.1 - 18.5]	0.94
'Rhodobacter sphaeroides' (NZ_CP033434)	*Haematobacter missouriensis* CCUG 52307	14.1	[11.3 - 17.5]	19.9	[17.7 - 22.3]	14.3	[11.9 - 17.2]	4.8
'Phaeobacter piscinae' (NZ_CP010681)	*Ruegeria atlantica* CECT 4292	14.0	[11.2 - 17.3]	19.9	[17.7 - 22.4]	14.2	[11.8 - 17.0]	3.9
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Leisingera caerulea* DSM 24564	13.2	[10.5 - 16.5]	19.9	[17.7 - 22.3]	13.5	[11.2 - 16.3]	0.11
'Marinovum algicola' (NZ_FWFM00000000)	*Leisingera aquaemixtae* CECT 8399	15.6	[12.7 - 19.0]	19.9	[17.7 - 22.3]	15.6	[13.1 - 18.5]	0.64

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Phaeobacter gallaeciensis* DSM 26640	12.9	[10.2 - 16.2]	19.9	[17.7 - 22.3]	13.3	[10.9 - 16.1]	9.33
'Phaeobacter piscinae' (NZ_CP010767)	*Ruegeria meonggei* CECT 8411	14.3	[11.5 - 17.7]	19.9	[17.7 - 22.3]	14.5	[12.1 - 17.3]	3.06
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus yeei* ATCC BAA-599	15.3	[12.4 - 18.8]	19.9	[17.7 - 22.3]	15.4	[12.9 - 18.3]	1.53
'Phaeobacter piscinae' (NZ_CP010681)	**'Paracoccus yeei' (NZ_CP031078)**	13.2	[10.5 - 16.5]	19.9	[17.7 - 22.3]	13.5	[11.2 - 16.3]	7.29
'Paracoccus yeei' (NZ_NIPZ00000000)	*Paracoccus aminophilus* JCM 7686	17.6	[14.5 - 21.1]	19.9	[17.7 - 22.3]	17.3	[14.6 - 20.2]	4.06
'Marinovum algicola' (NZ_FWFM00000000)	*Leisingera daeponensis* DSM 23529	15.5	[12.6 - 18.9]	19.9	[17.7 - 22.3]	15.5	[13.0 - 18.4]	0.7
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Phaeobacter gallaeciensis' (NZ_CP015124)**	13.3	[10.6 - 16.6]	19.9	[17.7 - 22.3]	13.6	[11.2 - 16.4]	1.87
'Phaeobacter piscinae' (NZ_CP010681)	*Ruegeria lacuscaerulensis* DSM 11314	15.4	[12.5 - 18.9]	19.9	[17.7 - 22.3]	15.4	[12.9 - 18.3]	2.72
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus sigani* DSM 26381	15.3	[12.4 - 18.7]	19.9	[17.7 - 22.3]	15.3	[12.8 - 18.2]	1.18
'Marinovum algicola' (NZ_FWFM00000000)	*Leisingera methylohalidivorans* DSM 14336	15.2	[12.3 - 18.6]	19.9	[17.7 - 22.3]	15.2	[12.7 - 18.1]	2.71
'Phaeobacter piscinae' (NZ_CP010767)	*Ruegeria lacuscaerulensis* DSM 11314	15.4	[12.5 - 18.8]	19.9	[17.7 - 22.3]	15.4	[12.9 - 18.3]	2.65
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	15.3	[12.4 - 18.7]	19.9	[17.7 - 22.3]	15.3	[12.8 - 18.2]	1.58
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Phaeobacter gallaeciensis' (NZ_CP010784)**	13.0	[10.3 - 16.3]	19.9	[17.7 - 22.3]	13.3	[11.0 - 16.1]	9.15
'Paracoccus yeei' (NZ_NIPZ00000000)	*Phaeovulum veldkampii* DSM 11550	15.5	[12.5 - 18.9]	19.9	[17.7 - 22.4]	15.5	[13.0 - 18.4]	2.28
'Paracoccus yeei' (NZ_CP024422)	**'Epibacterium mobile' (NZ_LNWN00000000)**	12.9	[10.2 - 16.2]	19.9	[17.7 - 22.3]	13.3	[10.9 - 16.1]	8.55
'Phaeobacter piscinae' (NZ_CP010656)	*Ruegeria atlantica* CECT 4292	14.0	[11.2 - 17.4]	19.9	[17.7 - 22.3]	14.2	[11.8 - 17.1]	4.02
'Phaeobacter piscinae' (NZ_CP010681)	*Marinovum algicola* DSM 10251	13.9	[11.1 - 17.2]	19.9	[17.7 - 22.3]	14.1	[11.7 - 16.9]	4.76
'Phaeobacter piscinae' (NZ_CP010767)	**'Marinovum algicola' (NZ_FWFM00000000)**	13.8	[11.0 - 17.2]	19.9	[17.7 - 22.3]	14.1	[11.6 - 16.9]	4.68
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Tropicibacter naphthalenivorans* DSM 19561	13.6	[10.8 - 16.9]	19.9	[17.7 - 22.3]	13.8	[11.4 - 16.6]	3.59
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Ruegeria denitrificans* CECT 5091	14.1	[11.3 - 17.5]	19.9	[17.7 - 22.3]	14.4	[11.9 - 17.2]	2.89
'Epibacterium mobile' (NZ_LNWF00000000)	*Haematobacter massiliensis* CCUG 47968	12.8	[10.1 - 16.1]	19.9	[17.7 - 22.3]	13.2	[10.9 - 16.0]	5.78
'Paracoccus yeei' (NZ_CP024422)	**'Epibacterium mobile' (NZ_LNWF00000000)**	12.9	[10.2 - 16.2]	19.9	[17.7 - 22.3]	13.3	[10.9 - 16.1]	8.55
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Marinovum algicola* DSM 10251	14.7	[11.9 - 18.1]	19.9	[17.7 - 22.3]	14.9	[12.4 - 17.7]	3.53

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Paracoccus yeei' (NZ_CP031078)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	15.1	[12.2 - 18.5]	19.9	[17.7 - 22.3]	15.2	[12.7 - 18.0]	1.49
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus subflavus* GY0581	12.9	[10.2 - 16.1]	19.9	[17.6 - 22.3]	13.2	[10.9 - 16.0]	6.0
'Phaeobacter gallaeciensis' (NZ_CP010784)	**'Paracoccus yeei' (NZ_CP031078)**	13.1	[10.4 - 16.4]	19.9	[17.7 - 22.3]	13.4	[11.1 - 16.2]	7.95
'Paracoccus yeei' (NZ_CP031078)	*Cereibacter azotoformans* KA25	15.5	[12.6 - 18.9]	19.9	[17.7 - 22.3]	15.5	[13.0 - 18.4]	0.79
'Phaeobacter inhibens' (NZ_CP010623)	*Ruegeria meteori* CECT 4293	14.1	[11.3 - 17.5]	19.9	[17.7 - 22.3]	14.4	[11.9 - 17.2]	3.53
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus yeei* ATCC BAA-599	18.3	[15.2 - 21.9]	19.9	[17.7 - 22.3]	17.8	[15.2 - 20.8]	4.09
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus aminovorans* DSM 8537	20.0	[16.8 - 23.6]	19.9	[17.7 - 22.3]	19.2	[16.5 - 22.2]	4.15
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Leisingera aquaemixtae* CECT 8399	13.2	[10.5 - 16.5]	19.9	[17.7 - 22.3]	13.5	[11.2 - 16.3]	1.01
'Paracoccus yeei' (NZ_CP024422)	*Phaeobacter gallaeciensis* DSM 26640	13.0	[10.3 - 16.3]	19.9	[17.7 - 22.3]	13.3	[11.0 - 16.1]	7.89
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Cereibacter sphaeroides* 2.4.1	13.0	[10.3 - 16.3]	19.9	[17.7 - 22.3]	13.3	[11.0 - 16.1]	9.17
'Phaeobacter gallaeciensis' (NZ_CP010784)	**'Paracoccus yeei' (NZ_CP024422)**	13.0	[10.3 - 16.3]	19.9	[17.7 - 22.3]	13.4	[11.0 - 16.1]	7.71
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus yeei* ATCC BAA-599	15.1	[12.2 - 18.5]	19.9	[17.7 - 22.3]	15.2	[12.7 - 18.0]	1.59
'Marinovum algicola' (NZ_FWFM00000000)	*Ruegeria lacuscaerulensis* DSM 11314	15.7	[12.8 - 19.2]	19.8	[17.6 - 22.3]	15.7	[13.2 - 18.6]	2.03
'Phaeobacter gallaeciensis' (NZ_CP010784)	**'Marinovum algicola' (NZ_FWFM00000000)**	13.9	[11.1 - 17.2]	19.8	[17.6 - 22.2]	14.1	[11.7 - 16.9]	5.41
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus aminophilus* JCM 7686	14.0	[11.2 - 17.4]	19.8	[17.6 - 22.3]	14.3	[11.8 - 17.1]	5.64
'Epibacterium mobile' (NZ_LNWN00000000)	*Ruegeria arenilitoris* CECT 8715	14.2	[11.4 - 17.6]	19.8	[17.6 - 22.2]	14.4	[12.0 - 17.3]	2.5
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Haematobacter missouriensis* CCUG 52307	14.2	[11.4 - 17.6]	19.8	[17.6 - 22.2]	14.4	[12.0 - 17.3]	4.69
'Paracoccus yeei' (NZ_CP031078)	*Leisingera daeponensis* DSM 23529	14.1	[11.3 - 17.5]	19.8	[17.6 - 22.2]	14.3	[11.9 - 17.1]	3.24
'Epibacterium mobile' (NZ_LNXJ00000000)	*Haematobacter massiliensis* CCUG 47968	12.8	[10.1 - 16.1]	19.8	[17.6 - 22.2]	13.2	[10.9 - 16.0]	5.81
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus alcaliphilus* DSM 8512	12.9	[10.2 - 16.2]	19.8	[17.6 - 22.2]	13.3	[10.9 - 16.0]	5.52
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus alcaliphilus* DSM 8512	12.9	[10.2 - 16.2]	19.8	[17.6 - 22.2]	13.3	[10.9 - 16.0]	5.52
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus alcaliphilus* DSM 8512	13.8	[11.0 - 17.2]	19.8	[17.6 - 22.2]	14.1	[11.7 - 16.9]	4.76
'Phaeobacter gallaeciensis' (NZ_CP015124)	**'Marinovum algicola' (NZ_FWFM00000000)**	14.7	[11.9 - 18.1]	19.8	[17.6 - 22.2]	14.9	[12.4 - 17.7]	3.52

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Paracoccus aminophilus JCM 7686' (NC_022041)**	14.2	[11.4 - 17.6]	19.8	[17.6 - 22.2]	14.4	[12.0 - 17.3]	5.62
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus marinus* NBRC 100637	14.9	[12.0 - 18.3]	19.8	[17.6 - 22.2]	15.0	[12.5 - 17.9]	0.31
'Marinovum algicola' (NZ_FWFM00000000)	*Ruegeria denitrificans* CECT 5091	13.5	[10.7 - 16.8]	19.8	[17.6 - 22.2]	13.8	[11.4 - 16.6]	8.3
'Paracoccus yeei' (NZ_CP031078)	*Ruegeria meteori* CECT 4293	12.9	[10.2 - 16.2]	19.8	[17.6 - 22.3]	13.3	[10.9 - 16.1]	11.1
'Epibacterium mobile' (NZ_LNWN00000000)	*Haematobacter massiliensis* CCUG 47968	12.8	[10.1 - 16.1]	19.8	[17.6 - 22.3]	13.2	[10.9 - 16.0]	5.78
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	18.2	[15.1 - 21.7]	19.8	[17.6 - 22.2]	17.7	[15.1 - 20.7]	4.04
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Haematobacter massiliensis* CCUG 47968	14.3	[11.5 - 17.7]	19.8	[17.6 - 22.2]	14.5	[12.1 - 17.4]	4.21
'Phaeobacter inhibens' (NZ_CP010735)	*Haematobacter massiliensis* CCUG 47968	12.9	[10.2 - 16.2]	19.8	[17.6 - 22.2]	13.3	[10.9 - 16.0]	4.75
'Paracoccus yeei' (NZ_CP024422)	*Phaeobacter inhibens* DSM 16374	13.0	[10.3 - 16.3]	19.8	[17.6 - 22.2]	13.4	[11.0 - 16.2]	7.32
'Epibacterium mobile' (NZ_LNWN00000000)	*Ruegeria atlantica* CECT 4292	13.4	[10.7 - 16.7]	19.8	[17.6 - 22.2]	13.7	[11.3 - 16.5]	2.41
'Epibacterium mobile' (NZ_LNWF00000000)	*Ruegeria arenilitoris* CECT 8715	14.2	[11.4 - 17.6]	19.8	[17.6 - 22.2]	14.4	[12.0 - 17.3]	2.5
'Paracoccus yeei' (NZ_NIPZ00000000)	*Cereibacter sphaeroides* 2.4.1	15.2	[12.3 - 18.7]	19.8	[17.6 - 22.2]	15.3	[12.8 - 18.2]	1.36
'Epibacterium mobile' (NZ_LNXJ00000000)	*Ruegeria arenilitoris* CECT 8715	14.2	[11.4 - 17.6]	19.8	[17.6 - 22.2]	14.4	[12.0 - 17.3]	2.53
'Epibacterium mobile' (NZ_LNXJ00000000)	*Tropicibacter naphthalenivorans* DSM 19561	13.5	[10.8 - 16.9]	19.8	[17.6 - 22.2]	13.8	[11.4 - 16.6]	4.46
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Thalassobius mediterraneus* CECT 5383	13.0	[10.3 - 16.3]	19.8	[17.6 - 22.2]	13.4	[11.0 - 16.2]	4.68
'Phaeobacter piscinae' (NZ_CP010681)	*Cereibacter azotoformans* KA25	13.0	[10.3 - 16.3]	19.8	[17.6 - 22.2]	13.4	[11.0 - 16.1]	8.09
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus thiocyanatus* ATCC 700171	14.7	[11.9 - 18.1]	19.8	[17.6 - 22.2]	14.9	[12.4 - 17.7]	1.6
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus thiocyanatus* ATCC 700171	14.9	[12.0 - 18.3]	19.8	[17.6 - 22.2]	15.0	[12.5 - 17.9]	1.94
'Phaeobacter piscinae' (NZ_CP010681)	*Rhodobacter megalophilus* DSM 18937	13.0	[10.3 - 16.3]	19.8	[17.6 - 22.2]	13.3	[11.0 - 16.1]	8.49
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Haematobacter massiliensis* CCUG 47968	14.2	[11.4 - 17.6]	19.8	[17.6 - 22.2]	14.4	[12.0 - 17.2]	4.51
'Phaeobacter piscinae' (NZ_CP010656)	**'Paracoccus yeei' (NZ_CP031078)**	13.3	[10.5 - 16.6]	19.8	[17.6 - 22.2]	13.6	[11.2 - 16.4]	7.18
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus aminovorans* DSM 8537	15.4	[12.5 - 18.9]	19.8	[17.6 - 22.2]	15.4	[12.9 - 18.3]	1.53
'Epibacterium mobile' (NZ_LNWN00000000)	*Tropicibacter naphthalenivorans* DSM 19561	13.5	[10.8 - 16.9]	19.8	[17.6 - 22.2]	13.8	[11.4 - 16.6]	4.42

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Epibacterium mobile' (NZ_LNXJ00000000)	*Ruegeria atlantica* CECT 4292	13.4	[10.7 - 16.7]	19.8	[17.6 - 22.2]	13.7	[11.3 - 16.5]	2.37
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus yeei* ATCC BAA-599	13.1	[10.4 - 16.4]	19.8	[17.6 - 22.2]	13.4	[11.1 - 16.2]	7.48
'Epibacterium mobile' (NZ_LNWF00000000)	*Ruegeria atlantica* CECT 4292	13.4	[10.7 - 16.7]	19.8	[17.6 - 22.2]	13.7	[11.3 - 16.5]	2.4
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus chinensis* CGMCC 1.7655	12.9	[10.2 - 16.2]	19.8	[17.6 - 22.2]	13.3	[10.9 - 16.0]	8.31
'Phaeobacter inhibens' (NZ_CP010735)	*Haematobacter missouriensis* CCUG 52307	12.8	[10.1 - 16.1]	19.8	[17.6 - 22.2]	13.2	[10.8 - 16.0]	4.51
'Phaeobacter inhibens' (NZ_CP010735)	**'Paracoccus yeei' (NZ_CP031078)**	13.2	[10.5 - 16.5]	19.8	[17.6 - 22.2]	13.5	[11.2 - 16.3]	7.77
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Pseudophaeobacter arcticus* DSM 23566	12.9	[10.2 - 16.2]	19.8	[17.6 - 22.2]	13.3	[10.9 - 16.1]	4.12
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Salipiger bermudensis* HTCC2601	13.4	[10.6 - 16.7]	19.8	[17.6 - 22.2]	13.7	[11.3 - 16.5]	3.06
'Marinovum algicola' (NZ_FWFM00000000)	*Phaeobacter porticola* P97	13.5	[10.7 - 16.8]	19.8	[17.6 - 22.2]	13.8	[11.4 - 16.6]	6.45
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Cereibacter johrii* JA192	14.2	[11.4 - 17.6]	19.8	[17.6 - 22.2]	14.4	[12.0 - 17.2]	5.7
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus yeei* ATCC BAA-599	15.3	[12.4 - 18.8]	19.8	[17.6 - 22.2]	15.4	[12.9 - 18.3]	1.29
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Phaeovulum vinaykumarii* DSM 18714	13.5	[10.8 - 16.9]	19.8	[17.6 - 22.2]	13.8	[11.4 - 16.6]	6.74
'Paracoccus yeei' (NZ_CP031078)	*Leisingera methylohalidivorans* DSM 14336	13.8	[11.0 - 17.1]	19.8	[17.6 - 22.2]	14.0	[11.6 - 16.9]	5.25
'Paracoccus yeei' (NZ_CP031078)	*Phaeovulum veldkampii* DSM 11550	15.5	[12.5 - 18.9]	19.8	[17.6 - 22.2]	15.5	[13.0 - 18.4]	2.43
'Paracoccus yeei' (NZ_CP024422)	*Ruegeria lacuscaerulensis* ITI-1157	14.4	[11.5 - 17.8]	19.8	[17.6 - 22.2]	14.6	[12.1 - 17.4]	4.36
'Paracoccus yeei' (NZ_CP024422)	*Leisingera methylohalidivorans* DSM 14336	14.0	[11.2 - 17.3]	19.8	[17.6 - 22.2]	14.2	[11.8 - 17.0]	5.0
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Phaeovulum vinaykumarii* DSM 18714	14.3	[11.5 - 17.7]	19.8	[17.6 - 22.2]	14.5	[12.0 - 17.3]	4.87
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	15.2	[12.3 - 18.7]	19.8	[17.6 - 22.2]	15.3	[12.8 - 18.2]	1.34
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus sigani* DSM 26381	16.5	[13.5 - 19.9]	19.8	[17.6 - 22.2]	16.3	[13.8 - 19.3]	4.5
'Epibacterium mobile' (NZ_LNWF00000000)	*Tropicibacter naphthalenivorans* DSM 19561	13.5	[10.8 - 16.9]	19.8	[17.6 - 22.2]	13.8	[11.4 - 16.6]	4.43
'Paracoccus yeei' (NZ_CP031078)	*Cereibacter ovatus* JA234	15.6	[12.7 - 19.1]	19.8	[17.6 - 22.2]	15.6	[13.1 - 18.5]	1.05
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Leisingera caerulea* DSM 24564	13.7	[10.9 - 17.0]	19.8	[17.6 - 22.2]	13.9	[11.5 - 16.7]	5.73
'Paracoccus yeei' (NZ_CP031078)	*Leisingera caerulea* DSM 24564	13.7	[10.9 - 17.1]	19.8	[17.6 - 22.2]	14.0	[11.6 - 16.8]	4.3
'Phaeobacter piscinae' (NZ_CP010681)	**'Marinovum algicola' (NZ_FWFM00000000)**	13.9	[11.1 - 17.2]	19.8	[17.6 - 22.2]	14.1	[11.7 - 16.9]	4.75

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus alcaliphilus* DSM 8512	14.2	[11.3 - 17.5]	19.8	[17.6 - 22.2]	14.4	[11.9 - 17.2]	4.81
'Phaeobacter inhibens' (NZ_CP010735)	*Marinovum algicola* DSM 10251	13.9	[11.1 - 17.3]	19.8	[17.6 - 22.2]	14.1	[11.7 - 17.0]	5.24
'Paracoccus yeei' (NZ_CP024422)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	12.9	[10.2 - 16.2]	19.8	[17.6 - 22.2]	13.3	[10.9 - 16.1]	8.58
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus lutimaris* CECT 8525	13.1	[10.4 - 16.4]	19.7	[17.5 - 22.1]	13.5	[11.1 - 16.3]	4.82
'Phaeobacter piscinae' (NZ_CP010656)	*Tropicibacter naphthalenivorans* DSM 19561	13.8	[11.1 - 17.2]	19.7	[17.5 - 22.1]	14.1	[11.7 - 16.9]	2.81
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus laeviglucosivorans* DSM 100094	13.1	[10.4 - 16.4]	19.7	[17.5 - 22.1]	13.4	[11.1 - 16.2]	2.75
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Phaeobacter gallaeciensis' (NZ_CP010784)**	13.0	[10.3 - 16.3]	19.7	[17.5 - 22.1]	13.4	[11.0 - 16.1]	9.38
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus marinus* NBRC 100637	13.1	[10.4 - 16.4]	19.7	[17.5 - 22.1]	13.4	[11.1 - 16.2]	8.98
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus laeviglucosivorans* DSM 100094	13.8	[11.0 - 17.1]	19.7	[17.5 - 22.1]	14.0	[11.6 - 16.8]	6.0
'Epibacterium mobile' (NZ_LNXJ00000000)	*Ruegeria meonggei* CECT 8411	13.6	[10.8 - 16.9]	19.7	[17.5 - 22.1]	13.8	[11.5 - 16.6]	1.45
'Epibacterium mobile' (NZ_LNWN00000000)	*Ruegeria meonggei* CECT 8411	13.6	[10.8 - 16.9]	19.7	[17.5 - 22.1]	13.8	[11.5 - 16.7]	1.49
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus contaminans* LMG 29738	12.9	[10.2 - 16.2]	19.7	[17.5 - 22.1]	13.2	[10.9 - 16.0]	9.08
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Cereibacter johrii* JA192	13.0	[10.3 - 16.3]	19.7	[17.5 - 22.1]	13.3	[11.0 - 16.1]	9.46
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus zhejiangensis* J6	14.9	[12.0 - 18.3]	19.7	[17.5 - 22.1]	15.0	[12.5 - 17.9]	3.42
'Paracoccus yeei' (NZ_NIPZ00000000)	*Leisingera methylohalidivorans* DSM 14336	13.9	[11.1 - 17.2]	19.7	[17.5 - 22.1]	14.1	[11.7 - 16.9]	5.1
'Paracoccus yeei' (NZ_CP031078)	*Gemmobacter aquatilis* DSM 3857	15.0	[12.1 - 18.4]	19.7	[17.5 - 22.0]	15.1	[12.6 - 18.0]	2.47
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus zhejiangensis* J6	14.9	[12.0 - 18.3]	19.7	[17.5 - 22.1]	15.0	[12.5 - 17.9]	3.19
'Epibacterium mobile' (NZ_LNWF00000000)	*Ruegeria denitrificans* CECT 5091	13.6	[10.9 - 17.0]	19.7	[17.5 - 22.1]	13.9	[11.5 - 16.7]	2.05
'Marinovum algicola' (NZ_FWFM00000000)	*Leisingera caerulea* DSM 24564	15.1	[12.2 - 18.5]	19.7	[17.5 - 22.1]	15.2	[12.7 - 18.1]	1.76
'Epibacterium mobile' (NZ_LNXJ00000000)	*Ruegeria denitrificans* CECT 5091	13.6	[10.9 - 17.0]	19.7	[17.5 - 22.1]	13.9	[11.5 - 16.7]	2.01
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Phaeobacter gallaeciensis* DSM 26640	13.0	[10.2 - 16.2]	19.7	[17.5 - 22.1]	13.3	[11.0 - 16.1]	9.57
'Phaeobacter piscinae' (NZ_CP010656)	*Marinovum algicola* DSM 10251	13.9	[11.1 - 17.2]	19.7	[17.5 - 22.1]	14.1	[11.7 - 16.9]	4.65
'Epibacterium mobile' (NZ_LNWF00000000)	*Ruegeria meonggei* CECT 8411	13.6	[10.8 - 16.9]	19.7	[17.5 - 22.1]	13.8	[11.5 - 16.7]	1.48
'Phaeobacter inhibens' (NZ_CP010735)	**'Marinovum algicola' (NZ_FWFM00000000)**	13.9	[11.1 - 17.3]	19.7	[17.5 - 22.1]	14.1	[11.7 - 17.0]	5.23

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Paracoccus yeei' (NZ_CP024422)	*Ruegeria lacuscaerulensis* DSM 11314	14.4	[11.5 - 17.7]	19.7	[17.5 - 22.1]	14.5	[12.1 - 17.4]	4.33
'Epibacterium mobile' (NZ_LNWN00000000)	*Ruegeria denitrificans* CECT 5091	13.6	[10.9 - 17.0]	19.7	[17.5 - 22.1]	13.9	[11.5 - 16.7]	2.05
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus lutimaris* CECT 8525	14.7	[11.9 - 18.2]	19.7	[17.5 - 22.1]	14.9	[12.4 - 17.7]	3.94
'Rhodobacter sphaeroides' (NZ_CP033434)	*Leisingera caerulea* DSM 24564	13.7	[11.0 - 17.1]	19.7	[17.5 - 22.1]	14.0	[11.6 - 16.8]	5.84
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Phaeobacter inhibens' (NZ_CP010623)**	13.1	[10.4 - 16.4]	19.7	[17.5 - 22.1]	13.4	[11.1 - 16.2]	9.0
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus zhejiangensis* J6	13.1	[10.4 - 16.4]	19.7	[17.5 - 22.1]	13.5	[11.1 - 16.2]	5.23
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus yeei* ATCC BAA-599	13.1	[10.4 - 16.4]	19.7	[17.5 - 22.1]	13.4	[11.1 - 16.2]	7.12
'Phaeobacter inhibens' (NZ_CP010623)	*Rhodobacter megalophilus* DSM 18937	13.0	[10.3 - 16.3]	19.7	[17.5 - 22.1]	13.4	[11.0 - 16.1]	8.77
'Paracoccus yeei' (NZ_CP024422)	*Tritonibacter mobilis* DSM 23403	13.0	[10.3 - 16.3]	19.7	[17.5 - 22.1]	13.4	[11.0 - 16.1]	8.33
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus sigani* DSM 26381	13.1	[10.4 - 16.4]	19.7	[17.5 - 22.1]	13.4	[11.1 - 16.2]	7.53
'Paracoccus yeei' (NZ_CP031078)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	13.0	[10.3 - 16.3]	19.7	[17.5 - 22.1]	13.4	[11.0 - 16.1]	8.83
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Ruegeria lacuscaerulensis* ITI-1157	13.5	[10.7 - 16.8]	19.7	[17.5 - 22.1]	13.8	[11.4 - 16.6]	0.41
'Marinovum algicola' (NZ_FWFM00000000)	*Ruegeria atlantica* CECT 4292	13.4	[10.7 - 16.7]	19.7	[17.5 - 22.1]	13.7	[11.3 - 16.5]	8.66
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus aminophilus* JCM 7686	12.9	[10.2 - 16.2]	19.7	[17.5 - 22.1]	13.3	[10.9 - 16.0]	4.58
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Cereibacter ovatus* JA234	14.0	[11.2 - 17.3]	19.7	[17.5 - 22.1]	14.2	[11.8 - 17.0]	3.15
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus aminophilus* JCM 7686	12.9	[10.2 - 16.2]	19.7	[17.5 - 22.1]	13.3	[10.9 - 16.0]	4.62
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Ruegeria meonggei* CECT 8411	14.7	[11.9 - 18.2]	19.7	[17.5 - 22.1]	14.9	[12.4 - 17.7]	4.21
'Paracoccus yeei' (NZ_CP031078)	**'Epibacterium mobile' (NZ_LNWN00000000)**	13.0	[10.3 - 16.3]	19.7	[17.5 - 22.1]	13.4	[11.0 - 16.1]	8.79
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus sigani* DSM 26381	13.0	[10.3 - 16.3]	19.7	[17.5 - 22.1]	13.4	[11.0 - 16.2]	8.26
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Rhodobacter megalophilus* DSM 18937	12.9	[10.2 - 16.2]	19.7	[17.5 - 22.1]	13.3	[10.9 - 16.0]	9.15
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Phaeobacter piscinae' (NZ_CP010767)**	13.1	[10.4 - 16.4]	19.7	[17.5 - 22.1]	13.4	[11.1 - 16.2]	8.65
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus alcaliphilus* DSM 8512	12.9	[10.2 - 16.2]	19.7	[17.5 - 22.1]	13.2	[10.9 - 16.0]	5.56
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus subflavus* GY0581	12.9	[10.2 - 16.2]	19.7	[17.5 - 22.1]	13.3	[10.9 - 16.0]	5.34
'Paracoccus yeei' (NZ_CP031078)	*Ruegeria lacuscaerulensis* ITI-1157	14.3	[11.5 - 17.7]	19.7	[17.5 - 22.1]	14.5	[12.1 - 17.4]	4.6

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus zhejiangensis* J6	14.9	[12.1 - 18.4]	19.7	[17.5 - 22.1]	15.0	[12.6 - 17.9]	3.48
'Phaeobacter piscinae' (NZ_CP010767)	*Rhodobacter megalophilus* DSM 18937	12.9	[10.2 - 16.2]	19.7	[17.5 - 22.1]	13.3	[10.9 - 16.1]	8.42
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus lutimaris* CECT 8525	13.1	[10.4 - 16.4]	19.7	[17.5 - 22.1]	13.4	[11.1 - 16.2]	5.56
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus contaminans* LMG 29738	12.9	[10.2 - 16.2]	19.7	[17.5 - 22.1]	13.3	[10.9 - 16.0]	8.35
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus sigani* DSM 26381	13.0	[10.3 - 16.3]	19.7	[17.5 - 22.2]	13.4	[11.0 - 16.2]	8.07
'Paracoccus yeei' (NZ_CP031078)	**'Epibacterium mobile' (NZ_LNWF00000000)**	13.0	[10.3 - 16.3]	19.7	[17.5 - 22.1]	13.4	[11.0 - 16.1]	8.79
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus aminophilus* JCM 7686	12.9	[10.2 - 16.2]	19.7	[17.5 - 22.1]	13.3	[10.9 - 16.0]	4.58
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus marinus* NBRC 100637	13.0	[10.2 - 16.2]	19.7	[17.5 - 22.1]	13.3	[11.0 - 16.1]	9.38
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus thiocyanatus* ATCC 700171	13.0	[10.3 - 16.3]	19.7	[17.5 - 22.1]	13.4	[11.0 - 16.1]	6.78
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus denitrificans* DSM 413	13.0	[10.3 - 16.3]	19.6	[17.4 - 22.0]	13.4	[11.0 - 16.1]	6.43
'Phaeobacter inhibens' (NZ_CP010623)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	13.0	[10.3 - 16.3]	19.6	[17.4 - 22.0]	13.4	[11.0 - 16.1]	9.06
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus lutimaris* CECT 8525	13.2	[10.5 - 16.5]	19.6	[17.4 - 22.0]	13.5	[11.2 - 16.3]	5.18
'Paracoccus yeei' (NZ_CP031078)	*Phaeobacter inhibens* DSM 16374	13.1	[10.4 - 16.4]	19.6	[17.4 - 22.0]	13.4	[11.1 - 16.2]	7.56
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus chinensis* CGMCC 1.7655	13.0	[10.2 - 16.2]	19.6	[17.4 - 22.0]	13.3	[11.0 - 16.1]	7.83
'Phaeobacter gallaeciensis' (NZ_CP010784)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	12.9	[10.2 - 16.2]	19.6	[17.4 - 22.0]	13.3	[10.9 - 16.1]	9.44
'Paracoccus yeei' (NZ_CP031078)	*Thalassobius mediterraneus* CECT 5383	13.2	[10.4 - 16.5]	19.6	[17.4 - 22.0]	13.5	[11.1 - 16.3]	8.88
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus subflavus* GY0581	13.0	[10.3 - 16.3]	19.6	[17.4 - 22.0]	13.4	[11.0 - 16.1]	5.62
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Ruegeria pelagia* NBRC102038	12.9	[10.2 - 16.2]	19.6	[17.4 - 22.0]	13.3	[10.9 - 16.0]	4.41
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Phaeobacter gallaeciensis* DSM 26640	12.9	[10.2 - 16.2]	19.6	[17.4 - 22.0]	13.3	[10.9 - 16.0]	9.63
'Phaeobacter piscinae' (NZ_CP010767)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	13.1	[10.4 - 16.4]	19.6	[17.4 - 22.0]	13.4	[11.1 - 16.2]	7.07
'Phaeobacter piscinae' (NZ_CP010656)	**'Marinovum algicola' (NZ_FWFM00000000)**	13.9	[11.1 - 17.2]	19.6	[17.4 - 22.0]	14.1	[11.7 - 16.9]	4.64
'Phaeobacter inhibens' (NZ_CP010623)	*Cereibacter azotoformans* KA25	13.0	[10.3 - 16.3]	19.6	[17.4 - 22.0]	13.3	[11.0 - 16.1]	8.37
'Rhodobacter sphaeroides' (NZ_CP033434)	*Haematobacter massiliensis* CCUG 47968	14.5	[11.7 - 17.9]	19.6	[17.4 - 22.0]	14.7	[12.2 - 17.5]	4.55
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	12.9	[10.2 - 16.2]	19.6	[17.4 - 22.0]	13.3	[10.9 - 16.1]	4.64

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)**	14.2	[11.3 - 17.5]	19.6	[17.4 - 22.0]	14.4	[11.9 - 17.2]	5.39
'Phaeobacter inhibens' (NZ_CP010623)	*Marinovum algicola* DSM 10251	14.0	[11.2 - 17.4]	19.6	[17.4 - 22.0]	14.2	[11.8 - 17.0]	5.04
'Paracoccus yeei' (NZ_CP024422)	*Leisingera daeponensis* DSM 23529	14.0	[11.2 - 17.4]	19.6	[17.4 - 22.0]	14.2	[11.8 - 17.1]	3.0
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Salipiger bermudensis* HTCC2601	14.7	[11.8 - 18.1]	19.6	[17.4 - 22.0]	14.8	[12.3 - 17.7]	4.92
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Haematobacter massiliensis* CCUG 47968	14.5	[11.6 - 17.9]	19.6	[17.4 - 22.0]	14.6	[12.2 - 17.5]	4.45
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus contaminans* LMG 29738	14.9	[12.0 - 18.3]	19.6	[17.4 - 22.0]	15.0	[12.5 - 17.9]	5.32
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus thiocyanatus* ATCC 700171	14.9	[12.0 - 18.3]	19.6	[17.4 - 22.0]	15.0	[12.5 - 17.9]	1.83
'Phaeobacter inhibens' (NZ_CP010623)	*Phaeovulum vinaykumarii* DSM 18714	13.2	[10.5 - 16.5]	19.6	[17.4 - 22.0]	13.5	[11.1 - 16.3]	8.25
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus thiocyanatus* ATCC 700171	19.6	[16.4 - 23.2]	19.6	[17.4 - 22.0]	18.8	[16.1 - 21.8]	3.79
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Epibacterium mobile' (NZ_LNWF00000000)**	12.9	[10.2 - 16.2]	19.6	[17.4 - 22.0]	13.3	[10.9 - 16.1]	4.6
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Tritonibacter horizontis* O3.65	13.0	[10.3 - 16.3]	19.6	[17.4 - 22.0]	13.4	[11.0 - 16.2]	1.87
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus laeviglucosivorans* DSM 100094	13.1	[10.4 - 16.4]	19.6	[17.4 - 22.0]	13.4	[11.1 - 16.2]	2.83
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Cereibacter azotoformans* KA25	12.9	[10.2 - 16.2]	19.6	[17.4 - 22.0]	13.3	[10.9 - 16.1]	8.75
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus aminophilus* JCM 7686	14.0	[11.2 - 17.4]	19.6	[17.4 - 22.0]	14.3	[11.8 - 17.1]	5.41
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Phaeobacter piscinae' (NZ_CP010681)**	13.0	[10.3 - 16.3]	19.6	[17.4 - 22.0]	13.4	[11.0 - 16.2]	8.49
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus zhejiangensis* J6	16.3	[13.3 - 19.8]	19.6	[17.4 - 22.0]	16.2	[13.6 - 19.1]	2.2
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Cereibacter sphaeroides* 2.4.1	14.2	[11.3 - 17.5]	19.6	[17.4 - 22.0]	14.4	[11.9 - 17.2]	5.41
'Phaeobacter inhibens' (NZ_CP010623)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	13.1	[10.3 - 16.4]	19.6	[17.4 - 22.0]	13.4	[11.0 - 16.2]	7.42
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Leisingera aquimarina* DSM 24565	13.1	[10.4 - 16.4]	19.6	[17.4 - 22.0]	13.5	[11.1 - 16.2]	2.03
'Phaeobacter piscinae' (NZ_CP010681)	*Cereibacter sphaeroides* 2.4.1	13.1	[10.3 - 16.3]	19.6	[17.4 - 22.0]	13.4	[11.0 - 16.2]	8.51
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus sigani* DSM 26381	13.1	[10.4 - 16.4]	19.6	[17.4 - 22.0]	13.4	[11.1 - 16.2]	7.88
'Paracoccus yeei' (NZ_CP024422)	*Salipiger bermudensis* HTCC2601	14.3	[11.5 - 17.7]	19.6	[17.4 - 22.0]	14.5	[12.1 - 17.3]	0.89
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Epibacterium mobile' (NZ_LNWN00000000)**	12.9	[10.2 - 16.2]	19.6	[17.4 - 22.0]	13.3	[10.9 - 16.1]	4.6
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus denitrificans* DSM 413	13.0	[10.3 - 16.3]	19.6	[17.4 - 22.0]	13.4	[11.0 - 16.2]	6.47
'Phaeobacter inhibens' (NZ_CP010623)	**'Marinovum algicola' (NZ_FWFM00000000)**	14.0	[11.2 - 17.4]	19.5	[17.3 - 21.9]	14.2	[11.8 - 17.0]	5.03

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Tropicibacter naphthalenivorans* DSM 19561	13.3	[10.5 - 16.6]	19.5	[17.3 - 21.9]	13.6	[11.2 - 16.4]	5.86
'Phaeobacter inhibens' (NZ_CP010735)	*Rhodobacter megalophilus* DSM 18937	13.0	[10.3 - 16.3]	19.5	[17.3 - 21.9]	13.3	[11.0 - 16.1]	8.97
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Phaeobacter porticola* P97	13.0	[10.3 - 16.3]	19.5	[17.3 - 21.9]	13.3	[11.0 - 16.1]	10.19
'Marinovum algicola' (NZ_FWFM00000000)	*Ruegeria meonggei* CECT 8411	13.5	[10.8 - 16.8]	19.5	[17.3 - 21.9]	13.8	[11.4 - 16.6]	7.73
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus aminovorans* DSM 8537	13.5	[10.7 - 16.8]	19.5	[17.3 - 21.8]	13.8	[11.4 - 16.5]	6.02
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Rhodobacter megalophilus* DSM 18937	14.1	[11.3 - 17.5]	19.5	[17.3 - 21.8]	14.3	[11.9 - 17.2]	5.39
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus laeviglucosivorans* DSM 100094	13.6	[10.9 - 17.0]	19.5	[17.3 - 21.9]	13.9	[11.5 - 16.7]	5.96
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus contaminans* LMG 29738	12.9	[10.2 - 16.2]	19.5	[17.3 - 21.9]	13.3	[10.9 - 16.1]	8.31
'Phaeobacter gallaeciensis' (NZ_CP015124)	**'Paracoccus yeei' (NZ_CP031078)**	13.5	[10.7 - 16.8]	19.5	[17.3 - 21.9]	13.8	[11.4 - 16.6]	6.06
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Leisingera aquimarina* DSM 24565	13.4	[10.7 - 16.7]	19.5	[17.3 - 21.9]	13.7	[11.3 - 16.5]	7.65
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Gemmobacter aquatilis* DSM 3857	16.4	[13.4 - 19.8]	19.5	[17.3 - 21.9]	16.2	[13.7 - 19.1]	3.66
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Gemmobacter aquatilis* DSM 3857	16.3	[13.4 - 19.8]	19.5	[17.3 - 21.9]	16.2	[13.7 - 19.1]	3.96
'Phaeobacter piscinae' (NZ_CP010656)	*Cereibacter sphaeroides* 2.4.1	13.1	[10.4 - 16.4]	19.5	[17.3 - 21.9]	13.4	[11.0 - 16.2]	8.39
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus laeviglucosivorans* DSM 100094	13.7	[10.9 - 17.0]	19.5	[17.3 - 21.9]	13.9	[11.5 - 16.8]	5.66
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Ruegeria atlantica* CECT 4292	12.9	[10.2 - 16.2]	19.5	[17.3 - 21.9]	13.3	[10.9 - 16.1]	7.01
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Phaeobacter inhibens' (NZ_CP010735)**	13.0	[10.3 - 16.3]	19.5	[17.3 - 21.9]	13.4	[11.0 - 16.2]	8.96
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus lutimaris* CECT 8525	14.5	[11.7 - 17.9]	19.5	[17.3 - 21.9]	14.7	[12.2 - 17.5]	3.59
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Haematobacter missouriensis* CCUG 52307	14.0	[11.2 - 17.4]	19.5	[17.3 - 21.9]	14.3	[11.8 - 17.1]	4.75
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Haematobacter missouriensis* CCUG 52307	12.9	[10.2 - 16.2]	19.5	[17.4 - 21.9]	13.3	[10.9 - 16.1]	2.8
'Epibacterium mobile' (NZ_LNWF00000000)	*Ruegeria lacuscaerulensis* ITI-1157	14.7	[11.8 - 18.1]	19.5	[17.3 - 21.9]	14.8	[12.4 - 17.7]	4.19
'Phaeobacter piscinae' (NZ_CP010656)	*Rhodobacter megalophilus* DSM 18937	13.0	[10.3 - 16.3]	19.5	[17.3 - 21.9]	13.3	[11.0 - 16.1]	8.38
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus sigani* DSM 26381	13.1	[10.4 - 16.4]	19.5	[17.3 - 21.9]	13.4	[11.1 - 16.2]	7.49

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus yeei* ATCC BAA-599	13.1	[10.4 - 16.4]	19.5	[17.3 - 21.9]	13.4	[11.1 - 16.2]	7.67
'Phaeobacter piscinae' (NZ_CP010681)	*Cereibacter johrii* JA192	13.1	[10.4 - 16.4]	19.5	[17.3 - 21.9]	13.4	[11.1 - 16.2]	8.8
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Thalassobius mediterraneus* CECT 5383	12.9	[10.2 - 16.1]	19.5	[17.3 - 21.8]	13.2	[10.9 - 16.0]	10.07
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Phaeobacter piscinae' (NZ_CP010656)**	13.1	[10.3 - 16.4]	19.5	[17.3 - 21.9]	13.4	[11.0 - 16.2]	8.37
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus yeei* ATCC BAA-599	13.1	[10.4 - 16.5]	19.5	[17.3 - 21.9]	13.5	[11.1 - 16.3]	7.08
'Paracoccus yeei' (NZ_CP031078)	*Tritonibacter mobilis* DSM 23403	13.0	[10.3 - 16.3]	19.5	[17.3 - 21.9]	13.4	[11.0 - 16.1]	8.58
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus thiocyanatus* ATCC 700171	14.9	[12.1 - 18.4]	19.5	[17.3 - 21.9]	15.0	[12.6 - 17.9]	1.89
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus yeei* ATCC BAA-599	13.4	[10.7 - 16.7]	19.5	[17.3 - 21.9]	13.7	[11.3 - 16.5]	5.96
'Epibacterium mobile' (NZ_LNXJ00000000)	*Ruegeria lacuscaerulensis* ITI-1157	14.7	[11.8 - 18.1]	19.5	[17.3 - 21.9]	14.8	[12.4 - 17.7]	4.23
'Phaeobacter piscinae' (NZ_CP010767)	*Haematobacter massiliensis* CCUG 47968	12.9	[10.2 - 16.2]	19.5	[17.3 - 21.8]	13.3	[10.9 - 16.0]	4.2
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus contaminans* LMG 29738	13.2	[10.5 - 16.6]	19.5	[17.3 - 21.9]	13.6	[11.2 - 16.4]	7.19
'Epibacterium mobile' (NZ_LNWN00000000)	*Ruegeria lacuscaerulensis* ITI-1157	14.7	[11.8 - 18.1]	19.5	[17.3 - 21.9]	14.8	[12.4 - 17.7]	4.19
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus zhejiangensis* J6	13.2	[10.5 - 16.6]	19.5	[17.3 - 21.9]	13.6	[11.2 - 16.4]	5.3
'Paracoccus yeei' (NZ_CP031078)	*Salipiger bermudensis* HTCC2601	14.4	[11.5 - 17.7]	19.5	[17.3 - 21.9]	14.5	[12.1 - 17.4]	1.14
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus lutimaris* CECT 8525	14.5	[11.6 - 17.9]	19.5	[17.3 - 21.9]	14.6	[12.2 - 17.5]	3.89
'Paracoccus yeei' (NZ_CP024422)	*Leisingera aquaemixtae* CECT 8399	13.9	[11.1 - 17.2]	19.5	[17.3 - 21.9]	14.1	[11.7 - 16.9]	2.94
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus yeei* ATCC BAA-599	13.1	[10.4 - 16.4]	19.5	[17.3 - 21.9]	13.5	[11.1 - 16.2]	7.2
'Phaeobacter inhibens' (NZ_CP010735)	*Cereibacter sphaeroides* 2.4.1	13.0	[10.3 - 16.3]	19.5	[17.3 - 21.9]	13.4	[11.0 - 16.2]	8.98
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus lutimaris* CECT 8525	13.2	[10.4 - 16.5]	19.5	[17.3 - 21.9]	13.5	[11.1 - 16.3]	5.37
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus laeviglucosivorans* DSM 100094	18.0	[14.9 - 21.6]	19.5	[17.3 - 21.9]	17.6	[15.0 - 20.6]	0.27
'Phaeobacter inhibens' (NZ_CP010623)	*Haematobacter missouriensis* CCUG 52307	12.9	[10.2 - 16.2]	19.5	[17.3 - 21.9]	13.2	[10.9 - 16.0]	4.31
'Paracoccus yeei' (NZ_CP024422)	*Marinovum algicola* DSM 10251	13.9	[11.1 - 17.3]	19.5	[17.3 - 21.9]	14.2	[11.7 - 17.0]	2.28
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus zhejiangensis* J6	13.1	[10.4 - 16.4]	19.5	[17.3 - 21.9]	13.5	[11.1 - 16.2]	5.96
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus contaminans* LMG 29738	12.9	[10.2 - 16.2]	19.5	[17.4 - 21.9]	13.3	[10.9 - 16.0]	8.7

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Paracoccus yeei' (NZ_CP024422)	*Thalassobius mediterraneus* CECT 5383	13.2	[10.5 - 16.5]	19.5	[17.3 - 21.9]	13.5	[11.1 - 16.3]	8.63
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Pseudophaeobacter arcticus* DSM 23566	12.9	[10.2 - 16.2]	19.5	[17.3 - 21.9]	13.3	[10.9 - 16.0]	9.8
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Phaeovulum veldkampii* DSM 11550	15.2	[12.3 - 18.6]	19.5	[17.3 - 21.9]	15.2	[12.7 - 18.1]	3.92
'Paracoccus yeei' (NZ_CP024422)	*Gemmobacter aquatilis* DSM 3857	15.1	[12.2 - 18.6]	19.4	[17.2 - 21.8]	15.2	[12.7 - 18.1]	2.22
'Paracoccus yeei' (NZ_NIPZ00000000)	*Thalassobius mediterraneus* CECT 5383	13.0	[10.3 - 16.3]	19.4	[17.2 - 21.8]	13.4	[11.0 - 16.1]	8.73
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus laeviglucosivorans* DSM 100094	13.7	[11.0 - 17.1]	19.4	[17.2 - 21.8]	14.0	[11.6 - 16.8]	5.9
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus subflavus* GY0581	12.9	[10.2 - 16.2]	19.4	[17.2 - 21.8]	13.3	[10.9 - 16.1]	5.22
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus chinensis* CGMCC 1.7655	12.9	[10.2 - 16.2]	19.4	[17.3 - 21.8]	13.3	[10.9 - 16.0]	7.76
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Ruegeria lacuscaerulensis* ITI-1157	14.0	[11.2 - 17.4]	19.4	[17.2 - 21.8]	14.2	[11.8 - 17.0]	6.09
'Paracoccus yeei' (NZ_CP024422)	*Ruegeria pelagia* NBRC102038	13.0	[10.3 - 16.3]	19.4	[17.2 - 21.8]	13.4	[11.0 - 16.2]	8.36
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Ruegeria lacuscaerulensis* ITI-1157	14.2	[11.4 - 17.6]	19.4	[17.2 - 21.7]	14.4	[11.9 - 17.2]	5.8
'Phaeobacter piscinae' (NZ_CP010681)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	13.1	[10.4 - 16.4]	19.4	[17.2 - 21.8]	13.5	[11.1 - 16.2]	7.14
'Phaeobacter piscinae' (NZ_CP010767)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	13.0	[10.3 - 16.3]	19.4	[17.2 - 21.8]	13.3	[11.0 - 16.1]	8.71
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus yeei* ATCC BAA-599	13.0	[10.3 - 16.3]	19.4	[17.2 - 21.8]	13.3	[11.0 - 16.1]	7.86
'Phaeobacter inhibens' (NZ_CP010735)	*Phaeovulum vinaykumarii* DSM 18714	13.2	[10.5 - 16.5]	19.4	[17.2 - 21.7]	13.5	[11.2 - 16.3]	8.45
'Rhodobacter sphaeroides' (NZ_CP033434)	*Phaeovulum veldkampii* DSM 11550	15.7	[12.8 - 19.2]	19.4	[17.2 - 21.8]	15.7	[13.2 - 18.6]	3.97
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Leisingera aquimarina* DSM 24565	13.4	[10.6 - 16.7]	19.4	[17.2 - 21.8]	13.7	[11.3 - 16.5]	7.42
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Gemmobacter aquatilis* DSM 3857	16.9	[13.9 - 20.4]	19.4	[17.2 - 21.8]	16.6	[14.1 - 19.6]	3.9
'Paracoccus yeei' (NZ_CP031078)	*Tritonibacter horizontis* O3.65	13.2	[10.5 - 16.6]	19.4	[17.2 - 21.8]	13.6	[11.2 - 16.4]	6.06
'Paracoccus yeei' (NZ_CP031078)	*Ruegeria lacuscaerulensis* DSM 11314	14.3	[11.5 - 17.7]	19.4	[17.3 - 21.8]	14.5	[12.1 - 17.4]	4.57
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus subflavus* GY0581	14.1	[11.3 - 17.5]	19.4	[17.2 - 21.8]	14.3	[11.9 - 17.2]	3.39
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Ruegeria denitrificans* CECT 5091	12.9	[10.2 - 16.2]	19.4	[17.2 - 21.8]	13.2	[10.9 - 16.0]	6.65

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Paracoccus lutimaris* CECT 8525	14.7	[11.8 - 18.1]	19.4	[17.2 - 21.8]	14.8	[12.3 - 17.7]	3.83
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus denitrificans* DSM 413	13.1	[10.3 - 16.4]	19.4	[17.2 - 21.8]	13.4	[11.0 - 16.2]	7.21
'Phaeobacter piscinae' (NZ_CP010681)	*Haematobacter massiliensis* CCUG 47968	12.9	[10.2 - 16.2]	19.4	[17.2 - 21.8]	13.3	[10.9 - 16.1]	4.28
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus chinensis* CGMCC 1.7655	12.9	[10.2 - 16.2]	19.4	[17.2 - 21.8]	13.3	[10.9 - 16.0]	7.72
'Rhodobacter sphaeroides' (NZ_CP033434)	*Gemmobacter aquatilis* DSM 3857	16.9	[13.9 - 20.4]	19.4	[17.2 - 21.7]	16.6	[14.1 - 19.6]	4.01
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Thalassobius mediterraneus* DSM 16398	13.0	[10.3 - 16.3]	19.4	[17.3 - 21.8]	13.4	[11.0 - 16.1]	4.65
'Paracoccus yeei' (NZ_CP024422)	*Ruegeria meteori* CECT 4293	13.0	[10.3 - 16.3]	19.4	[17.2 - 21.8]	13.3	[11.0 - 16.1]	10.86
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus aminophilus* JCM 7686	14.1	[11.3 - 17.5]	19.4	[17.2 - 21.8]	14.3	[11.9 - 17.2]	5.71
'Phaeobacter piscinae' (NZ_CP010656)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	13.1	[10.4 - 16.4]	19.4	[17.2 - 21.8]	13.5	[11.1 - 16.2]	7.03
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus lutimaris* CECT 8525	13.2	[10.5 - 16.5]	19.4	[17.2 - 21.8]	13.6	[11.2 - 16.3]	4.78
'Paracoccus yeei' (NZ_NIPZ00000000)	*Tropicibacter naphthalenivorans* DSM 19561	13.6	[10.8 - 16.9]	19.4	[17.2 - 21.8]	13.9	[11.5 - 16.7]	4.22
'Phaeobacter inhibens' (NZ_CP010735)	*Cereibacter azotoformans* KA25	12.9	[10.2 - 16.2]	19.4	[17.2 - 21.8]	13.3	[10.9 - 16.0]	8.56
'Paracoccus yeei' (NZ_CP024422)	**'Marinovum algicola' (NZ_FWFM00000000)**	13.9	[11.1 - 17.3]	19.4	[17.2 - 21.8]	14.2	[11.8 - 17.0]	2.3
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Tropicibacter naphthalenivorans* DSM 19561	13.4	[10.6 - 16.7]	19.4	[17.2 - 21.8]	13.7	[11.3 - 16.5]	5.56
'Epibacterium mobile' (NZ_LNWF00000000)	*Ruegeria lacuscaerulensis* DSM 11314	14.7	[11.8 - 18.1]	19.4	[17.2 - 21.8]	14.8	[12.4 - 17.7]	4.22
'Phaeobacter piscinae' (NZ_CP010656)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	13.0	[10.3 - 16.3]	19.4	[17.2 - 21.8]	13.4	[11.0 - 16.1]	8.67
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Ruegeria meteori* CECT 4293	12.9	[10.2 - 16.2]	19.4	[17.2 - 21.8]	13.3	[10.9 - 16.0]	6.91
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus sigani* DSM 26381	13.4	[10.7 - 16.8]	19.4	[17.2 - 21.7]	13.7	[11.3 - 16.5]	6.37
'Paracoccus yeei' (NZ_CP024422)	*Tropicibacter naphthalenivorans* DSM 19561	13.7	[10.9 - 17.0]	19.4	[17.2 - 21.8]	13.9	[11.5 - 16.7]	4.12
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Phaeobacter porticola* P97	12.9	[10.2 - 16.2]	19.4	[17.2 - 21.8]	13.3	[10.9 - 16.1]	10.48
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Tritonibacter mobilis* DSM 23403	13.0	[10.3 - 16.3]	19.4	[17.2 - 21.8]	13.3	[11.0 - 16.1]	4.39
'Paracoccus yeei' (NZ_NIPZ00000000)	*Ruegeria lacuscaerulensis* ITI-1157	14.3	[11.4 - 17.6]	19.4	[17.2 - 21.8]	14.5	[12.0 - 17.3]	4.45
'Phaeobacter piscinae' (NZ_CP010767)	*Cereibacter azotoformans* KA25	13.1	[10.3 - 16.4]	19.4	[17.2 - 21.8]	13.4	[11.0 - 16.2]	8.01

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus marinus* NBRC 100637	13.2	[10.5 - 16.5]	19.4	[17.2 - 21.8]	13.5	[11.1 - 16.3]	7.86
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	14.2	[11.4 - 17.6]	19.4	[17.2 - 21.8]	14.4	[12.0 - 17.3]	5.68
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus alcaliphilus* DSM 8512	16.2	[13.2 - 19.7]	19.4	[17.2 - 21.7]	16.1	[13.5 - 19.0]	0.92
'Epibacterium mobile' (NZ_LNWN00000000)	*Ruegeria lacuscaerulensis* DSM 11314	14.7	[11.8 - 18.1]	19.4	[17.2 - 21.8]	14.8	[12.4 - 17.7]	4.22
'Epibacterium mobile' (NZ_LNXJ00000000)	*Ruegeria lacuscaerulensis* DSM 11314	14.7	[11.8 - 18.1]	19.4	[17.2 - 21.8]	14.8	[12.4 - 17.7]	4.26
'Phaeobacter piscinae' (NZ_CP010656)	*Cereibacter azotoformans* KA25	13.1	[10.4 - 16.4]	19.4	[17.3 - 21.8]	13.4	[11.1 - 16.2]	7.97
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Paracoccus subflavus* GY0581	14.0	[11.2 - 17.4]	19.4	[17.2 - 21.8]	14.2	[11.8 - 17.0]	3.15
'Paracoccus yeei' (NZ_CP024422)	*Leisingera aquimarina* DSM 24565	13.6	[10.8 - 16.9]	19.4	[17.2 - 21.8]	13.8	[11.5 - 16.6]	5.98
'Phaeobacter inhibens' (NZ_CP010735)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	13.0	[10.3 - 16.3]	19.4	[17.2 - 21.8]	13.3	[11.0 - 16.1]	9.26
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus zhejiangensis* J6	13.0	[10.3 - 16.3]	19.3	[17.1 - 21.7]	13.3	[11.0 - 16.1]	6.8
'Paracoccus yeei' (NZ_NIPZ00000000)	*Phaeobacter gallaeciensis* DSM 26640	13.0	[10.2 - 16.2]	19.3	[17.1 - 21.7]	13.3	[11.0 - 16.1]	7.99
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Cereibacter azotoformans* KA25	13.5	[10.8 - 16.9]	19.3	[17.1 - 21.7]	13.8	[11.4 - 16.6]	6.85
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus zhejiangensis* J6	13.0	[10.3 - 16.3]	19.3	[17.1 - 21.7]	13.3	[11.0 - 16.1]	6.84
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus laeviglucosivorans* DSM 100094	13.0	[10.3 - 16.3]	19.3	[17.1 - 21.7]	13.4	[11.0 - 16.2]	3.49
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus zhejiangensis* J6	13.5	[10.8 - 16.9]	19.3	[17.1 - 21.6]	13.8	[11.4 - 16.6]	4.07
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Phaeobacter gallaeciensis' (NZ_CP015124)**	13.4	[10.6 - 16.7]	19.3	[17.1 - 21.6]	13.7	[11.3 - 16.5]	7.49
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Phaeobacter gallaeciensis' (NZ_CP015124)**	13.3	[10.6 - 16.6]	19.3	[17.1 - 21.7]	13.6	[11.3 - 16.4]	7.26
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus zhejiangensis* J6	13.2	[10.5 - 16.5]	19.3	[17.2 - 21.7]	13.5	[11.1 - 16.3]	5.77
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus chinensis* CGMCC 1.7655	12.9	[10.2 - 16.2]	19.3	[17.1 - 21.7]	13.3	[10.9 - 16.1]	8.5
'Paracoccus yeei' (NZ_CP031078)	*Thalassobius mediterraneus* DSM 16398	13.2	[10.4 - 16.5]	19.3	[17.2 - 21.7]	13.5	[11.1 - 16.3]	8.84
'Marinovum algicola' (NZ_FWFM00000000)	*Phaeovulum vinaykumarii* DSM 18714	14.7	[11.9 - 18.1]	19.3	[17.1 - 21.7]	14.8	[12.4 - 17.7]	3.22
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Phaeovulum vinaykumarii* DSM 18714	13.3	[10.5 - 16.6]	19.3	[17.1 - 21.7]	13.6	[11.2 - 16.4]	8.63

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus subflavus* GY0581	13.0	[10.3 - 16.3]	19.3	[17.1 - 21.7]	13.3	[11.0 - 16.1]	5.81
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Ruegeria lacuscaerulensis* ITI-1157	14.4	[11.6 - 17.8]	19.3	[17.1 - 21.7]	14.6	[12.1 - 17.4]	6.03
'Rhodobacter sphaeroides' (NZ_CP033434)	*Paracoccus subflavus* GY0581	14.3	[11.4 - 17.7]	19.3	[17.1 - 21.6]	14.5	[12.0 - 17.3]	3.49
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Leisingera daeponensis* DSM 23529	13.8	[11.0 - 17.1]	19.3	[17.1 - 21.7]	14.0	[11.6 - 16.8]	4.73
'Paracoccus yeei' (NZ_NIPZ00000000)	*Phaeobacter porticola* P97	12.9	[10.2 - 16.2]	19.3	[17.2 - 21.7]	13.3	[10.9 - 16.1]	8.84
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Paracoccus subflavus* GY0581	14.0	[11.2 - 17.4]	19.3	[17.1 - 21.7]	14.2	[11.8 - 17.0]	3.45
'Marinovum algicola' (NZ_FWFM00000000)	*Tropicibacter naphthalenivorans* DSM 19561	14.8	[12.0 - 18.2]	19.3	[17.1 - 21.7]	14.9	[12.5 - 17.8]	1.83
'Rhodobacter sphaeroides' (NZ_CP033434)	*Pseudophaeobacter arcticus* DSM 23566	12.8	[10.1 - 16.1]	19.3	[17.1 - 21.6]	13.2	[10.9 - 16.0]	9.85
'Paracoccus yeei' (NZ_CP031078)	*Leisingera aquimarina* DSM 24565	13.6	[10.8 - 16.9]	19.3	[17.2 - 21.7]	13.9	[11.5 - 16.7]	6.22
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Phaeobacter piscinae' (NZ_CP010681)**	13.1	[10.4 - 16.4]	19.3	[17.1 - 21.7]	13.5	[11.1 - 16.2]	8.72
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus thiocyanatus* ATCC 700171	13.1	[10.3 - 16.4]	19.3	[17.1 - 21.7]	13.4	[11.0 - 16.2]	6.82
'Paracoccus yeei' (NZ_NIPZ00000000)	*Ruegeria lacuscaerulensis* DSM 11314	14.2	[11.4 - 17.6]	19.3	[17.1 - 21.6]	14.4	[12.0 - 17.3]	4.42
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Cereibacter sphaeroides* 2.4.1	13.3	[10.6 - 16.6]	19.3	[17.1 - 21.7]	13.6	[11.3 - 16.4]	7.27
'Phaeobacter gallaeciensis' (NZ_CP015124)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	13.4	[10.6 - 16.7]	19.3	[17.1 - 21.7]	13.7	[11.3 - 16.5]	5.91
'Paracoccus yeei' (NZ_CP031078)	*Ruegeria pelagia* NBRC102038	13.1	[10.3 - 16.4]	19.3	[17.2 - 21.7]	13.4	[11.0 - 16.2]	8.6
'Paracoccus yeei' (NZ_CP031078)	*Ruegeria denitrificans* CECT 5091	13.0	[10.3 - 16.3]	19.3	[17.2 - 21.7]	13.4	[11.0 - 16.2]	10.84
'Paracoccus yeei' (NZ_CP031078)	*Leisingera aquaemixtae* CECT 8399	14.0	[11.2 - 17.3]	19.3	[17.1 - 21.6]	14.2	[11.8 - 17.0]	3.18
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Phaeovulum veldkampii* DSM 11550	14.0	[11.2 - 17.3]	19.3	[17.1 - 21.7]	14.2	[11.8 - 17.0]	1.76
'Phaeobacter inhibens' (NZ_CP010735)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	13.1	[10.4 - 16.4]	19.3	[17.1 - 21.7]	13.4	[11.1 - 16.2]	7.62
'Rhodobacter sphaeroides' (NZ_CP033434)	*Ruegeria lacuscaerulensis* ITI-1157	14.5	[11.6 - 17.9]	19.3	[17.1 - 21.7]	14.6	[12.2 - 17.5]	6.14
'Rhodobacter sphaeroides' (NZ_CP033434)	*Leisingera aquimarina* DSM 24565	13.3	[10.6 - 16.7]	19.3	[17.1 - 21.6]	13.7	[11.3 - 16.4]	7.76
'Rhodobacter sphaeroides' (NZ_CP033434)	*Tropicibacter naphthalenivorans* DSM 19561	13.5	[10.8 - 16.9]	19.3	[17.1 - 21.7]	13.8	[11.4 - 16.6]	5.91
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus marinus* NBRC 100637	15.3	[12.4 - 18.7]	19.3	[17.1 - 21.7]	15.3	[12.8 - 18.2]	5.99

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Paracoccus yeei' (NZ_NIPZ00000000)	*Gemmobacter aquatilis* DSM 3857	15.0	[12.1 - 18.4]	19.3	[17.1 - 21.7]	15.1	[12.6 - 17.9]	2.32
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Leisingera daeponensis* DSM 23529	13.9	[11.1 - 17.3]	19.3	[17.1 - 21.7]	14.2	[11.8 - 17.0]	4.44
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus zhejiangensis* J6	13.0	[10.3 - 16.3]	19.3	[17.1 - 21.7]	13.3	[11.0 - 16.1]	6.8
'Paracoccus yeei' (NZ_NIPZ00000000)	*Tritonibacter horizontis* O3.65	13.2	[10.5 - 16.5]	19.3	[17.1 - 21.7]	13.5	[11.2 - 16.3]	5.91
'Paracoccus yeei' (NZ_CP024422)	*Thalassobius mediterraneus* DSM 16398	13.2	[10.4 - 16.5]	19.3	[17.1 - 21.6]	13.5	[11.1 - 16.3]	8.6
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Haematobacter massiliensis* CCUG 47968	12.9	[10.2 - 16.2]	19.3	[17.2 - 21.7]	13.2	[10.9 - 16.0]	4.94
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus yeei* ATCC BAA-599	13.0	[10.3 - 16.3]	19.3	[17.1 - 21.7]	13.3	[11.0 - 16.1]	8.73
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus yeei* ATCC BAA-599	13.0	[10.3 - 16.3]	19.3	[17.1 - 21.6]	13.3	[11.0 - 16.1]	8.7
'Phaeobacter inhibens' (NZ_CP010623)	**'Rhodobacter sphaeroides' (NZ_CP033434)**	13.1	[10.4 - 16.4]	19.3	[17.1 - 21.6]	13.4	[11.1 - 16.2]	9.11
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Tritonibacter scottomollicae* DSM 25328	13.0	[10.3 - 16.3]	19.3	[17.2 - 21.7]	13.4	[11.0 - 16.2]	2.5
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus chinensis* CGMCC 1.7655	12.9	[10.2 - 16.2]	19.2	[17.0 - 21.6]	13.3	[10.9 - 16.0]	9.37
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus alcaliphilus* DSM 8512	13.0	[10.3 - 16.3]	19.2	[17.0 - 21.6]	13.3	[11.0 - 16.1]	4.68
'Epibacterium mobile' (NZ_LNXJ00000000)	*Phaeovulum vinaykumarii* DSM 18714	13.1	[10.4 - 16.4]	19.2	[17.0 - 21.6]	13.4	[11.1 - 16.2]	9.51
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus yeei* ATCC BAA-599	13.0	[10.3 - 16.3]	19.2	[17.0 - 21.6]	13.3	[11.0 - 16.1]	8.69
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Paracoccus thiocyanatus* ATCC 700171	13.1	[10.3 - 16.4]	19.2	[17.0 - 21.6]	13.4	[11.0 - 16.2]	7.55
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Ruegeria lacuscaerulensis* DSM 11314	13.5	[10.7 - 16.8]	19.2	[17.1 - 21.6]	13.8	[11.4 - 16.6]	0.38
'Epibacterium mobile' (NZ_LNWF00000000)	*Phaeovulum vinaykumarii* DSM 18714	13.1	[10.4 - 16.4]	19.2	[17.0 - 21.6]	13.4	[11.1 - 16.2]	9.47
'Paracoccus yeei' (NZ_NIPZ00000000)	*Pseudophaeobacter arcticus* DSM 23566	12.8	[10.2 - 16.1]	19.2	[17.0 - 21.6]	13.2	[10.9 - 16.0]	8.16
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus chinensis* CGMCC 1.7655	12.9	[10.2 - 16.2]	19.2	[17.0 - 21.6]	13.3	[10.9 - 16.0]	9.34
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus chinensis* CGMCC 1.7655	12.9	[10.2 - 16.2]	19.2	[17.0 - 21.6]	13.3	[10.9 - 16.0]	9.33
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Phaeobacter inhibens* DSM 16374	13.0	[10.3 - 16.3]	19.2	[17.0 - 21.6]	13.3	[11.0 - 16.1]	8.76
'Phaeobacter gallaeciensis' (NZ_CP010784)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	13.0	[10.3 - 16.3]	19.2	[17.1 - 21.6]	13.3	[11.0 - 16.1]	7.8
'Paracoccus yeei' (NZ_NIPZ00000000)	*Phaeobacter inhibens* DSM 16374	13.0	[10.3 - 16.3]	19.2	[17.0 - 21.6]	13.3	[11.0 - 16.1]	7.41
'Paracoccus yeei' (NZ_NIPZ00000000)	*Leisingera daeponensis* DSM 23529	14.0	[11.2 - 17.4]	19.2	[17.0 - 21.6]	14.2	[11.8 - 17.1]	3.09

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Phaeobacter inhibens' (NZ_CP010623)	*Haematobacter massiliensis* CCUG 47968	13.0	[10.3 - 16.3]	19.2	[17.0 - 21.6]	13.3	[11.0 - 16.1]	4.56
'Paracoccus yeei' (NZ_CP024422)	*Ruegeria denitrificans* CECT 5091	13.1	[10.3 - 16.4]	19.2	[17.0 - 21.6]	13.4	[11.0 - 16.2]	10.59
'Paracoccus yeei' (NZ_NIPZ00000000)	*Leisingera caerulea* DSM 24564	13.7	[10.9 - 17.0]	19.2	[17.0 - 21.6]	13.9	[11.5 - 16.7]	4.15
'Phaeobacter piscinae' (NZ_CP010767)	**'Rhodobacter sphaeroides' (NZ_CP033434)**	13.0	[10.3 - 16.3]	19.2	[17.0 - 21.6]	13.4	[11.0 - 16.2]	8.76
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus aminovorans* DSM 8537	13.0	[10.3 - 16.3]	19.2	[17.0 - 21.6]	13.3	[11.0 - 16.1]	8.76
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Phaeobacter porticola* P97	13.0	[10.3 - 16.3]	19.2	[17.0 - 21.6]	13.4	[11.0 - 16.2]	10.42
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Phaeovulum veldkampii* DSM 11550	15.8	[12.9 - 19.3]	19.2	[17.0 - 21.6]	15.8	[13.2 - 18.7]	3.86
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus sigani* DSM 26381	13.1	[10.4 - 16.5]	19.2	[17.0 - 21.6]	13.5	[11.1 - 16.3]	7.6
'Rhodobacter sphaeroides' (NZ_CP033434)	*Salipiger bermudensis* HTCC2601	15.4	[12.5 - 18.8]	19.2	[17.0 - 21.6]	15.4	[12.9 - 18.3]	2.67
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus subflavus* GY0581	14.9	[12.0 - 18.3]	19.2	[17.0 - 21.6]	15.0	[12.5 - 17.9]	2.24
'Epibacterium mobile' (NZ_LNWN00000000)	*Phaeovulum vinaykumarii* DSM 18714	13.1	[10.4 - 16.4]	19.2	[17.0 - 21.6]	13.4	[11.1 - 16.2]	9.47
'Paracoccus yeei' (NZ_NIPZ00000000)	*Thalassobius mediterraneus* DSM 16398	13.0	[10.3 - 16.3]	19.2	[17.0 - 21.6]	13.4	[11.0 - 16.1]	8.69
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus aminovorans* DSM 8537	13.0	[10.3 - 16.3]	19.2	[17.0 - 21.6]	13.3	[11.0 - 16.1]	8.75
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Salipiger bermudensis* HTCC2601	15.0	[12.1 - 18.4]	19.2	[17.0 - 21.6]	15.1	[12.6 - 17.9]	2.63
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Phaeobacter piscinae' (NZ_CP010656)**	13.1	[10.4 - 16.4]	19.2	[17.0 - 21.6]	13.5	[11.1 - 16.2]	8.61
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Leisingera daeponensis* DSM 23529	14.1	[11.3 - 17.5]	19.2	[17.0 - 21.6]	14.3	[11.9 - 17.2]	4.67
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Ruegeria lacuscaerulensis* DSM 11314	14.2	[11.3 - 17.5]	19.2	[17.0 - 21.6]	14.4	[11.9 - 17.2]	5.77
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Ruegeria lacuscaerulensis* DSM 11314	14.0	[11.2 - 17.4]	19.2	[17.1 - 21.6]	14.2	[11.8 - 17.0]	6.06
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Phaeobacter inhibens' (NZ_CP010735)**	13.1	[10.4 - 16.4]	19.2	[17.0 - 21.6]	13.4	[11.1 - 16.2]	9.2
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Phaeovulum veldkampii* DSM 11550	15.5	[12.6 - 18.9]	19.2	[17.1 - 21.6]	15.5	[13.0 - 18.4]	3.63
'Rhodobacter sphaeroides' (NZ_CP033434)	*Ruegeria lacuscaerulensis* DSM 11314	14.5	[11.6 - 17.9]	19.2	[17.1 - 21.6]	14.6	[12.2 - 17.5]	6.11
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Cereibacter azotoformans* KA25	13.9	[11.1 - 17.3]	19.2	[17.0 - 21.6]	14.2	[11.7 - 17.0]	4.99
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Paracoccus chinensis* CGMCC 1.7655	15.2	[12.3 - 18.6]	19.2	[17.1 - 21.6]	15.2	[12.7 - 18.1]	4.73

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Tropicibacter naphthalenivorans* DSM 19561	13.5	[10.7 - 16.8]	19.2	[17.0 - 21.6]	13.8	[11.4 - 16.6]	5.8
'Rhodobacter sphaeroides' (NZ_CP033434)	*Leisingera daeponensis* DSM 23529	14.1	[11.3 - 17.5]	19.2	[17.0 - 21.6]	14.3	[11.9 - 17.2]	4.78
'Paracoccus yeei' (NZ_NIPZ00000000)	*Leisingera aquaemixtae* CECT 8399	13.8	[11.0 - 17.2]	19.2	[17.0 - 21.6]	14.1	[11.7 - 16.9]	3.03
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Tabrizicola sediminis* DRYC-M-16	13.5	[10.7 - 16.8]	19.1	[16.9 - 21.5]	13.8	[11.4 - 16.6]	0.39
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Ruegeria meonggei* CECT 8411	13.0	[10.3 - 16.3]	19.1	[16.9 - 21.4]	13.3	[11.0 - 16.1]	6.08
'Paracoccus yeei' (NZ_NIPZ00000000)	*Salipiger bermudensis* HTCC2601	14.4	[11.6 - 17.8]	19.1	[16.9 - 21.5]	14.6	[12.2 - 17.4]	0.99
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Salipiger bermudensis* HTCC2601	15.2	[12.3 - 18.7]	19.1	[16.9 - 21.5]	15.3	[12.8 - 18.2]	2.57
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus yeei* ATCC BAA-599	14.1	[11.3 - 17.4]	19.1	[16.9 - 21.5]	14.3	[11.8 - 17.1]	2.44
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Thalassobius mediterraneus* DSM 16398	12.8	[10.2 - 16.1]	19.1	[16.9 - 21.5]	13.2	[10.9 - 16.0]	10.04
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus alcaliphilus* DSM 8512	13.4	[10.7 - 16.7]	19.1	[17.0 - 21.5]	13.7	[11.3 - 16.5]	2.79
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus denitrificans* DSM 413	13.2	[10.4 - 16.5]	19.1	[16.9 - 21.5]	13.5	[11.1 - 16.3]	6.54
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus aminovorans* DSM 8537	14.4	[11.5 - 17.8]	19.1	[16.9 - 21.5]	14.5	[12.1 - 17.4]	2.5
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Ruegeria arenilitoris* CECT 8715	13.3	[10.6 - 16.6]	19.1	[16.9 - 21.5]	13.6	[11.2 - 16.4]	2.1
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Leisingera aquaemixtae* CECT 8399	14.0	[11.2 - 17.3]	19.1	[16.9 - 21.5]	14.2	[11.8 - 17.0]	4.38
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus subflavus* GY0581	13.5	[10.7 - 16.8]	19.1	[16.9 - 21.5]	13.8	[11.4 - 16.6]	0.59
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus zhejiangensis* J6	13.2	[10.5 - 16.6]	19.1	[16.9 - 21.5]	13.6	[11.2 - 16.3]	5.58
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Tropicibacter naphthalenivorans* DSM 19561	13.2	[10.4 - 16.5]	19.1	[17.0 - 21.5]	13.5	[11.1 - 16.3]	0.18
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Ruegeria pelagia* NBRC102038	13.1	[10.4 - 16.4]	19.1	[16.9 - 21.4]	13.4	[11.0 - 16.2]	9.8
'Paracoccus yeei' (NZ_CP024422)	*Ruegeria arenilitoris* CECT 8715	14.1	[11.3 - 17.4]	19.1	[16.9 - 21.4]	14.3	[11.9 - 17.1]	6.05
'Rhodobacter sphaeroides' (NZ_CP033434)	*Ruegeria arenilitoris* CECT 8715	14.0	[11.2 - 17.3]	19.1	[16.9 - 21.5]	14.2	[11.8 - 17.0]	7.83
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus thiocyanatus* ATCC 700171	13.1	[10.4 - 16.4]	19.1	[16.9 - 21.5]	13.4	[11.1 - 16.2]	6.89
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus thiocyanatus* ATCC 700171	13.1	[10.4 - 16.4]	19.1	[17.0 - 21.5]	13.5	[11.1 - 16.2]	7.17
'Marinovum algicola' (NZ_FWFM00000000)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	14.0	[11.2 - 17.4]	19.1	[16.9 - 21.4]	14.2	[11.8 - 17.1]	2.39
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Leisingera methylohalidivorans* DSM 14336	13.5	[10.8 - 16.9]	19.1	[16.9 - 21.5]	13.8	[11.4 - 16.6]	6.44

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Gemmobacter aquatilis* DSM 3857	14.1	[11.3 - 17.5]	19.1	[16.9 - 21.5]	14.3	[11.9 - 17.1]	1.72
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus thiocyanatus* ATCC 700171	13.0	[10.3 - 16.3]	19.1	[16.9 - 21.5]	13.4	[11.0 - 16.2]	7.36
'Paracoccus yeei' (NZ_NIPZ00000000)	*Marinovum algicola* DSM 10251	14.0	[11.2 - 17.4]	19.1	[17.0 - 21.5]	14.2	[11.8 - 17.1]	2.38
'Paracoccus yeei' (NZ_CP024422)	*Ruegeria atlantica* CECT 4292	13.0	[10.3 - 16.3]	19.1	[16.9 - 21.4]	13.3	[11.0 - 16.1]	10.95
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Leisingera aquimarina* DSM 24565	13.4	[10.7 - 16.7]	19.1	[16.9 - 21.5]	13.7	[11.3 - 16.5]	7.71
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus chinensis* CGMCC 1.7655	13.2	[10.5 - 16.6]	19.1	[16.9 - 21.5]	13.6	[11.2 - 16.4]	6.6
'Paracoccus yeei' (NZ_CP031078)	*Ruegeria arenilitoris* CECT 8715	14.0	[11.2 - 17.4]	19.1	[16.9 - 21.4]	14.3	[11.8 - 17.1]	6.29
'Phaeobacter gallaeciensis' (NZ_CP015124)	**'Rhodobacter sphaeroides' (NZ_CP033434)**	13.5	[10.7 - 16.8]	19.1	[16.9 - 21.5]	13.7	[11.4 - 16.5]	7.6
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus thiocyanatus* ATCC 700171	14.0	[11.2 - 17.4]	19.1	[16.9 - 21.5]	14.3	[11.8 - 17.1]	2.14
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Rhodobacter megalophilus* DSM 18937	13.3	[10.6 - 16.6]	19.1	[16.9 - 21.4]	13.6	[11.2 - 16.4]	7.26
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus chinensis* CGMCC 1.7655	13.7	[10.9 - 17.0]	19.1	[16.9 - 21.5]	13.9	[11.5 - 16.8]	3.08
'Rhodobacter sphaeroides' (NZ_CP033434)	*Leisingera aquaemixtae* CECT 8399	14.1	[11.3 - 17.5]	19.1	[16.9 - 21.5]	14.3	[11.9 - 17.1]	4.72
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Salipiger bermudensis* HTCC2601	15.2	[12.3 - 18.6]	19.1	[16.9 - 21.5]	15.2	[12.7 - 18.1]	2.33
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus marinus* NBRC 100637	12.9	[10.2 - 16.2]	19.1	[16.9 - 21.4]	13.3	[10.9 - 16.1]	10.6
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus aminovorans* DSM 8537	13.0	[10.3 - 16.3]	19.1	[17.0 - 21.5]	13.3	[11.0 - 16.1]	8.79
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Ruegeria lacuscaerulensis* DSM 11314	14.4	[11.6 - 17.8]	19.1	[16.9 - 21.5]	14.6	[12.1 - 17.4]	6.0
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus subflavus* GY0581	13.0	[10.3 - 16.3]	19.1	[17.0 - 21.5]	13.3	[11.0 - 16.1]	5.26
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus thiocyanatus* ATCC 700171	13.5	[10.7 - 16.8]	19.1	[16.9 - 21.5]	13.8	[11.4 - 16.5]	5.66
'Paracoccus yeei' (NZ_CP031078)	*Marinovum algicola* DSM 10251	14.1	[11.3 - 17.5]	19.1	[16.9 - 21.5]	14.3	[11.9 - 17.1]	2.53
'Epibacterium mobile' (NZ_LNXJ00000000)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	13.0	[10.3 - 16.2]	19.1	[16.9 - 21.4]	13.3	[11.0 - 16.1]	8.68
'Paracoccus yeei' (NZ_CP031078)	*Ruegeria atlantica* CECT 4292	12.9	[10.2 - 16.2]	19.1	[16.9 - 21.4]	13.3	[10.9 - 16.1]	11.2
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Marinovum algicola* DSM 10251	14.3	[11.4 - 17.7]	19.1	[16.9 - 21.4]	14.5	[12.0 - 17.3]	4.02
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Tritonibacter horizontis* O3.65	13.1	[10.4 - 16.4]	19.0	[16.8 - 21.4]	13.4	[11.1 - 16.2]	7.26

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Epibacterium mobile' (NZ_LNWF00000000)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	13.0	[10.3 - 16.3]	19.0	[16.8 - 21.4]	13.3	[11.0 - 16.1]	8.64
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Cereibacter johrii* JA192	13.5	[10.7 - 16.8]	19.0	[16.8 - 21.4]	13.7	[11.4 - 16.5]	7.57
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Tritonibacter horizontis* O3.65	13.1	[10.4 - 16.4]	19.0	[16.8 - 21.4]	13.4	[11.1 - 16.2]	7.55
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus denitrificans* DSM 413	13.5	[10.7 - 16.8]	19.0	[16.8 - 21.4]	13.8	[11.4 - 16.6]	5.31
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Ruegeria arenilitoris* CECT 8715	13.7	[10.9 - 17.1]	19.0	[16.8 - 21.4]	14.0	[11.6 - 16.8]	7.49
'Paracoccus yeei' (NZ_CP031078)	*Ruegeria meonggei* CECT 8411	13.0	[10.3 - 16.3]	19.0	[16.8 - 21.4]	13.3	[11.0 - 16.1]	10.28
'Marinovum algicola' (NZ_FWFM00000000)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	14.3	[11.4 - 17.7]	19.0	[16.8 - 21.4]	14.4	[12.0 - 17.3]	4.03
'Epibacterium mobile' (NZ_LNWF00000000)	*Cereibacter azotoformans* KA25	13.0	[10.3 - 16.3]	19.0	[16.8 - 21.3]	13.4	[11.0 - 16.1]	9.59
'Phaeobacter piscinae' (NZ_CP010681)	*Paracoccus alcaliphilus* DSM 8512	13.0	[10.3 - 16.3]	19.0	[16.8 - 21.4]	13.3	[11.0 - 16.1]	4.02
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Leisingera aquaemixtae* CECT 8399	14.1	[11.3 - 17.5]	19.0	[16.8 - 21.4]	14.3	[11.9 - 17.2]	4.61
'Phaeobacter gallaeciensis' (NZ_CP015124)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	13.3	[10.6 - 16.7]	19.0	[16.8 - 21.4]	13.7	[11.3 - 16.4]	7.55
'Phaeobacter piscinae' (NZ_CP010767)	*Cereibacter ovatus* JA234	13.3	[10.5 - 16.6]	19.0	[16.8 - 21.4]	13.6	[11.2 - 16.4]	6.17
'Phaeobacter piscinae' (NZ_CP010656)	*Haematobacter massiliensis* CCUG 47968	12.9	[10.2 - 16.2]	19.0	[16.8 - 21.4]	13.3	[10.9 - 16.0]	4.16
'Paracoccus yeei' (NZ_NIPZ00000000)	*Ruegeria pelagia* NBRC102038	13.0	[10.3 - 16.3]	19.0	[16.8 - 21.4]	13.3	[11.0 - 16.1]	8.46
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus marinus* NBRC 100637	12.9	[10.2 - 16.2]	19.0	[16.9 - 21.4]	13.3	[10.9 - 16.1]	10.59
'Epibacterium mobile' (NZ_LNWN00000000)	**'Paracoccus yeei' (NZ_NIPZ00000000)**	13.0	[10.3 - 16.3]	19.0	[16.8 - 21.4]	13.3	[11.0 - 16.1]	8.64
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Leisingera methylohalidivorans* DSM 14336	13.7	[10.9 - 17.0]	19.0	[16.8 - 21.3]	13.9	[11.5 - 16.7]	6.68
'Paracoccus yeei' (NZ_CP024422)	*Ruegeria meonggei* CECT 8411	13.0	[10.3 - 16.3]	19.0	[16.8 - 21.4]	13.3	[11.0 - 16.1]	10.03
'Paracoccus yeei' (NZ_CP031078)	**'Marinovum algicola' (NZ_FWFM00000000)**	14.1	[11.3 - 17.5]	19.0	[16.9 - 21.4]	14.3	[11.9 - 17.1]	2.54
'Epibacterium mobile' (NZ_LNWF00000000)	*Gemmobacter aquatilis* DSM 3857	13.2	[10.5 - 16.5]	19.0	[16.8 - 21.4]	13.5	[11.1 - 16.3]	6.33
'Phaeobacter piscinae' (NZ_CP010767)	*Paracoccus alcaliphilus* DSM 8512	13.0	[10.3 - 16.3]	19.0	[16.8 - 21.3]	13.3	[11.0 - 16.1]	3.95
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus marinus* NBRC 100637	12.9	[10.2 - 16.2]	19.0	[16.8 - 21.4]	13.3	[10.9 - 16.1]	10.63
'Paracoccus yeei' (NZ_CP024422)	*Tabrizicola sediminis* DRYC-M-16	14.1	[11.3 - 17.5]	19.0	[16.9 - 21.4]	14.3	[11.9 - 17.1]	4.33
'Paracoccus yeei' (NZ_NIPZ00000000)	*Ruegeria meteori* CECT 4293	13.0	[10.3 - 16.3]	19.0	[16.8 - 21.4]	13.3	[11.0 - 16.1]	10.95

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides' (NZ_CP033434)	*Leisingera methylohalidivorans* DSM 14336	13.6	[10.8 - 16.9]	19.0	[16.8 - 21.3]	13.9	[11.5 - 16.7]	6.79
'Epibacterium mobile' (NZ_LNXJ00000000)	*Gemmobacter aquatilis* DSM 3857	13.2	[10.5 - 16.5]	19.0	[16.8 - 21.4]	13.5	[11.1 - 16.3]	6.36
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Thalassobius mediterraneus* CECT 5383	12.9	[10.2 - 16.2]	19.0	[16.8 - 21.4]	13.3	[10.9 - 16.0]	10.31
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Gemmobacter aquatilis* DSM 3857	13.5	[10.7 - 16.8]	19.0	[16.8 - 21.4]	13.8	[11.4 - 16.6]	5.48
'Paracoccus yeei' (NZ_NIPZ00000000)	*Leisingera aquimarina* DSM 24565	13.5	[10.7 - 16.8]	19.0	[16.8 - 21.4]	13.8	[11.4 - 16.6]	6.07
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Leisingera aquaemixtae* CECT 8399	13.9	[11.1 - 17.2]	19.0	[16.8 - 21.3]	14.1	[11.7 - 16.9]	4.68
'Paracoccus yeei' (NZ_CP031078)	*Tabrizicola sediminis* DRYC-M-16	14.2	[11.4 - 17.6]	19.0	[16.8 - 21.4]	14.4	[11.9 - 17.2]	4.58
'Epibacterium mobile' (NZ_LNWN00000000)	*Cereibacter azotoformans* KA25	13.0	[10.3 - 16.3]	19.0	[16.8 - 21.3]	13.4	[11.0 - 16.1]	9.58
'Marinovum algicola' (NZ_FWFM00000000)	*Haematobacter missouriensis* CCUG 52307	13.1	[10.4 - 16.4]	19.0	[16.9 - 21.4]	13.4	[11.1 - 16.2]	0.72
'Epibacterium mobile' (NZ_LNWN00000000)	*Gemmobacter aquatilis* DSM 3857	13.2	[10.5 - 16.5]	19.0	[16.8 - 21.4]	13.5	[11.1 - 16.3]	6.32
'Phaeobacter piscinae' (NZ_CP010681)	**'Rhodobacter sphaeroides' (NZ_CP033434)**	13.1	[10.4 - 16.4]	19.0	[16.8 - 21.4]	13.4	[11.0 - 16.2]	8.83
'Paracoccus yeei' (NZ_CP031078)	*Tropicibacter naphthalenivorans* DSM 19561	13.6	[10.8 - 16.9]	19.0	[16.8 - 21.4]	13.8	[11.4 - 16.6]	4.37
'Paracoccus yeei' (NZ_NIPZ00000000)	*Ruegeria arenilitoris* CECT 8715	14.0	[11.2 - 17.3]	18.9	[16.8 - 21.3]	14.2	[11.8 - 17.0]	6.15
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus alcaliphilus* DSM 8512	13.8	[11.0 - 17.2]	18.9	[16.7 - 21.3]	14.1	[11.7 - 16.9]	0.73
'Paracoccus aminophilus JCM 7686' (NC_022041)	*Marinovum algicola* DSM 10251	13.5	[10.8 - 16.9]	18.9	[16.8 - 21.3]	13.8	[11.4 - 16.6]	1.66
'Rhodobacter sphaeroides' (NZ_CP033434)	*Phaeobacter inhibens* DSM 16374	13.0	[10.3 - 16.3]	18.9	[16.7 - 21.3]	13.3	[11.0 - 16.1]	9.1
'Rhodobacter sphaeroides' (NZ_CP033434)	**'Marinovum algicola' (NZ_FWFM00000000)**	14.6	[11.7 - 18.0]	18.9	[16.7 - 21.3]	14.7	[12.2 - 17.6]	4.08
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Marinovum algicola* DSM 10251	14.5	[11.6 - 17.9]	18.9	[16.7 - 21.3]	14.6	[12.2 - 17.5]	3.96
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Ruegeria arenilitoris* CECT 8715	13.9	[11.1 - 17.3]	18.9	[16.7 - 21.3]	14.1	[11.7 - 16.9]	7.73
'Phaeobacter piscinae' (NZ_CP010656)	**'Rhodobacter sphaeroides' (NZ_CP033434)**	13.1	[10.4 - 16.4]	18.9	[16.7 - 21.3]	13.5	[11.1 - 16.2]	8.72
'Marinovum algicola' (NZ_FWFM00000000)	*Cereibacter johrii* JA192	14.4	[11.6 - 17.8]	18.9	[16.7 - 21.3]	14.6	[12.1 - 17.4]	4.05
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Ruegeria pelagia* NBRC102038	13.1	[10.4 - 16.4]	18.9	[16.7 - 21.2]	13.4	[11.1 - 16.2]	10.04
'Phaeobacter inhibens' (NZ_CP010735)	**'Rhodobacter sphaeroides' (NZ_CP033434)**	13.0	[10.3 - 16.3]	18.9	[16.7 - 21.2]	13.4	[11.0 - 16.2]	9.31

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides' (NZ_CP033434)	*Tritonibacter horizontis* O3.65	13.1	[10.4 - 16.5]	18.9	[16.8 - 21.3]	13.5	[11.1 - 16.3]	7.6
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus marinus* NBRC 100637	13.6	[10.9 - 17.0]	18.9	[16.7 - 21.2]	13.9	[11.5 - 16.7]	4.34
'Rhodobacter sphaeroides' (NZ_CP033434)	*Phaeobacter porticola* P97	12.9	[10.2 - 16.2]	18.9	[16.7 - 21.3]	13.3	[10.9 - 16.1]	10.53
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Ruegeria arenilitoris* CECT 8715	13.6	[10.9 - 17.0]	18.9	[16.7 - 21.3]	13.9	[11.5 - 16.7]	7.79
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Marinovum algicola* DSM 10251	14.3	[11.5 - 17.7]	18.9	[16.7 - 21.3]	14.5	[12.1 - 17.4]	3.72
'Phaeobacter piscinae' (NZ_CP010681)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	13.0	[10.3 - 16.3]	18.9	[16.7 - 21.3]	13.4	[11.0 - 16.1]	8.78
'Phaeobacter inhibens' (NZ_CP010623)	*Gemmobacter aquatilis* DSM 3857	13.5	[10.7 - 16.8]	18.9	[16.7 - 21.3]	13.8	[11.4 - 16.6]	5.11
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus alcaliphilus* DSM 8512	13.0	[10.3 - 16.3]	18.9	[16.7 - 21.3]	13.3	[11.0 - 16.1]	4.49
'Rhodobacter sphaeroides' (NZ_CP033434)	*Marinovum algicola* DSM 10251	14.6	[11.7 - 18.0]	18.9	[16.7 - 21.3]	14.7	[12.2 - 17.5]	4.07
'Epibacterium mobile' (NZ_LNXJ00000000)	*Cereibacter azotoformans* KA25	13.0	[10.3 - 16.3]	18.9	[16.8 - 21.3]	13.3	[11.0 - 16.1]	9.62
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus lutimaris* CECT 8525	13.5	[10.8 - 16.9]	18.9	[16.7 - 21.3]	13.8	[11.4 - 16.6]	3.66
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus denitrificans* DSM 413	14.3	[11.4 - 17.6]	18.9	[16.8 - 21.3]	14.4	[12.0 - 17.3]	1.79
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus sigani* DSM 26381	13.0	[10.2 - 16.2]	18.8	[16.6 - 21.2]	13.3	[11.0 - 16.1]	9.14
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus denitrificans* DSM 413	13.1	[10.4 - 16.4]	18.8	[16.6 - 21.2]	13.5	[11.1 - 16.2]	6.83
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus sigani* DSM 26381	14.4	[11.6 - 17.8]	18.8	[16.6 - 21.1]	14.5	[12.1 - 17.4]	2.85
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Haematobacter massiliensis* CCUG 47968	13.0	[10.3 - 16.3]	18.8	[16.7 - 21.2]	13.4	[11.0 - 16.1]	3.05
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Marinovum algicola' (NZ_FWFM00000000)**	14.5	[11.6 - 17.9]	18.8	[16.7 - 21.2]	14.6	[12.2 - 17.5]	3.97
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus aminophilus* JCM 7686	13.5	[10.7 - 16.8]	18.8	[16.7 - 21.2]	13.8	[11.4 - 16.6]	1.67
'Phaeobacter piscinae' (NZ_CP010681)	*Gemmobacter aquatilis* DSM 3857	13.6	[10.8 - 16.9]	18.8	[16.6 - 21.2]	13.9	[11.5 - 16.7]	4.82
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus sigani* DSM 26381	13.0	[10.3 - 16.2]	18.8	[16.7 - 21.2]	13.3	[11.0 - 16.1]	9.1
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Epibacterium mobile' (NZ_LNWN00000000)**	13.1	[10.4 - 16.4]	18.8	[16.6 - 21.1]	13.5	[11.1 - 16.2]	9.98
'Epibacterium mobile' (NZ_LNWF00000000)	*Haematobacter missouriensis* CCUG 52307	12.9	[10.2 - 16.1]	18.8	[16.6 - 21.2]	13.2	[10.9 - 16.0]	5.53
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus contaminans* LMG 29738	13.7	[10.9 - 17.0]	18.8	[16.7 - 21.2]	14.0	[11.6 - 16.8]	3.67

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Phaeovulum veldkampii* DSM 11550	13.2	[10.5 - 16.5]	18.8	[16.6 - 21.2]	13.5	[11.1 - 16.3]	5.52
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Ruegeria meteori* CECT 4293	13.0	[10.3 - 16.3]	18.8	[16.6 - 21.2]	13.3	[11.0 - 16.1]	12.3
'Phaeobacter piscinae' (NZ_CP010656)	*Cereibacter ovatus* JA234	13.3	[10.6 - 16.6]	18.8	[16.6 - 21.1]	13.6	[11.3 - 16.4]	6.13
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Phaeobacter inhibens* DSM 16374	13.0	[10.3 - 16.3]	18.8	[16.6 - 21.2]	13.3	[11.0 - 16.1]	9.05
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Gemmobacter aquatilis* DSM 3857	13.9	[11.1 - 17.2]	18.8	[16.7 - 21.2]	14.1	[11.7 - 16.9]	3.59
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Epibacterium mobile' (NZ_LNWF00000000)**	13.1	[10.4 - 16.4]	18.8	[16.6 - 21.1]	13.5	[11.1 - 16.2]	9.99
'Paracoccus aminophilus JCM 7686' (NC_022041)	**'Marinovum algicola' (NZ_FWFM00000000)**	13.5	[10.8 - 16.9]	18.8	[16.6 - 21.2]	13.8	[11.4 - 16.6]	1.65
'Phaeobacter inhibens' (NZ_CP010735)	*Gemmobacter aquatilis* DSM 3857	13.5	[10.7 - 16.8]	18.8	[16.6 - 21.1]	13.7	[11.4 - 16.5]	5.3
'Epibacterium mobile' (NZ_LNWN00000000)	*Cereibacter sphaeroides* 2.4.1	13.1	[10.4 - 16.4]	18.8	[16.6 - 21.1]	13.5	[11.1 - 16.2]	10.0
'Paracoccus yeei' (NZ_NIPZ00000000)	*Tritonibacter scottomollicae* DSM 25328	13.3	[10.5 - 16.6]	18.8	[16.7 - 21.2]	13.6	[11.2 - 16.4]	6.54
'Phaeobacter inhibens' (NZ_CP010623)	*Paracoccus alcaliphilus* DSM 8512	13.0	[10.3 - 16.3]	18.8	[16.6 - 21.2]	13.4	[11.0 - 16.1]	4.3
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Tritonibacter horizontis* O3.65	13.1	[10.4 - 16.4]	18.8	[16.7 - 21.2]	13.5	[11.1 - 16.2]	7.49
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Tritonibacter mobilis* DSM 23403	13.1	[10.4 - 16.4]	18.8	[16.7 - 21.2]	13.5	[11.1 - 16.2]	9.77
'Phaeobacter inhibens' (NZ_CP010623)	*Phaeovulum veldkampii* DSM 11550	13.2	[10.5 - 16.5]	18.8	[16.6 - 21.2]	13.5	[11.1 - 16.3]	5.14
'Epibacterium mobile' (NZ_LNWN00000000)	*Haematobacter missouriensis* CCUG 52307	12.9	[10.2 - 16.1]	18.8	[16.6 - 21.2]	13.2	[10.9 - 16.0]	5.53
'Marinovum algicola' (NZ_FWFM00000000)	*Cereibacter sphaeroides* 2.4.1	14.4	[11.5 - 17.7]	18.8	[16.7 - 21.2]	14.5	[12.1 - 17.4]	3.75
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Phaeobacter inhibens* DSM 16374	13.1	[10.3 - 16.4]	18.8	[16.6 - 21.2]	13.4	[11.0 - 16.2]	8.99
'Epibacterium mobile' (NZ_LNWF00000000)	*Cereibacter sphaeroides* 2.4.1	13.1	[10.4 - 16.4]	18.8	[16.6 - 21.1]	13.5	[11.1 - 16.2]	10.01
'Paracoccus yeei' (NZ_NIPZ00000000)	*Tritonibacter mobilis* DSM 23403	13.0	[10.3 - 16.3]	18.8	[16.7 - 21.2]	13.4	[11.0 - 16.1]	8.43
'Phaeobacter inhibens' (NZ_CP010623)	*Cereibacter ovatus* JA234	13.2	[10.5 - 16.5]	18.8	[16.6 - 21.2]	13.5	[11.2 - 16.3]	6.53
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus sigani* DSM 26381	13.0	[10.3 - 16.2]	18.8	[16.7 - 21.2]	13.3	[11.0 - 16.1]	9.1
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Marinovum algicola' (NZ_FWFM00000000)**	14.3	[11.5 - 17.7]	18.8	[16.7 - 21.2]	14.5	[12.1 - 17.3]	3.74
'Rhodobacter sphaeroides' (NZ_CP033434)	*Phaeobacter gallaeciensis* DSM 26640	12.9	[10.2 - 16.2]	18.7	[16.5 - 21.1]	13.3	[10.9 - 16.1]	9.68

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Epibacterium mobile' (NZ_LNXJ00000000)	*Cereibacter johrii* JA192	13.2	[10.5 - 16.5]	18.7	[16.5 - 21.0]	13.5	[11.2 - 16.3]	10.34
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus laeviglucosivorans* DSM 100094	13.4	[10.6 - 16.7]	18.7	[16.6 - 21.1]	13.7	[11.3 - 16.5]	1.93
'Paracoccus yeei' (NZ_CP031078)	*Tritonibacter scottomollicae* DSM 25328	13.4	[10.7 - 16.7]	18.7	[16.5 - 21.1]	13.7	[11.3 - 16.5]	6.69
'Phaeobacter inhibens' (NZ_CP010735)	*Cereibacter ovatus* JA234	13.2	[10.4 - 16.5]	18.7	[16.6 - 21.1]	13.5	[11.1 - 16.3]	6.72
'Phaeobacter gallaeciensis' (NZ_CP010784)	**'Rhodobacter sphaeroides' (NZ_CP033434)**	13.0	[10.3 - 16.3]	18.7	[16.5 - 21.1]	13.3	[11.0 - 16.1]	9.49
'Epibacterium mobile' (NZ_LNWN00000000)	*Cereibacter johrii* JA192	13.2	[10.5 - 16.5]	18.7	[16.5 - 21.0]	13.5	[11.2 - 16.3]	10.3
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Cereibacter ovatus* JA234	13.7	[10.9 - 17.0]	18.7	[16.5 - 21.0]	13.9	[11.5 - 16.8]	5.02
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus thiocyanatus* ATCC 700171	13.0	[10.3 - 16.3]	18.7	[16.6 - 21.1]	13.3	[11.0 - 16.1]	8.43
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus subflavus* GY0581	12.9	[10.2 - 16.2]	18.7	[16.5 - 21.1]	13.2	[10.9 - 16.0]	6.87
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus subflavus* GY0581	12.9	[10.2 - 16.2]	18.7	[16.5 - 21.1]	13.2	[10.9 - 16.0]	6.84
'Epibacterium mobile' (NZ_LNWF00000000)	*Rhodobacter megalophilus* DSM 18937	13.1	[10.4 - 16.4]	18.7	[16.6 - 21.1]	13.4	[11.1 - 16.2]	9.99
'Epibacterium mobile' (NZ_LNXJ00000000)	*Haematobacter missouriensis* CCUG 52307	12.9	[10.2 - 16.1]	18.7	[16.6 - 21.1]	13.2	[10.9 - 16.0]	5.57
'Epibacterium mobile' (NZ_LNWF00000000)	*Cereibacter johrii* JA192	13.2	[10.5 - 16.5]	18.7	[16.5 - 21.1]	13.5	[11.2 - 16.3]	10.3
'Phaeobacter piscinae' (NZ_CP010656)	*Gemmobacter aquatilis* DSM 3857	13.5	[10.8 - 16.8]	18.7	[16.6 - 21.1]	13.8	[11.4 - 16.6]	4.71
'Marinovum algicola' (NZ_FWFM00000000)	*Cereibacter azotoformans* KA25	14.4	[11.6 - 17.8]	18.7	[16.5 - 21.1]	14.6	[12.1 - 17.4]	3.34
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus thiocyanatus* ATCC 700171	13.0	[10.3 - 16.3]	18.7	[16.6 - 21.1]	13.3	[11.0 - 16.1]	8.39
'Epibacterium mobile' (NZ_LNXJ00000000)	*Cereibacter sphaeroides* 2.4.1	13.1	[10.4 - 16.4]	18.7	[16.6 - 21.1]	13.5	[11.1 - 16.2]	10.04
'Epibacterium mobile' (NZ_LNXJ00000000)	*Rhodobacter megalophilus* DSM 18937	13.1	[10.4 - 16.4]	18.7	[16.5 - 21.1]	13.4	[11.1 - 16.2]	10.03
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus zhejiangensis* J6	14.4	[11.5 - 17.7]	18.7	[16.6 - 21.1]	14.5	[12.1 - 17.4]	0.55
'Marinovum algicola' (NZ_FWFM00000000)	*Rhodobacter megalophilus* DSM 18937	14.3	[11.4 - 17.6]	18.7	[16.6 - 21.1]	14.4	[12.0 - 17.3]	3.74
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus subflavus* GY0581	12.9	[10.2 - 16.2]	18.7	[16.5 - 21.1]	13.2	[10.9 - 16.0]	6.83
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus thiocyanatus* ATCC 700171	13.0	[10.3 - 16.3]	18.7	[16.6 - 21.1]	13.3	[11.0 - 16.1]	8.39
'Rhodobacter sphaeroides' (NZ_CP033434)	*Tritonibacter scottomollicae* DSM 25328	13.4	[10.6 - 16.7]	18.7	[16.6 - 21.1]	13.7	[11.3 - 16.5]	8.23
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Ruegeria meonggei* CECT 8411	12.8	[10.1 - 16.1]	18.7	[16.6 - 21.1]	13.2	[10.9 - 16.0]	11.47
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	13.1	[10.4 - 16.4]	18.7	[16.6 - 21.1]	13.5	[11.1 - 16.2]	10.02

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Epibacterium mobile' (NZ_LNWN00000000)	*Rhodobacter megalophilus* DSM 18937	13.1	[10.4 - 16.4]	18.7	[16.6 - 21.1]	13.4	[11.1 - 16.2]	9.99
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Tritonibacter scottomollicae* DSM 25328	13.3	[10.5 - 16.6]	18.7	[16.6 - 21.1]	13.6	[11.2 - 16.4]	7.88
'Rhodobacter sphaeroides' (NZ_CP033434)	*Ruegeria pelagia* NBRC102038	13.1	[10.4 - 16.4]	18.7	[16.6 - 21.1]	13.5	[11.1 - 16.2]	10.14
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Leisingera methylohalidivorans* DSM 14336	13.6	[10.9 - 17.0]	18.7	[16.5 - 21.1]	13.9	[11.5 - 16.7]	6.74
'Marinovum algicola' (NZ_FWFM00000000)	*Paracoccus lutimaris* CECT 8525	14.0	[11.2 - 17.3]	18.7	[16.5 - 21.1]	14.2	[11.8 - 17.0]	0.14
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Epibacterium mobile' (NZ_LNWN00000000)**	13.2	[10.4 - 16.5]	18.6	[16.4 - 21.0]	13.5	[11.1 - 16.3]	10.22
'Paracoccus yeei' (NZ_CP024422)	*Tritonibacter scottomollicae* DSM 25328	13.4	[10.7 - 16.7]	18.6	[16.4 - 21.0]	13.7	[11.3 - 16.5]	6.44
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus contaminans* LMG 29738	12.9	[10.2 - 16.2]	18.6	[16.4 - 21.0]	13.3	[10.9 - 16.0]	9.96
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Tritonibacter scottomollicae* DSM 25328	13.3	[10.6 - 16.6]	18.6	[16.4 - 21.0]	13.6	[11.2 - 16.4]	8.12
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Tabrizicola sediminis* DRYC-M-16	14.3	[11.4 - 17.6]	18.6	[16.4 - 20.9]	14.4	[12.0 - 17.3]	6.07
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Thalassobius mediterraneus* CECT 5383	12.9	[10.2 - 16.2]	18.6	[16.4 - 21.0]	13.2	[10.9 - 16.0]	10.37
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Thalassobius mediterraneus* DSM 16398	12.9	[10.2 - 16.2]	18.6	[16.5 - 21.0]	13.2	[10.9 - 16.0]	10.27
'Epibacterium mobile' (NZ_LNXJ00000000)	*Cereibacter ovatus* JA234	13.2	[10.5 - 16.5]	18.6	[16.5 - 21.0]	13.5	[11.2 - 16.3]	7.78
'Phaeobacter inhibens' (NZ_CP010735)	*Paracoccus denitrificans* DSM 413	13.0	[10.3 - 16.3]	18.6	[16.5 - 21.0]	13.4	[11.0 - 16.1]	7.02
'Phaeobacter inhibens' (NZ_CP010623)	*Tabrizicola sediminis* DRYC-M-16	13.2	[10.4 - 16.5]	18.6	[16.5 - 21.0]	13.5	[11.1 - 16.3]	2.99
'Phaeobacter piscinae' (NZ_CP010767)	*Tabrizicola sediminis* DRYC-M-16	13.3	[10.5 - 16.6]	18.6	[16.5 - 21.0]	13.6	[11.2 - 16.3]	2.64
'Epibacterium mobile' (NZ_LNWF00000000)	*Cereibacter ovatus* JA234	13.2	[10.5 - 16.5]	18.6	[16.5 - 21.0]	13.5	[11.2 - 16.3]	7.75
'Marinovum algicola' (NZ_FWFM00000000)	*Cereibacter ovatus* JA234	14.3	[11.5 - 17.7]	18.6	[16.5 - 21.0]	14.5	[12.0 - 17.3]	1.5
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Ruegeria meteori* CECT 4293	12.9	[10.2 - 16.2]	18.6	[16.5 - 21.0]	13.2	[10.9 - 16.0]	12.59
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Tritonibacter mobilis* DSM 23403	13.1	[10.4 - 16.4]	18.6	[16.5 - 21.0]	13.5	[11.1 - 16.2]	10.01
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus contaminans* LMG 29738	12.9	[10.2 - 16.2]	18.6	[16.5 - 21.0]	13.3	[10.9 - 16.0]	9.92
'Phaeobacter inhibens' (NZ_CP010735)	*Phaeovulum veldkampii* DSM 11550	13.1	[10.4 - 16.5]	18.6	[16.5 - 21.0]	13.5	[11.1 - 16.3]	5.34

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	13.2	[10.4 - 16.5]	18.6	[16.4 - 20.9]	13.5	[11.1 - 16.3]	10.26
'Epibacterium mobile' (NZ_LNWN00000000)	*Cereibacter ovatus* JA234	13.2	[10.5 - 16.5]	18.6	[16.5 - 21.0]	13.5	[11.2 - 16.3]	7.75
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	**'Epibacterium mobile' (NZ_LNWF00000000)**	13.2	[10.4 - 16.5]	18.6	[16.4 - 21.0]	13.5	[11.1 - 16.3]	10.22
'Phaeobacter piscinae' (NZ_CP010767)	*Gemmobacter aquatilis* DSM 3857	13.6	[10.8 - 16.9]	18.6	[16.4 - 20.9]	13.9	[11.5 - 16.7]	4.75
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Tabrizicola sediminis* DRYC-M-16	14.4	[11.5 - 17.8]	18.6	[16.4 - 20.9]	14.5	[12.1 - 17.4]	5.77
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus contaminans* LMG 29738	12.9	[10.2 - 16.2]	18.6	[16.5 - 21.0]	13.3	[10.9 - 16.0]	9.92
'Phaeobacter piscinae' (NZ_CP010681)	*Cereibacter ovatus* JA234	13.4	[10.7 - 16.8]	18.6	[16.5 - 21.0]	13.7	[11.3 - 16.5]	6.25
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus denitrificans* DSM 413	12.9	[10.2 - 16.2]	18.5	[16.4 - 20.9]	13.3	[10.9 - 16.1]	8.05
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Ruegeria meteori* CECT 4293	13.0	[10.3 - 16.3]	18.5	[16.3 - 20.8]	13.3	[11.0 - 16.1]	12.53
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Ruegeria meonggei* CECT 8411	12.8	[10.1 - 16.1]	18.5	[16.4 - 20.9]	13.2	[10.8 - 15.9]	11.77
'Paracoccus yeei' (NZ_NIPZ00000000)	*Ruegeria atlantica* CECT 4292	12.9	[10.2 - 16.2]	18.5	[16.4 - 20.9]	13.3	[10.9 - 16.0]	11.05
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Ruegeria pelagia* NBRC102038	13.1	[10.4 - 16.4]	18.5	[16.4 - 20.9]	13.4	[11.1 - 16.2]	10.1
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus denitrificans* DSM 413	12.9	[10.2 - 16.2]	18.5	[16.4 - 20.9]	13.3	[10.9 - 16.1]	8.04
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Ruegeria atlantica* CECT 4292	12.9	[10.2 - 16.2]	18.5	[16.3 - 20.9]	13.2	[10.9 - 16.0]	12.69
'Paracoccus yeei' (NZ_NIPZ00000000)	*Tabrizicola sediminis* DRYC-M-16	14.0	[11.2 - 17.4]	18.5	[16.4 - 20.9]	14.2	[11.8 - 17.0]	4.43
'Epibacterium mobile' (NZ_LNXJ00000000)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	13.2	[10.4 - 16.5]	18.5	[16.3 - 20.8]	13.5	[11.1 - 16.3]	10.32
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Paracoccus subflavus* GY0581	13.2	[10.5 - 16.6]	18.5	[16.4 - 20.9]	13.6	[11.2 - 16.3]	4.1
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Ruegeria atlantica* CECT 4292	12.9	[10.2 - 16.2]	18.5	[16.4 - 20.9]	13.3	[10.9 - 16.1]	12.39
'Rhodobacter sphaeroides' (NZ_CP033434)	**'Epibacterium mobile' (NZ_LNXJ00000000)**	13.2	[10.5 - 16.5]	18.5	[16.3 - 20.8]	13.5	[11.1 - 16.3]	10.37
'Epibacterium mobile' (NZ_LNWN00000000)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	13.2	[10.4 - 16.5]	18.5	[16.3 - 20.8]	13.5	[11.1 - 16.3]	10.28
'Rhodobacter sphaeroides' (NZ_CP033434)	**'Epibacterium mobile' (NZ_LNWF00000000)**	13.2	[10.5 - 16.5]	18.5	[16.3 - 20.9]	13.5	[11.2 - 16.3]	10.33
'Marinovum algicola' (NZ_FWFM00000000)	*Phaeovulum veldkampii* DSM 11550	14.0	[11.2 - 17.4]	18.5	[16.4 - 20.9]	14.2	[11.8 - 17.0]	0.11

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides' (NZ_CP033434)	**'Epibacterium mobile' (NZ_LNWN00000000)**	13.2	[10.5 - 16.5]	18.5	[16.3 - 20.9]	13.5	[11.2 - 16.3]	10.33
'Epibacterium mobile' (NZ_LNWF00000000)	**'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)**	13.2	[10.4 - 16.5]	18.5	[16.3 - 20.8]	13.5	[11.1 - 16.3]	10.28
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus denitrificans* DSM 413	12.9	[10.2 - 16.2]	18.5	[16.4 - 20.9]	13.3	[10.9 - 16.1]	8.08
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Tabrizicola sediminis* DRYC-M-16	14.6	[11.7 - 18.0]	18.4	[16.2 - 20.8]	14.7	[12.3 - 17.6]	6.01
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Tabrizicola sediminis* DRYC-M-16	13.4	[10.7 - 16.7]	18.4	[16.3 - 20.8]	13.7	[11.3 - 16.5]	1.48
'Phaeobacter piscinae' (NZ_CP010656)	*Tabrizicola sediminis* DRYC-M-16	13.3	[10.6 - 16.6]	18.4	[16.2 - 20.7]	13.6	[11.2 - 16.4]	2.6
'Paracoccus yeei' (NZ_NIPZ00000000)	*Ruegeria denitrificans* CECT 5091	13.0	[10.3 - 16.3]	18.4	[16.3 - 20.8]	13.4	[11.0 - 16.1]	10.69
'Phaeobacter piscinae' (NZ_CP010656)	*Paracoccus alcaliphilus* DSM 8512	13.0	[10.3 - 16.3]	18.4	[16.2 - 20.7]	13.3	[11.0 - 16.1]	3.91
'Phaeobacter inhibens' (NZ_CP010735)	*Tabrizicola sediminis* DRYC-M-16	13.1	[10.4 - 16.4]	18.4	[16.2 - 20.8]	13.5	[11.1 - 16.2]	3.19
'Paracoccus yeei' (NZ_NIPZ00000000)	*Ruegeria meonggei* CECT 8411	12.9	[10.2 - 16.2]	18.4	[16.2 - 20.7]	13.3	[10.9 - 16.1]	10.13
'Phaeobacter piscinae' (NZ_CP010656)	*Phaeovulum veldkampii* DSM 11550	13.3	[10.6 - 16.7]	18.4	[16.2 - 20.8]	13.6	[11.3 - 16.4]	4.75
'Epibacterium mobile' (NZ_LNWN00000000)	*Phaeovulum veldkampii* DSM 11550	13.1	[10.3 - 16.4]	18.4	[16.2 - 20.8]	13.4	[11.0 - 16.2]	6.36
'Epibacterium mobile' (NZ_LNXJ00000000)	*Phaeovulum veldkampii* DSM 11550	13.1	[10.3 - 16.4]	18.4	[16.2 - 20.7]	13.4	[11.0 - 16.2]	6.4
'Rhodobacter sphaeroides' (NZ_CP033434)	*Thalassobius mediterraneus* CECT 5383	12.9	[10.2 - 16.2]	18.4	[16.3 - 20.8]	13.3	[10.9 - 16.0]	10.41
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Tritonibacter mobilis* DSM 23403	13.1	[10.4 - 16.4]	18.4	[16.3 - 20.8]	13.5	[11.1 - 16.2]	10.07
'Epibacterium mobile' (NZ_LNWF00000000)	*Phaeovulum veldkampii* DSM 11550	13.1	[10.3 - 16.4]	18.4	[16.2 - 20.8]	13.4	[11.0 - 16.2]	6.36
'Rhodobacter sphaeroides' (NZ_CP033434)	*Tabrizicola sediminis* DRYC-M-16	14.6	[11.7 - 18.0]	18.4	[16.3 - 20.8]	14.7	[12.2 - 17.5]	6.12
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Ruegeria atlantica* CECT 4292	13.0	[10.3 - 16.3]	18.3	[16.1 - 20.6]	13.3	[11.0 - 16.1]	12.63
'Phaeobacter piscinae' (NZ_CP010681)	*Tabrizicola sediminis* DRYC-M-16	13.3	[10.6 - 16.6]	18.3	[16.2 - 20.7]	13.6	[11.2 - 16.4]	2.71
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Cereibacter ovatus* JA234	13.3	[10.6 - 16.6]	18.3	[16.2 - 20.7]	13.6	[11.2 - 16.4]	6.91
'Rhodobacter sphaeroides' (NZ_CP033434)	*Tritonibacter mobilis* DSM 23403	13.2	[10.4 - 16.5]	18.3	[16.2 - 20.7]	13.5	[11.1 - 16.3]	10.12
'Rhodobacter sphaeroides' (NZ_CP033434)	*Ruegeria meteori* CECT 4293	12.9	[10.2 - 16.2]	18.3	[16.2 - 20.7]	13.3	[10.9 - 16.0]	12.64
'Rhodobacter sphaeroides' (NZ_CP033434)	*Thalassobius mediterraneus* DSM 16398	12.9	[10.2 - 16.2]	18.3	[16.2 - 20.7]	13.3	[10.9 - 16.0]	10.38

Query	Subject	d_0	C.I. d_0	d_4	C.I. d_4	d_6	C.I. d_6	Diff. G+C Percent
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Tritonibacter scottomollicae* DSM 25328	13.3	[10.5 - 16.6]	18.3	[16.2 - 20.7]	13.6	[11.2 - 16.3]	8.18
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Thalassobius mediterraneus* DSM 16398	12.9	[10.2 - 16.1]	18.3	[16.2 - 20.7]	13.2	[10.9 - 16.0]	10.34
'Marinovum algicola' (NZ_FWFM00000000)	*Gemmobacter aquatilis* DSM 3857	14.5	[11.7 - 17.9]	18.2	[16.0 - 20.5]	14.7	[12.2 - 17.5]	0.07
'Phaeobacter piscinae' (NZ_CP010681)	*Phaeovulum veldkampii* DSM 11550	13.4	[10.6 - 16.7]	18.2	[16.1 - 20.6]	13.7	[11.3 - 16.5]	4.86
'Phaeobacter gallaeciensis' (NZ_CP015124)	*Phaeovulum veldkampii* DSM 11550	13.7	[10.9 - 17.0]	18.2	[16.1 - 20.6]	13.9	[11.5 - 16.7]	3.63
'Epibacterium mobile' (NZ_LNWN00000000)	*Paracoccus laeviglucosivorans* DSM 100094	13.0	[10.3 - 16.3]	18.2	[16.0 - 20.5]	13.3	[11.0 - 16.1]	4.32
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Ruegeria meonggei* CECT 8411	12.9	[10.2 - 16.1]	18.2	[16.0 - 20.5]	13.2	[10.9 - 16.0]	11.71
'Epibacterium mobile' (NZ_LNWF00000000)	*Paracoccus laeviglucosivorans* DSM 100094	13.0	[10.3 - 16.3]	18.2	[16.0 - 20.5]	13.3	[11.0 - 16.1]	4.33
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)	*Ruegeria denitrificans* CECT 5091	13.0	[10.3 - 16.3]	18.2	[16.1 - 20.6]	13.3	[11.0 - 16.1]	12.03
'Phaeobacter piscinae' (NZ_CP010767)	*Phaeovulum veldkampii* DSM 11550	13.5	[10.8 - 16.8]	18.2	[16.1 - 20.6]	13.8	[11.4 - 16.6]	4.79
'Epibacterium mobile' (NZ_LNXJ00000000)	*Paracoccus laeviglucosivorans* DSM 100094	13.0	[10.3 - 16.3]	18.1	[16.0 - 20.5]	13.3	[11.0 - 16.1]	4.36
'Phaeobacter gallaeciensis' (NZ_CP010784)	*Tabrizicola sediminis* DRYC-M-16	13.2	[10.5 - 16.5]	18.0	[15.9 - 20.4]	13.5	[11.2 - 16.3]	3.37
'Rhodobacter sphaeroides' (NZ_CP033434)	*Ruegeria meonggei* CECT 8411	12.9	[10.2 - 16.2]	18.0	[15.9 - 20.4]	13.2	[10.9 - 16.0]	11.81
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)	*Ruegeria denitrificans* CECT 5091	12.9	[10.2 - 16.2]	17.9	[15.8 - 20.3]	13.2	[10.9 - 16.0]	12.33
'Rhodobacter sphaeroides' (NZ_CP033434)	*Ruegeria atlantica* CECT 4292	12.9	[10.2 - 16.2]	17.9	[15.8 - 20.3]	13.3	[10.9 - 16.0]	12.74
'Rhodobacter sphaeroides 2.4.1' (NC_007493)	*Ruegeria denitrificans* CECT 5091	13.0	[10.3 - 16.3]	17.8	[15.6 - 20.1]	13.3	[11.0 - 16.1]	12.27
'Marinovum algicola' (NZ_FWFM00000000)	*Tabrizicola sediminis* DRYC-M-16	13.6	[10.9 - 17.0]	17.8	[15.7 - 20.2]	13.9	[11.5 - 16.7]	2.04
'Rhodobacter sphaeroides' (NZ_CP033434)	*Ruegeria denitrificans* CECT 5091	13.0	[10.3 - 16.3]	17.5	[15.4 - 19.8]	13.3	[11.0 - 16.1]	12.38
'Epibacterium mobile' (NZ_LNWF00000000)	*Tabrizicola sediminis* DRYC-M-16	13.1	[10.4 - 16.4]	17.3	[15.2 - 19.7]	13.5	[11.1 - 16.2]	4.21
'Epibacterium mobile' (NZ_LNWN00000000)	*Tabrizicola sediminis* DRYC-M-16	13.1	[10.4 - 16.4]	17.3	[15.2 - 19.7]	13.5	[11.1 - 16.2]	4.21
'Epibacterium mobile' (NZ_LNXJ00000000)	*Tabrizicola sediminis* DRYC-M-16	13.1	[10.4 - 16.4]	17.3	[15.2 - 19.6]	13.5	[11.1 - 16.2]	4.25

Table 4: Strains in your dataset

Joint dataset of automatically determined closest type strains (if this mode was chosen), manually selected type strains (if selected accordingly) and the provided user strains, if provided (marked in yellow).

Strain	Authority	Other deposits	Synonyms	Base pairs	Percent G+C	No. proteins	Goldstamp	Bioproject accession	Biosample accession	Assembly accession	IMG OID
Leisingera methylohalidivorans DSM 14336	Schaefer et al. 2002 emend. Hördt et al. 2020	ATCC BAA-92; MB2	*Leisingera methylohalidivorans*	4650965	62.3	4530	Gp0012643	PRJNA74371	SAMN02769646	GCA_000511355	2512564009
Paracoccus marinus NBRC 100637	Khan et al. 2008	CIP 108500; KKL-A5	*Paracoccus marinus*	3128040	69.4	2966		PRJNA553536	SAMN12237583	GCA_007018965	
Ruegeria pelagia NBRC102038	Lee et al. 2007	KCCM 42378; HTCC2662	*Ruegeria pelagia*; *Tritonibacter mobilis* subsp. *pelagius*	4843795	59.0	4436	Gp0323767	PRJNA224116	SAMN03339863	GCF_001681735	
Ruegeria atlantica CECT 4292	(Rüger and Höfle 1992) Uchino et al. 1999 emend. Hördt et al. 2020	1480; CIP 105975; ATCC 700000; DSM 5823; JCM 21234; IFO 15792; IFO (now NBRC) 15792; NBRC 15792; IAM 14463	*Agrobacterium atlanticum*; *Ruegeria atlantica*	4816136	56.4	4736	Gp0142918	PRJEB10690	SAMEA3528420	GCA_001458195	
Phaeobacter porticola P97	Breider et al. 2017	DSM 103148; LMG 29594	*Phaeobacter porticola*	4207221	58.6	3965	Gp0203608	PRJNA327072	SAMN05300637	GCA_001888185	
Tritonibacter horizontis O3.65	Klotz et al. 2018	DSM 101689; LMG 29740	*Epibacterium horizontis*; *Tritonibacter horizontis*	4851488	61.5	4579	Gp0316527	PRJNA305382	SAMN04324894	GCA_001518015	
Ruegeria arenilitoris CECT 8715	Park and Yoon 2013	KCTC 23960; CCUG 62412; G-M8	*Ruegeria arenilitoris*	3865167	61.3	3791	Gp0365744	PRJEB21021	SAMEA104102142	GCA_900185035	
Tabrizicola sediminis DRYC-M-16	Liu et al. 2019	CGMCC 1.13881; KCTC 72015	*Pseudotabrizicola sediminis*; *Tabrizicola sediminis*	4030475	63.0	3714	Gp0454617	PRJNA503327	SAMN10364616	GCA_004745575	

Strain	Authority	Other deposits	Synonyms	Base pairs	Percent G+C	No. proteins	Goldstamp	Bioproject accession	Biosample accession	Assembly accession	IMG OID
Phaeovulum vinaykumarii DSM 18714	(Srinivas et al. 2007) Suresh et al. 2020	CCUG 54311; JCM 14544; JA123	*Bieblia vinaykumarii*; *Phaeovulum vinaykumarii*; *Rhodobacter vinaykumarii*	3481 377	68.3	3261	Gp0131603	PRJEB18824	SAMN05421795	GCA_900156695	2681813513
Paracoccus thiocyanatus ATCC 700171	Katayama et al. 1996	CIP 106060; JCM 20756; IFO 14569; NBRC 14569; VKM B-2162; IAM 12816; THI 11	*Paracoccus thiocyanatus*	3524 403	67.2	3446	Gp0131622	PRJNA330509	SAMN05421641	GCA_900156255	2681812813
Rhodobacter megalophilus DSM 18937	Arunasri et al. 2008 emend. Hördt et al. 2020	KCTC 5602; JCM 14598; JA194	*Luteovulum sphaeroides* subsp. *megalophilum*; *Rhodobacter megalophilus*	4857 921	68.8	4633	Gp0131669	PRJNA329768	SAMN05421763	GCA_900188265	2681813553
Thalassobius mediterraneus DSM 16398	Arahal et al. 2005 emend. Hördt et al. 2020	CIP 108400; CCUG 49438; CECT 5383; DSM 16398; XSM19	*Thalassobius mediterraneus*; *Thalassovita mediterranea*	3405 551	58.7	3272	Gp0131666	PRJEB18818	SAMN05421685	GCA_900156595	2681813506
Paracoccus subflavus GY0581	Zhang et al. 2019	KCTC 42710; MCCC 1A10575	*Paracoccus subflavus*	3183 584	65.6	3108		PRJNA224116	SAMN10970023	GCF_004310345	
Paracoccus sigani DSM 26381	Liu et al. 2025	CCTCC AB 2012865; M26	*Paracoccus sigani*	4896 726	67.9	4675		PRJNA489780	SAMN09989089	GCA_003594835	
Paracoccus yeei ATCC BAA-599	Daneshvar et al. 2003 emend. Hördt et al. 2020	CCUG 46822; CDC G1212; G1212	*Paracoccus yeei*	4427 155	67.5	4216	Gp0018764	PRJNA234040	SAMN02744027	GCA_000622145	2558309104
Paracoccus zhejiangensis J6	Wu et al. 2026	CCTCC AB 2012031; KACC 16703	*Paracoccus zhejiangensis*	4637 247	65.6	4429	Gp0299611	PRJNA224116	SAMN08166682	GCF_002847445	

Strain	Authority	Other deposits	Synonyms	Base pairs	Percent G+C	No. proteins	Goldstamp	Bioproject accession	Biosample accession	Assembly accession	IMG OID
Ruegeria denitrificans CECT 5091	Arahal et al. 2018	5OM10; LMG 29896	*Ruegeria denitrificans*	4614074	56.7	4541	Gp0144616	PRJEB10702	SAMEA3542132	GCA_001458295	
Paracoccus lutimaris CECT 8525	Jung et al. 2014	KCTC 42007; HDM-25	*Paracoccus lutimaris*	4206068	65.2	3971	Gp0290063	PRJNA463294	SAMN09075496	GCA_003337565	
Paracoccus laeviglucosivorans DSM 100094	Nakamura 2015	43P; JCM 30587	*Paracoccus laeviglucosivorans*	4299345	63.1	4233	Gp0194255	PRJEB20674	SAMN06265221	GCA_900182695	2724679710
Paracoccus denitrificans DSM 413	(Beijerinck and Minkman 1910) Davis 1969 emend. Hördt et al. 2020	NCCB 22021; ATCC 17741; JCM 21484; NBRC 102528; LMD 22.21; LMG 4218	*Micrococcus denitrificans*; *Paracoccus denitrificans*	5190202	66.8	5096	Gp0108325	PRJNA298098	SAMN04244581	GCA_900100045	2597490357
Paracoccus contaminans LMG 29738	Kämpfer et al. 2016 emend. Hördt et al. 2020	CIP 111112; CCM 8701; RKI 16-01929; WPAn02	*Paracoccus contaminans*	3033494	68.7	2748	Gp0223222	PRJNA369557	SAMN06289119	GCA_002105555	
Ruegeria meonggei CECT 8411	Kim et al. 2014	KCTC 32450; MA-E2-3	*Ruegeria meonggei*	4543068	57.3	4471	Gp0323242	PRJEB19742	SAMEA102343918	GCA_900172215	
Tritonibacter scottomollicae DSM 25328	(Vandecandelaere et al. 2008) Hördt et al. 2020	CCUG 55858; LMG 24367	*Epibacterium scottomollicae*; *Ruegeria scottomollicae*; *Tritonibacter scottomollicae*	4677188	60.9	4414	Gp0207633	PRJNA402511	SAMN07621368	GCA_003003215	2728369517
Marinovum algicola DSM 10251	(Lafay et al. 1995) Martens et al. 2006 emend. Hördt et al. 2020	CIP 104267; ATCC 51440; JCM 21266; IFO 16653; NBRC 16653; FF3; IAM 14591	*Marinovum algicola*; *Roseobacter algicola*; *Ruegeria algicola*	5394816	65.0	5160	Gp0110623	PRJNA303351	SAMN04487940	GCA_900109145	2615840718

Strain	Authority	Other deposits	Synonyms	Base pairs	Percent G+C	No. proteins	Goldstamp	Bioproject accession	Biosample accession	Assembly accession	IMG OID
Paracoccus aminovorans DSM 8537	Urakami et al. 1990	CIP 106076; ATCC 49632; JCM 7685; IFO 16711; NBRC 16711; VKM B-2140; DM-82	*Paracoccus aminovorans*	3946 204	67.5	3770	Gp0112493	PRJNA303498	SAMN04488021	GCA_900113565	2615840720
Gemmobacter aquatilis DSM 3857	Rothe et al. 1988 emend. Hördt et al. 2020	ATCC 49971; IFAM 1031	*Gemmobacter aquatilis*	3961 148	65.1	3855	Gp0113033	PRJNA303623	SAMN04488103	GCA_900110025	2615840721
Cereibacter ovatus JA234	(Srinivas et al. 2008) Hördt et al. 2020	CCUG 55049; JCM 14779	*Cereibacter ovatus*; *Luteovulum ovatum*; *Rhodobacter ovatus*	3805 778	66.5	3609	Gp0117000	PRJEB22316	SAMN05878503	GCA_900207575	
Tropicibacter naphthalenivorans DSM 19561	Harwati et al. 2009 emend. Hördt et al. 2020	JCM 14838; C02	*Tropicibacter naphthalenivorans*	4449 440	63.2	4199	Gp0113023	PRJNA303565	SAMN04488093	GCA_900176475	2622736506
Paracoccus alcaliphilus DSM 8512	Urakami et al. 1989 emend. Hördt et al. 2020	CIP 106073; ATCC 51199; JCM 7364; IFO 16719; NBRC 16719; TK 1015; Urakami 0-100	*Paracoccus alcaliphilus*	4610 036	64.3	4580	Gp0116932	PRJNA303795	SAMN04489859	GCA_900110285	2636415977
Leisingera caerulea DSM 24564	(Vandecandelaere et al. 2009) Breider et al. 2014	CCUG 55859; LMG 24369	*Leisingera caerulea*; *Phaeobacter caeruleus*	5343 216	63.3	5227	Gp0012640	PRJNA77971	SAMN02440718	GCA_000473325	2512047087
Leisingera daeponensis DSM 23529	(Yoon et al. 2007) Breider et al. 2014	KCTC 12794; JCM 13606; TF-218	*Leisingera daeponensis*; *Phaeobacter daeponensis*	4641 749	64.3	4353	Gp0012641	PRJNA86087	SAMN02440716	GCA_000473145	2521172619
Phaeobacter inhibens DSM 16374	Martens et al. 2006 emend. Dogs et al. 2013	LMG 22475; T5	*Phaeobacter inhibens*	4130 690	60.0	3923	Gp0012642	PRJNA88111	SAMN02440777	GCA_000473105	2574179718

Strain	Authority	Other deposits	Synonyms	Base pairs	Percent G+C	No. proteins	Goldstamp	Bioproject accession	Biosample accession	Assembly accession	IMG OID
Pseudophaeobacter arcticus DSM 23566	(Zhang et al. 2008) Breider et al. 2014	20188; CGMCC 1.6500; JCM 14644	*Phaeobacter arcticus*; *Pseudophaeobacter arcticus*	5048994	59.3	4828	Gp0012238	PRJNA81437	SAMN02441118	GCA_000473205	2521172622
Leisingera aquimarina DSM 24565	Vandecandelaere et al. 2008	CCUG 55860; LMG 24366	*Leisingera aquimarina*	5343518	61.4	5125	Gp0012159	PRJNA81653	SAMN02441453	GCA_000473165	2521172617
Phaeobacter gallaeciensis DSM 26640	(Ruiz-Ponte et al. 1998) Martens et al. 2006 emend. Hördt et al. 2020	CIP 105210; ATCC 700781; JCM 21319; IFO 16654; NBRC 16654; BS107	*Phaeobacter gallaeciensis*; *Roseobacter gallaeciensis*	4540155	59.4	4359	Gp0070879	PRJNA227502	SAMN02641497	GCA_000511385	2558309061
Paracoccus aminophilus JCM 7686	Urakami et al. 1990	CIP 106077; ATCC 49673; DSM 8538; IFO 16710; NBRC 16710; VKM B-2141; DM-15	*Paracoccus aminophilus*	4917798	63.4	4571	Gp0044838	PRJNA212980	SAMN02604253	GCA_000444995	2547132467
Ruegeria lacuscaerulensis ITI-1157	(Petursdottir and Kristjansson 1999) Yi et al. 2007 emend. Hördt et al. 2020	KCTC 2953; DSM 11314; ITI-1157	*Ruegeria lacuscaerulensis*; *Silicibacter lacuscaerulensis*	3515866	63.0	3611	Gp0003696	PRJNA37681	SAMN02436218	GCA_000161775	647533208
Cereibacter sphaeroides 2.4.1	(van Niel 1944) Hördt et al. 2020	CIP 60.6; ATCC 17023; CCUG 31486; CECT 300; DSM 158; JCM 6121; IFO 12203; NBRC 12203; ATH 2.4.1.; LMG 2827; Van Niel's ATH 2.4.1	*Cereibacter sphaeroides*; *Luteovulum sphaeroides*; *Luteovulum sphaeroides* subsp. *sphaeroides*; *Rhodobacter sphaeroides*; *Rhodopseudomonas sphaeroides*	4602877	68.8	4280	Gp0000309	PRJNA56	SAMN02598537	GCA_000012905	640069327

Strain	Authority	Other deposits	Synonyms	Base pairs	Percent G+C	No. proteins	Goldstamp	Bioproject accession	Biosample accession	Assembly accession	IMG OID
Leisingera aquaemixtae CECT 8399	(Park et al. 2014) Breider et al. 2014	KCTC 32538; SSK6-1	*Leisingera aquaemixtae*; *Phaeobacter aquaemixtae*	4614 050	64.4	4313	Gp0145660	PRJEB10724	SAMEA3539551	GCA_001458395	
Haematobacter massiliensis CCUG 47968	(Greub and Raoult 2006) Helsel et al. 2007 emend. Hördt et al. 2020	CIP 107725; Framboise	*Haematobacter massiliensis*; *Rhodobacter massiliensis*	4128 680	64.6	3806	Gp0026445	PRJNA241047	SAMN02687979	GCA_000740795	
Thalassobius mediterraneus CECT 5383	Arahal et al. 2005 emend. Hördt et al. 2020	CIP 108400; CCUG 49438; CECT 5383; DSM 16398; XSM19	*Thalassobius mediterraneus*; *Thalassovita mediterranea*	3431 655	58.7	3276	Gp0143353	PRJEB10713	SAMEA3532031	GCA_001458435	
Haematobacter missouriensis CCUG 52307	Helsel et al. 2007 emend. Hördt et al. 2020	CIP 109176; H 1892	*Haematobacter missouriensis*	3958 808	64.3	3612	Gp0026470	PRJNA239788	SAMN02670966	GCA_000740775	
Ruegeria meteori CECT 4293	(Rüger and Höfle 1992) Hördt et al. 2020	1513; ATCC 700001; DSM 5824; IAM 14464	*Agrobacterium meteori*; *Ruegeria meteori*	4825 928	56.5	4701	Gp0144492	PRJEB10679	SAMEA3522225	GCA_001458095	
Cereibacter johrii JA192	(Girija et al. 2010) Hördt et al. 2020	DSM 18678; JCM 14543; MTCC 8172	*Cereibacter johrii*; *Luteovulum johrii*; *Rhodobacter johrii*	4512 111	69.1	4035		PRJNA323784	SAMN05188776	GCA_001720585	
Tritonibacter mobilis DSM 23403	(Muramatsu et al. 2007) Hördt et al. 2020	CIP 109181; NBRC 101030; MBIC 1146	*Epibacterium mobile*; *Ruegeria mobilis*; *Tritonibacter mobilis*; *Tritonibacter mobilis* subsp. *mobilis*	4713 652	59.0	4497	Gp0148742	PRJNA331507	SAMN05444385	GCA_900106635	2693429875
Paracoccus chinensis CGMCC 1.7655	Li et al. 2009	NBRC 104937; KS-11	*Paracoccus chinensis*	3632 870	68.1	3545	Gp0112583	PRJEB16111	SAMN04487971	GCA_900102885	
Ruegeria lacuscaerulensis DSM 11314	(Petursdottir and Kristjansson 1999) Yi et al. 2007 emend. Hördt et al. 2020	KCTC 2953; DSM 11314; ITI-1157	*Ruegeria lacuscaerulensis*; *Silicibacter lacuscaerulensis*	3503 407	63.0	3507	Gp0148802	PRJNA335201	SAMN05444404	GCA_900141625	2698536695

Strain	Authority	Other deposits	Synonyms	Base pairs	Percent G+C	No. proteins	Goldstamp	Bioproject accession	Biosample accession	Assembly accession	IMG OID
Phaeovulum veldkampii DSM 11550	(Hansen and Imhoff 1985) Suresh et al. 2020	CIP 103912; ATCC 35703; IFO 16458; NBRC 16458; BN 714; Hansen 51	*Bieblia veldkampii*; *Phaeovulum veldkampii*; *Rhodobacter veldkampii*	3264455	65.1	3116		PRJNA434051	SAMN08535030	GCA_003034995	
Cereibacter azotoformans KA25	(Hiraishi et al. 1997) Hördt et al. 2020	CIP 105439; JCM 9340; IFO 16436; NBRC 16436	*Cereibacter azotoformans*; *Luteovulum azotoformans*; *Rhodobacter azotoformans*	4414402	68.4	4314	Gp0216249	PRJNA443267	SAMN08779780	GCA_003050905	
Salipiger bermudensis HTCC2601	(Cho and Giovannoni 2006) Wirth and Whitman 2018 emend. Hördt et al. 2020	KCTC 12554; DSM 26914; JCM 13377	*Pelagibaca bermudensis*; *Salipiger bermudensis*	5425920	66.4	5452	Gp0001836	PRJNA13574	SAMN02436105	GCA_000153725	648276709
'Rhodobacter sphaeroides 2.4.1' (NC_007493)				3188524	69.0	3041					
'Paracoccus aminophilus JCM 7686' (NC_022041)				3613807	63.4	3496					
'Rhodobacter sphaeroides 2.4.1' (NZ_AKVW00000000)				4628173	68.8	4372					
'Phaeobacter inhibens' (NZ_CP010623)				3688987	60.0	3544					
'Phaeobacter piscinae' (NZ_CP010656)				3597778	60.4	3405					
'Phaeobacter piscinae' (NZ_CP010681)				3607181	60.3	3379					
'Phaeobacter inhibens' (NZ_CP010735)				3814079	59.8	3653					

Strain	Authority	Other deposits	Synonyms	Base pairs	Percent G+C	No. proteins	Goldstamp	Bioproject accession	Biosample accession	Assembly accession	IMG OID
'Phaeobacter piscinae' (NZ_CP010767)				3617848	60.4	3404					
'Phaeobacter gallaeciensis' (NZ_CP010784)				3775738	59.6	3620					
'Phaeobacter gallaeciensis' (NZ_CP015124)				4061725	61.5	3793					
'Paracoccus yeei' (NZ_CP024422)				3588087	67.3	3498					
'Paracoccus yeei' (NZ_CP031078)				3421679	67.6	3355					
'Rhodobacter sphaeroides' (NZ_CP033434)				3264454	69.1	3166					
'Marinovum algicola' (NZ_FWFM00000000)				5304586	65.0	5115					
'Epibacterium mobile' (NZ_LNWF00000000)				4794126	58.8	4623					
'Epibacterium mobile' (NZ_LNWN00000000)				4786262	58.8	4615					
'Epibacterium mobile' (NZ_LNXJ00000000)				4808993	58.7	4648					
'Paracoccus yeei' (NZ_NIPZ00000000)				4399776	67.4	4279					
'Rhodobacter sphaeroides f. sp. denitrificans' (NZ_QRBG01000000)				4792304	69.1	4566					

Methods, Results and References

The genome sequence data were uploaded to the Type (Strain) Genome Server (TYGS), a free bioinformatics platform available under https://tygs.dsmz.de, for a whole genome-based taxonomic analysis [1]. The analysis also made use of recently introduced methodological updates and features [2,3]. Information on nomenclature, synonymy and associated taxonomic literature was provided by TYGS's sister database, the List of Prokaryotic names with Standing in Nomenclature (LPSN, available at https://lpsn.dsmz.de) [2,3]. The results were provided by the TYGS on 2019-10-02. The TYGS analysis was subdivided into the following steps:

Determination of closely related type strains

Determination of closest type strain genomes was done in two complementary ways: First, all user genomes were compared against all type strain genomes available in the TYGS database via the MASH algorithm, a fast approximation of intergenomic relatedness [4], and, the ten type strains with the smallest MASH distances chosen per user genome. Second, an additional set of ten closely related type strains was determined via the 16S rDNA gene sequences. These were extracted from the user genomes using RNAmmer [5] and each sequence was subsequently BLASTed [6] against the 16S rDNA gene sequence of each of the currently 25464 type strains available in the TYGS database. This was used as a proxy to find the best 50 matching type strains (according to the bitscore) for each user genome and to subsequently calculate precise distances using the Genome BLAST Distance Phylogeny approach (GBDP) under the algorithm 'coverage' and distance formula d_5 [7]. These distances were finally used to determine the 10 closest type strain genomes for each of the user genomes.

Pairwise comparison of genome sequences

For the phylogenomic inference, all pairwise comparisons among the set of genomes were conducted using GBDP and accurate intergenomic distances inferred under the algorithm 'trimming' and distance formula d_5 [7]. 100 distance replicates were calculated each. Digital DDH values and confidence intervals were calculated using the recommended settings of the GGDC 4.0 [2,7].

Phylogenetic inference

The resulting intergenomic distances were used to infer a balanced minimum evolution tree with branch support via FASTME 2.1.6.1 including SPR postprocessing [8]. Branch support was inferred from 100 pseudo-bootstrap replicates each. The trees were rooted at the midpoint [9] and visualized with PhyD3 [10].

Type-based species and subspecies clustering

The type-based species clustering using a 70% dDDH radius around each of the 50 type strains was done as previously described [1]. The resulting groups are shown in Table 1 and 4. Subspecies clustering was done using a 79% dDDH threshold as previously introduced [11].

Results

Type-based species and subspecies clustering

The resulting species and subspecies clusters are listed in Table 4, whereas the taxonomic identification of the query strains is found in Table 1. Briefly, the clustering yielded 49 species clusters and the provided query strains were assigned to 11 of these. Moreover, user strains were located in 12 of 52 subspecies clusters.

Figure caption SSU tree

Figure 1. Tree inferred with FastME 2.1.6.1 [8] from GBDP distances calculated from 16S rDNA gene sequences. The branch lengths are scaled in terms of GBDP distance formula d_5. The numbers above branches are GBDP pseudo-bootstrap support values > 60 % from 100 replications, with an average branch support of 72.0 %. The tree was rooted at the midpoint [9].

Figure caption genome tree

Figure 2. Tree inferred with FastME 2.1.6.1 [8] from GBDP distances calculated from genome sequences. The branch lengths are scaled in terms of GBDP distance formula d_5. The numbers above branches are GBDP pseudo-bootstrap support values > 60 % from 100 replications, with an average branch support of 80.5 %. The tree was rooted at the midpoint [9].

References

[1] Meier-Kolthoff JP, Göker M. TYGS is an automated high-throughput platform for state-of-the-art genome-based taxonomy. Nat. Commun. 2019;10: 2182. DOI: 10.1038/s41467-019-10210-3

[2] Meier-Kolthoff JP, Sardà Carbasse J, Peinado-Olarte RL, Göker M. TYGS and LPSN: a database tandem for fast and reliable genome-based classification and nomenclature of prokaryotes. Nucleic Acid Res. 2022;50: D801–D807. DOI: 10.1093/nar/gkab902

[3] Freese HM, Meier-Kolthoff JP, Sardà Carbasse J, Afolayan AO, Göker M. TYGS and LPSN in 2025: a Global Core Biodata Resource for genome-based classification and nomenclature of prokaryotes within DSMZ Digital Diversity. Nucleic Acid Res. 2025;54: D884–D891. DOI: 10.1093/nar/gkaf1110

[4] Ondov BD, Treangen TJ, Melsted P, et al. Mash: Fast genome and metagenome distance estimation using MinHash. Genome Biol 2016;17: 1–14. DOI: 10.1186/s13059-016-0997-x

[5] Lagesen K, Hallin P. RNAmmer: consistent and rapid annotation of ribosomal RNA genes. Nucleic Acids Res. Oxford Univ Press; 2007;35: 3100–3108. DOI: 10.1093/nar/gkm160

[6] Camacho C, Coulouris G, Avagyan V, Ma N, Papadopoulos J, Bealer K, et al. BLAST+: architecture and applications. BMC Bioinformatics. 2009;10: 421. DOI: 10.1186/1471-2105-10-421

[7] Meier-Kolthoff JP, Auch AF, Klenk H-P, Göker M. Genome sequence-based species delimitation with confidence intervals and improved distance functions. BMC Bioinformatics. 2013;14: 60. DOI: 10.1186/1471-2105-14-60

[8] Lefort V, Desper R, Gascuel O. FastME 2.0: A comprehensive, accurate, and fast distance-based phylogeny inference program. Mol Biol Evol. 2015;32: 2798–2800. DOI: 10.1093/molbev/msv150

[9] Farris JS. Estimating phylogenetic trees from distance matrices. Am Nat. 1972;106: 645–667.

[10] Kreft L, Botzki A, Coppens F, Vandepoele K, Van Bel M. PhyD3: A phylogenetic tree viewer with extended phyloXML support for functional genomics data visualization. Bioinformatics. 2017;33: 2946–2947. DOI: 10.1093/bioinformatics/btx324

[11] Meier-Kolthoff JP, Hahnke RL, Petersen J, Scheuner C, Michael V, Fiebig A, et al. Complete genome sequence of DSM 30083^{T}, the type strain (U5/41^{T}) of *Escherichia coli*, and a proposal for delineating subspecies in microbial taxonomy. Stand Genomic Sci. 2014;9: 2. DOI: 10.1186/1944-3277-9-2