

Table S1 Comparison of repeat structure in symbionts and free-living bacteria

Strain	Genome length (bp)	Repeat length (bp)	Repeat length (%)	Life-style*	No. Repeat loci	Repeat loci N50	Longest repeat locus (bp)
<i>Spiroplasma citri</i> R8-A2	1640878	666844	40.64	F	212	6597	40155
<i>Sodalis glossinidius</i> morsitans	4292502	580517	13.52	F	400	2814	14279
“ <i>Candidatus</i> Didemnitutus mandela”	2684137	513494	19.13	T	5		108264
“ <i>Candidatus</i> Hamiltonella defensa 5AT”	2169363	403291	18.59	T	277	2743	21540
<i>Wolbachia</i> wCle	1250060	222137	17.77	T	272	889	6484
<i>Wolbachia</i> wMel	1267782	182530	14.40	F	228	1261	4933
“ <i>Candidatus</i> Tremblaya princeps PCIT”	138927	11893	8.56	O	6	5701	5701
<i>Spiroplasma chrysopicola</i> DF-1	1123322	88023	7.84	F	85	1321	4997
<i>Streptomyces coelicolor</i> A3_2	9054847	530189	5.86	N	429	2530	76766
<i>Sorangium cellulosum</i> So ce 56	13033779	741512	5.69	N	896	1493	24734
<i>Pseudomonas fluorescens</i> F113	6845832	285418	4.17	N	728	1247	5824
<i>Spiroplasma sabaudiense</i> Ar-1343	1075953	41544	3.86	F	48	1928	5064
<i>Escherichia coli</i> K-12 MG1655	4641652	171560	3.70	N	241	1335	5725
<i>Spiroplasma taiwanense</i>	1086278	27895	2.57	F	51	895	1782
<i>Spiroplasma apis</i> B31	1160554	26192	2.26	F	26	1363	2263
<i>Spiroplasma syrphidicola</i> EA-1	1107344	23847	2.15	F	46	777	1428
<i>Spiroplasma culicicola</i> AES-1	1175131	24914	2.12	F	50	849	2176
<i>Bacillus subtilis</i> 168	4215606	88834	2.11	N	76	5154	10834
<i>Opitutus</i> sp. GAS368	4150883	79732	1.92	N	242	417	1423
<i>Spiroplasma eriocheiris</i> DSM21848	1365714	24693	1.81	F	34	1130	1797
<i>Serratia marcescens</i> Db11	5113802	85838	1.68	N	108	2026	5722
“ <i>Candidatus</i> Moranella endobia PCIT”	538294	8684	1.61	O	8	4022	4022
<i>Spiroplasma atrichopogonis</i> GNAT3597	1160484	17128	1.48	F	37	1222	2675
<i>Pantoea vagans</i> C9-1	4888338	71463	1.46	N	137	5269	5727
“ <i>Candidatus</i> Pantoea carbekii”	1151074	15203	1.32	T	4	5114	5116
<i>Sodalis praecaptivus</i> HS1	5159425	63922	1.24	N	96	3901	6446

<i>Spiroplasma diminutum</i> CUAS-1	945296	11215	1.19	F	26	777	967
<i>Buchnera aphidicola</i> APS	655725	7354	1.12	O	2	7257	7257
" <i>Candidatus Nasuia deltocephalinicola</i> NAS-ALF"	112091	370	0.33	O	2	296	296
<i>Serratia symbiotica</i> SCc	1762765	3078	0.17	T	4	1449	1468
" <i>Candidatus Sulcia muelleri</i> PSPU"	285352	697	0.24	O	3	233	240
" <i>Candidatus Hodgkinia cicadicola</i> Dsem"	143795	130	0.09	O	1	130	130
<i>Arsenophonus</i> sp. CB	836724	78	0.01	T	1	78	78
" <i>Candidatus Endolissoclinum faulkneri</i> L2"	1481191	77	0.01	O	1	77	77

*Abbreviations: N, non-host-restricted; F, facultative; T, transitional; O, obligate