

TABLE S1 Pairwise comparison of the number of nucleotide differences (lower diagonal) and percent sequence similarity (upper diagonal) between different members of the genus *Rickettsiella*

Taxon	Accession no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 <i>'R. costelytrae'</i> ¹	JF490030	-	99.8	99.9	99.8	99.8	99.5	99.7	99.4	99.4	97.6	96.5	97.9	97.4	97.5	94.4	95.2	95.1	97.1	94.5	97.1
2 <i>'R. tipulae'</i> ¹	EU180598	3	-	99.8	99.7	99.7	99.4	99.6	99.1	99.2	97.5	96.4	97.9	97.2	97.3	94.2	95.0	95.0	97.1	94.5	97.1
3 <i>'R. melolonthae'</i> ¹	EF408231	1	2	-	99.8	99.8	99.6	99.8	99.2	99.3	97.5	96.5	98.0	97.3	97.5	94.2	95.1	95.1	97.1	94.5	97.1
4 <i>'R. agriotidis'</i> ¹	HQ640943	3	4	2	-	99.7	99.4	99.6	99.1	99.1	97.4	96.3	97.9	97.3	97.4	94.1	94.9	95.2	97.1	94.4	97.1
5 ex <i>Myrmeleon bore</i> ¹	AB291637	3	4	2	4	-	99.6	99.8	98.9	99.1	97.5	96.3	98.0	97.2	97.3	94.2	94.9	94.9	97.0	94.4	97.0
6 ex <i>Poecilus chalcities</i> ¹	EF608533	6	7	5	7	5	-	99.5	98.9	98.9	97.0	96.0	97.6	96.9	97.0	94.0	94.8	94.8	96.7	94.2	98.6
7 ex <i>Harpalus pennsylvanicus</i> ³	GU815103	4	5	3	5	2	5	-	99.0	99.0	97.2	96.1	97.6	97.1	97.2	94.1	94.9	94.7	96.8	94.2	98.6
8 ex <i>Eisenia fetida</i> ¹	FJ542982	8	11	9	14	11	14	12	-	99.7	97.3	96.5	97.6	97.3	97.3	94.1	95.2	95.1	97.1	94.2	97.0
9 ex <i>Folsomia candida</i> ⁴	AF327558	8	10	9	11	11	14	12	4	-	97.6	96.4	97.6	97.3	97.3	94.3	95.1	94.9	97.1	94.1	96.9
10 <i>R. grylli</i> ex <i>Gryllus</i> ¹	U97545	30	32	32	33	32	37	35	33	30	-	97.2	96.3	96.4	97.3	94.1	94.8	95.1	96.2	93.8	96.0
11 <i>'R. ixodidis'</i> ²	AF383621	44	46	45	47	47	51	49	44	36	35	-	95.1	96.2	96.4	93.5	94.2	94.3	95.2	93.3	95.5
12 <i>'R. angustus'</i> ¹	HF912419	26	27	25	27	25	30	30	30	30	46	62	-	96.2	96.2	93.9	94.1	93.4	96.3	93.5	96.3
13 <i>'R. kingi'</i> ¹	HF912421	33	35	34	34	35	39	37	34	34	39	47	49	-	98.9	93.8	94.1	94.4	94.9	96.1	96.7
14 <i>'R. sculptus'</i> ¹	HF912420	32	34	32	33	34	38	35	33	33	33	46	49	14	-	94.0	94.3	95.3	95.2	96.3	96.4
15 ex <i>Ceciotrioza sozanica</i> ⁶	AF286124	71	72	72	74	72	75	75	74	72	74	83	77	78	75	-	95.8	94.4	94.0	93.0	93.4
16 ex Oribatid mites ⁵	GU906700	61	62	63	62	64	64	65	65	61	62	65	74	75	72	53	-	95.0	94.9	94.2	94.6
17 ex <i>Acyrtosiphon pisum</i> ³	AB522704	62	63	62	62	64	66	66	62	65	62	73	76	72	62	71	63	-	95.4	93.6	94.4
18 ex <i>Asellus aquaticus</i> ⁷	AY447040	36	37	37	36	38	42	40	36	37	47	61	47	64	61	74	64	57	-	93.9	96.0
19 <i>Diplorickettsia massiliensis</i> ⁵	GQ857549	69	70	70	72	72	73	73	74	75	73	85	82	49	47	88	73	81	77	-	94.2
20 <i>R. grylli</i> ex <i>Armadillidium</i> ¹	AAQJ02000001	36	37	37	37	38	40	40	37	39	50	57	47	41	45	83	68	71	50	74	-

¹1255 bp, ²1269 bp, ³1256 bp, ⁴1253 bp, ⁵1260 bp, ⁶1259 bp and ⁷1257 bp

TABLE S2 Pairwise comparison of the number of nucleotide differences (lower diagonal) and percent sequence similarity (upper diagonal) of *rpsA* between different members of the genus *Rickettsiella*

Taxon	Accession no.	1	2	3	4	5	6	7	8	9
1 ' <i>R. costelytrae</i> ' ¹	JN695774	-	100	96.8	96.3	97.4	89.1	91.9	90.9	91.7
2 ' <i>R. pyronotae</i> ' ¹	JN695775	0	-	96.6	96.3	97.4	89.1	91.9	90.9	91.7
3 ' <i>R. tipulae</i> ' ¹	JF288930	29	29	-	97.3	98.9	88.9	92.3	91.3	91.8
4 ' <i>R. melolonthae</i> ' ¹	EF694043	33	33	24	-	98.0	88.2	91.4	90.6	91.5
5 ' <i>R. agriotidis</i> ' ¹	JN695773	23	23	10	18	-	79.0	92.5	91.4	92.1
6 ' <i>R. ixodidis</i> ' ¹	JQ070346	97	97	99	104	95	-	87.5	90.4	90.6
7 ' <i>R. angustus</i> ' ¹	HG792868	72	72	69	76	67	112	-	85.6	90.2
8 ' <i>R. kingi</i> ' ¹	HG792869	81	81	78	84	76	86	93	-	97.5
9 ' <i>R. sculptus</i> ' ¹	HG792870	74	74	73	76	71	84	88	22	-

¹894 bp

TABLE S3 Pairwise comparison of the number of amino acid differences (lower diagonal) and percent sequence similarity (upper diagonal) of *rpsA* between different members of the genus *Rickettsiella*

Taxon	Accession no.	1	2	3	4	5	6	7	8	9
1 ' <i>R. costelytrae</i> ' ¹	JN695774	-	100	99.7	99.7	100	97.0	98.0	96.6	98.0
2 ' <i>R. pyronotae</i> ' ¹	JN695775	0	-	99.7	99.7	100	97.0	98.0	96.6	98.0
3 ' <i>R. tipulae</i> ' ¹	JF288930	1	1	-	99.3	99.7	96.6	97.7	96.3	97.7
4 ' <i>R. melolonthae</i> ' ¹	EF694043	1	1	2	-	99.7	96.6	97.7	96.3	97.7
5 ' <i>R. agriotidis</i> ' ¹	JN695773	0	0	1	1	-	99.7	98.0	96.6	98.0
6 ' <i>R. ixodidis</i> ' ¹	JQ070346	9	9	10	10	9	-	95.0	94.6	95.6
7 ' <i>R. angustus</i> ' ¹	HG792868	6	6	7	7	6	15	-	95.3	96.6
8 ' <i>R. kingi</i> ' ¹	HG792869	10	10	11	11	10	16	14	-	98.0
9 ' <i>R. sculptus</i> ' ¹	HG792870	6	6	7	7	6	13	10	6	-

¹298 aa

TABLE S4 Pairwise comparison of the number of nucleotide differences (lower diagonal) and percent sequence similarity (upper diagonal) of *gidA* between different members of the genus *Rickettsiella*

Taxon	Accession no.	1	2	3	4	5	6	7	8	9
1 ' <i>R. costelytrae</i> ' ¹	JN565689	-	99.6	95.7	95.2	96.1	84.7	87.9	88.8	88.3
2 ' <i>R. pyronotae</i> ' ¹	JN565691	3	-	95.5	95.0	95.9	84.9	87.8	88.5	88.2
3 ' <i>R. tipulae</i> ' ¹	JF288927	34	35	-	96.8	97.6	84.4	87.8	88.1	88.3
4 ' <i>R. melolonthae</i> ' ²	EF694040	38	39	25	-	98.2	84.0	87.8	88.3	88.1
5 ' <i>R. agriotidis</i> ' ²	JN565687	21	29	19	14	-	84.4	88.2	88.3	88.1
6 ' <i>R. ixodidis</i> ' ¹	JQ070345	120	119	123	126	123	-	83.5	86.7	87.0
7 ' <i>R. angustus</i> ' ²	HG792871	95	96	96	96	93	130	-	86.7	86.3
8 ' <i>R. kingi</i> ' ²	HG792872	88	90	93	92	92	105	105	-	98.1
9 ' <i>R. sculptus</i> ' ²	HG792873	92	93	92	93	93	102	108	15	-

¹786 bp, ²787 bp

TABLE S5 Pairwise comparison of the number of amino acid differences (lower diagonal) and percent sequence similarity (upper diagonal) of *gidA* between different members of the genus *Rickettsiella*

Taxon	Accession no.	1	2	3	4	5	6	7	8	9
1 ' <i>R. costelytrae</i> ' ¹	JN565689	-	100	97.3	96.2	96.9	91.2	93.1	92.3	92.7
2 ' <i>R. pyronotae</i> ' ¹	JN565691	0	-	97.3	96.2	96.9	91.2	93.1	92.3	92.7
3 ' <i>R. tipulae</i> ' ¹	JF288927	7	7	-	97.3	98.1	90.4	92.7	93.5	93.9
4 ' <i>R. melolonthae</i> ' ¹	EF694040	10	10	7	-	97.7	89.7	92.7	92.7	93.1
5 ' <i>R. agriotidis</i> ' ¹	JN565687	8	8	5	6	-	89.7	92.7	92.7	93.1
6 ' <i>R. ixodidis</i> ' ¹	JQ070345	23	23	25	27	27	-	89.7	90.8	91.2
7 ' <i>R. angustus</i> ' ¹	HG792871	18	18	19	19	19	27	-	91.6	92.0
8 ' <i>R. kingi</i> ' ¹	HG792872	20	20	17	19	19	24	22	-	98.1
9 ' <i>R. sculptus</i> ' ¹	HG792873	19	19	16	18	18	23	20	5	-

¹262 aa

TABLE S6 Pairwise comparison of the number of nucleotide differences (lower diagonal) and percent sequence similarity (upper diagonal) of *sucB* between different members of the genus *Rickettsiella*

Taxon	Accession no.	1	2	3	4	5	6	7	8	9
1 ' <i>R. costelytrae</i> ' ¹	JN565690	-	100	93.6	93.7	74.7	78.1	78.5	78.1	78.2
2 ' <i>R. pyronotae</i> ' ¹	JN565692	0	-	93.6	93.7	74.7	78.1	78.5	78.1	78.2
3 ' <i>R. tipulae</i> ' ²	JF288931	57	57	-	94.5	97.2	74.6	77.9	77.8	76.5
4 ' <i>R. melolonthae</i> ' ²	EF694044	56	56	49	-	95.6	74.9	78.2	77.8	77.1
5 ' <i>R. agriotidis</i> ' ³	JN565688	49	49	25	39	-	74.8	79.3	78.1	77.8
6 ' <i>R. ixodidis</i> ' ⁴	JQ070347	234	234	315	232	234	-	78.9	82.0	82.0
7 ' <i>R. angustus</i> ' ⁵	HG792874	196	196	206	204	193	198	-	82.6	83.0
8 ' <i>R. kingi</i> ' ⁶	HG792875	203	203	206	206	203	168	162	-	96.0
9 ' <i>R. sculptus</i> ' ⁶	HG792876	194	194	218	213	206	168	158	37	-

¹855 bp, ²892 bp, ³891 bp, ⁴924 bp, ⁵931 bp, ⁶855 bp

TABLE S7 Pairwise comparison of the number of amino acid differences (lower diagonal) and percent sequence similarity (upper diagonal) of *sucB* between different members of the genus *Rickettsiella*

Taxon	Accession no.	1	2	3	4	5	6	7	8	9
1 ' <i>R. costelytrae</i> ' ¹	JN565690	-	100	95.6	94.6	97.3	76.7	82.6	78.4	77.1
2 ' <i>R. pyronotae</i> ' ¹	JN565692	0	-	95.6	94.6	97.3	76.7	82.6	78.4	77.1
3 ' <i>R. tipulae</i> ' ²	JF288931	13	13	-	91.1	97.0	74.4	80.6	76.1	74.5
4 ' <i>R. melolonthae</i> ' ²	EF694044	16	16	24	-	94.3	76.1	81.9	77.4	75.5
5 ' <i>R. agriotidis</i> ' ²	JN565688	8	8	9	17	-	76.7	82.3	77.4	75.8
6 ' <i>R. ixodidis</i> ' ³	JQ070347	72	72	77	74	72	-	81.7	82.9	82.3
7 ' <i>R. angustus</i> ' ⁴	HG792874	54	54	60	56	55	57	-	84.8	81.2
8 ' <i>R. kingi</i> ' ⁵	HG792875	67	67	74	70	70	53	47	-	93.9
9 ' <i>R. sculptus</i> ' ⁵	HG792876	71	71	79	76	75	55	46	19	-

¹295 aa, ²297 aa, ³308 aa, ⁴310 aa, ⁵309 aa