

Supplementary Table S3. Cloning and sequencing of bacterial 16S rRNA gene sequences from maternal symbiotic M4 region, and offspring eggs and newborn nymphs of *M. gracilicorne*.

Mother-offspring set ^a	Accession number of 16S rRNA gene of bacterial clone	Sequence similarity to mother-derived 16S rRNA gene ^b	BLAST top hit ^c
CKSI20-12			
Mother	LC594159	100% (515/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-1	LC594143	100% (515/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-2	LC594144	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-3	LC594145	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-4	LC594146	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-5	LC594147	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-6	LC594148	92.2% (475/515)	NR_041697; <i>Citrobacter gillenii</i> strain CDC 4693-86 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-7	LC594149	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-8	LC594150	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-1	LC594160	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-2	LC594161	100% (515/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-3	LC594162	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-4	LC594163	77.7% (388/499)	NR_074155; <i>Ehrlichia ruminantium</i> strain Welgevonden (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-5	LC594164	76.9% (384/499)	NR_044747; 4.11E-177; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-6	LC594165	55.2% (278/503)	Host 18S rRNA sequence
Nymph1-7	LC594166	88.5% (456/515)	NR_025335; <i>Pragia fontium</i> strain DSM 5563 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-8	LC594167	76.4% (386/505)	NR_135210; <i>Methylobacterium indicum</i> strain SE2.11 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-1	LC594151	79.8% (405/507)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-2	LC594152	87.0% (445/511)	NR_152004; <i>Acinetobacter lactucae</i> strain NRRL B-41902 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-3	LC594153	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-4	LC594154	83.3% (426/511)	NR_112030; <i>Stenotrophomonas maltophilia</i> strain ATCC 13637 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-5	LC594155	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-6	LC594156	55.0% (277/503)	Host 18S rRNA sequence
Egg2-7	LC594157	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-8	LC594158	80.0% (402/502)	NR_113608; <i>Agrobacterium rubi</i> strain NBRC 13261 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph2-1	LC594168	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph2-2	LC594169	78.6% (390/496)	NR_118559; <i>Rhizobium skiemiewicense</i> Ch11 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph2-3	LC594170	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph2-4	LC594171	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph2-5	LC594172	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S

			ribosomal RNA, partial sequence
Nymph2-6	LC594173	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph2-7	LC594174	55.2% (278/503)	Host 18S rRNA sequence
Nymph2-8	LC594175	99.8% (514/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
CKSI20-13			
Mother	LC594192	100% (515/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-1	LC594176	76.7% (383/499)	NR_044747; 4.11E-177; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-2	LC594177	76.7% (383/499)	NR_044747; 4.11E-177; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-3	LC594178	84.0% (426/507)	NR_113867; <i>Sphingomonas aquatilis</i> strain NBRC 16722 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-4	LC594179	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-5	LC594180	94.4% (478/506)	NR_118335; <i>Klebsiella michiganensis</i> strain W14 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-6	LC594181	78.3% (391/499)	NR_149816; <i>Microbacterium zeae</i> strain 1204 (Actinobacteria) 16S ribosomal RNA, partial sequence
Egg1-7	LC594182	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-8	LC594183	76.5% (382/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-1	LC594193	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-2	LC594194	78.0% (392/502)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-3	LC594195	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-4	LC594196	80.7% (382/473)	NR_026519; <i>Agrobacterium larrymoorei</i> strain AF3.10 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-5	LC594197	77.5% (386/498)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-6	LC594198	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-7	LC594199	99.6% (513/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-8	LC594200	79.1% (399/504)	NR_108571; <i>Paracoccus caeni</i> strain MJ17 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-1	LC594184	78.5% (396/504)	NR_036805; <i>Legionella fallonii</i> strain LLAP10 (γ -Proteobacteria) 16S ribosomal RNA gene, partial sequence
Egg2-2	LC594185	87.3% (447/512)	NR_113855; <i>Pseudomonas cremenicolorata</i> DSM 17059 = NBRC 16634 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-3	LC594186	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-4	LC594187	76.5% (382/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-5	LC594188	72.8% (365/501)	NR_113706; <i>Sphingobacterium multivorum</i> strain NBRC 14947 (Bacteroidetes) 16S ribosomal RNA, partial sequence
Egg2-6	LC594189	79.2% (406/512)	NR_042568; <i>Stenotrophomonas humi</i> strain R-32729 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-7	LC594190	78.7% (403/512)	NR_029319; <i>Pseudomonas anguilliseptica</i> strain S 1 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-8	LC594191	79.2% (404/510)	NR_042578; <i>Sphingomonas pseudosanguinis</i> strain G1-2 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-1	LC594201	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-2	LC594202	78% (390/500)	NR_026519; <i>Agrobacterium larrymoorei</i> strain AF3.10 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-3	LC594203	79.2% (400/505)	NR_158122; <i>Consotaelia salsifontis</i> strain USBA 369 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-4	LC594204	78.8% (402/510)	NR_116711; <i>Sphingomonas hunanensis</i> strain JSM 083058 (α -Proteobacteria) 16S ribosomal RNA, partial sequence

Nymph 2-5	LC594205	76.8% (385/501)	NR_028838; <i>Devosia neptuniae</i> strain J1 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-6	LC594206	81.7% (233/285)	NR_026519; <i>Agrobacterium larrymoorei</i> strain AF3.10 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-7	LC594207	79.4% (399/502)	NR_044213; <i>Devosia crocina</i> strain IPL20 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-8	LC594208	77.9% (396/508)	NR_113807; <i>Ahrensiella kielensis</i> strain NBRC 15762 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
CKSI20-14			
Mother	LC594225	100% (515/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-1	LC594209	78.6% (398/506)	NR_026519; <i>Agrobacterium larrymoorei</i> strain AF3.10 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-2	LC594210	83.4% (425/509)	NR_112030; <i>Stenotrophomonas maltophilia</i> strain ATCC 13637 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-3	LC594211	76.5% (382/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-4	LC594212	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-5	LC594213	88.9% (444/499)	NR_118335; <i>Klebsiella michiganensis</i> strain W14 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-6	LC594214	99.6% (513/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-7	LC594215	98.4% (507/515)	NR_114159; <i>Yokenella regensburgei</i> strain NBRC 102600 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-8	LC594216	76.5% (382/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-1	LC594226	55.2% (278/503)	Host 18S rRNA sequence
Nymph 1-2	LC594227	55.2% (278/503)	Host 18S rRNA sequence
Nymph 1-3	LC594228	99.6% (513/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-4	LC594229	99.8% (514/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-5	LC594230	76.1% (380/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-6	LC594231	77.5% (384/495)	NR_117429; <i>Pseudonocardia alni</i> strain DSM 44104 (Actinobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-7	LC594232	76.5% (382/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-8	LC594233	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-1	LC594217	79.6% (404/507)	NR_112030; <i>Stenotrophomonas maltophilia</i> strain ATCC 13637 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-2	LC594218	74.3% (290/390)	NR_148840; <i>Taibaiella coffeisoli</i> strain TZCO2 (Bacteroidetes) 16S ribosomal RNA, partial sequence
Egg2-3	LC594219	83.3% (424/509)	NR_112030; <i>Stenotrophomonas maltophilia</i> strain ATCC 13637 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-4	LC594220	87.5% (448/512)	NR_102854; <i>Pseudomonas entomophila</i> L48 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-5	LC594221	81.7% (417/510)	NR_148635; <i>Comamonas piscis</i> strain CN1 (β -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-6	LC594222	81.4% (416/511)	NR_148635; <i>Comamonas piscis</i> strain CN1 (β -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-7	LC594223	84.2% (428/508)	NR_041370; <i>Dyella ginsengisoli</i> strain Gsoil 3046 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-8	LC594224	72.9% (369/506)	NR_113311; <i>Sphingobacterium pakistanense</i> strain NCCP-246 (Bacteroidetes) 16S ribosomal RNA, partial sequence
Nymph 2-1	LC594234	99.6% (513/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-2	LC594235	76.5% (382/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-3	LC594236	76.3% (381/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-4	LC594237	99.6% (513/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S

			ribosomal RNA, partial sequence
Nymph 2-5	LC594238	76.5% (382/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-6	LC594239	99.8% (514/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 16S ribosomal RNA, partial sequence
Nymph 2-7	LC594240	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-8	LC594241	76.5% (382/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
CKSI20-15			
Mother	LC594258	100% (515/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-1	LC594242	77.4% (391/505)	NR_044391; <i>Sphingobacterium siyangense</i> strain SY1 (Bacteroidetes) 16S ribosomal RNA, partial sequence
Egg1-2	LC594243	73.5% (361/491)	NR_044391; <i>Sphingobacterium siyangense</i> strain SY1 (Bacteroidetes) 16S ribosomal RNA, partial sequence
Egg1-3	LC594244	98.4% (506/514)	NR_116748; <i>Pantoea brenneri</i> strain LMG 5343 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-4	LC594245	97.6% (503/515)	NR_025331; <i>Buttiauxella izardii</i> strain S3/2-161 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-5	LC594246	79.9% (403/504)	NR_024863; <i>Neorhizobium huautlense</i> strain SO2 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-6	LC594247	83.1% (425/511)	NR_029319; <i>Pseudomonas anguilliseptica</i> strain S 1 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-7	LC594248	73.8% (359/486)	NR_108531; <i>Chryseobacterium tructae</i> strain 1084-08 (Bacteroidetes) 16S ribosomal RNA, partial sequence
Egg1-8	LC594249	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-1	LC594259	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-2	LC594260	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-3	LC594261	76.8% (382/497)	NR_114151; <i>Ochrobactrum oryzae</i> strain NBRC 102588 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-4	LC594262	80.7% (411/509)	NR_029202; <i>Amaricoccus macauensis</i> strain Ben104 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-5	LC594263	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-6	LC594264	79.9% (403/504)	NR_117103; <i>Rhodococcus cerastii</i> strain C5 (Actinobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-7	LC594265	79.9% (402/503)	NR_117103; <i>Rhodococcus cerastii</i> strain C5 (Actinobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-8	LC594266	79.8% (405/507)	NR_108571; <i>Paracoccus caeni</i> strain MJ17 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-1	LC594250	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-2	LC594251	72.6% (367/505)	NR_113706; <i>Sphingobacterium multivorum</i> strain NBRC 14947 (Bacteroidetes) 16S ribosomal RNA, partial sequence
Egg2-3	LC594252	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-4	LC594253	72.6% (367/505)	NR_044391; <i>Sphingobacterium siyangense</i> strain SY1 (Bacteroidetes) 16S ribosomal RNA, partial sequence
Egg2-5	LC594254	82.3% (421/511)	NR_029319; <i>Pseudomonas anguilliseptica</i> strain S 1 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-6	LC594255	90.6% (466/514)	NR_126317; <i>Cedecea lapagei</i> strain DSM 4587 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-7	LC594256	99.4% (512/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-8	LC594257	72.0% (356/494)	NR_044391; <i>Sphingobacterium siyangense</i> strain SY1 (Bacteroidetes) 16S ribosomal RNA, partial sequence
Nymph 2-1	LC594267	99.6% (513/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-2	LC594268	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-3	LC594269	99.8% (514/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence

Nymph 2-4	LC594270	99.2% (511/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-5	LC594271	99.4% (512/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-6	LC594272	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-7	LC594273	98.6% (508/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-8	LC594274	99.4% (512/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
CKS120-16			
Mother	LC594291	100% (515/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-1	LC594275	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-2	LC594276	75.9% (383/504)	NR_125697; <i>Trichocoleus desertorum</i> strain ATA4-8-CV2 (Cyanobacteria) 16S ribosomal RNA, partial sequence
Egg1-3	LC594277	76.4% (386/505)	NR_135210; <i>Methylobacterium indicum</i> strain SE2.11 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-4	LC594278	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-5	LC594279	79.1% (402/508)	NR_028944; <i>Microbacterium aerolatum</i> strain V-73 (Actinobacteria) 16S ribosomal RNA, partial sequence
Egg1-6	LC594280	79.1% (398/503)	NR_028944; <i>Microbacterium aerolatum</i> strain V-73 (Actinobacteria) 16S ribosomal RNA, partial sequence
Egg1-7	LC594281	78.5% (395/503)	NR_135210; <i>Methylobacterium indicum</i> strain SE2.11 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-8	LC594282	84.0% (431/513)	NR_148578; <i>Pantoea beijingensis</i> strain JZB2120001 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-1	LC594292	73.6% (372/505)	NR_169321; <i>Pedobacter indicus</i> strain SM1810 (Bacteroidetes) 16S ribosomal RNA, partial sequence
Nymph 1-2	LC594293	99.8% (514/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-3	LC594294	99.8% (514/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-4	LC594295	76.5% (382/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-5	LC594296	99.4% (512/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-6	LC594297	88.9% (444/499)	NR_116752; <i>Pantoea septica</i> strain LMG 5345 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-7	LC594298	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-8	LC594299	71.5% (352/492)	NR_042540; <i>Flavobacterium ceti</i> strain 454-2 (Bacteroidetes) 16S ribosomal RNA, partial sequence
Egg2-1	LC594283	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-2	LC594284	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-3	LC594285	99.8% (514/515)	NR_114154; <i>Leclercia adecarboxylata</i> strain NBRC 102595 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-4	LC594286	99.6% (513/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-5	LC594287	99.6% (513/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-6	LC594288	76.5% (382/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-7	LC594289	93.2% (480/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-8	LC594290	99.8% (514/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-1	LC594300	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-2	LC594301	94.6% (475/502)	NR_041797; <i>Alkalimonas amyloytica</i> strain N10 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-3	LC594302	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S

			ribosomal RNA, partial sequence
Nymph 2-4	LC594303	99.6% (513/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-5	LC594304	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-6	LC594305	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-7	LC594306	55.2% (278/503)	Host 18S rRNA sequence
Nymph 2-8	LC594307	99.6% (513/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
CKSI20-17			
Mother	LC594324	100% (515/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-1	LC594308	75.9% (383/504)	NR_125697; <i>Trichocoleus desertorum</i> strain ATA4-8-CV2 (Cyanobacteria) 16S ribosomal RNA, partial sequence
Egg1-2	LC594309	76.2% (385/505)	NR_125697; <i>Trichocoleus desertorum</i> strain ATA4-8-CV2 (Cyanobacteria) 16S ribosomal RNA, partial sequence
Egg1-3	LC594310	75.9% (383/504)	NR_125697; <i>Trichocoleus desertorum</i> strain ATA4-8-CV2 (Cyanobacteria) 16S ribosomal RNA, partial sequence
Egg1-4	LC594311	75.5% (381/504)	NR_125697; <i>Trichocoleus desertorum</i> strain ATA4-8-CV2 (Cyanobacteria) 16S ribosomal RNA, partial sequence
Egg1-5	LC594312	73.9% (367/496)	NR_117881; <i>Loriellopsis cavernicola</i> strain LF-B5 (Cyanobacteria) 16S ribosomal RNA, partial sequence
Egg1-6	LC594313	75.9% (383/504)	NR_125697; <i>Trichocoleus desertorum</i> strain ATA4-8-CV2 (Cyanobacteria) 16S ribosomal RNA, partial sequence
Egg1-7	LC594314	75.9% (383/504)	NR_125697; <i>Trichocoleus desertorum</i> strain ATA4-8-CV2 (Cyanobacteria) 16S ribosomal RNA, partial sequence
Egg1-8	LC594315	75.9% (383/504)	NR_125697; <i>Trichocoleus desertorum</i> strain ATA4-8-CV2 (Cyanobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-1	LC594325	73.7% (376/510)	NR_040847; <i>Cutibacterium acnes</i> strain ATCC 6919 (Actinobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-2	LC594326	86.4% (442/511)	NR_117677; <i>Acinetobacter baumannii</i> strain DSM 30007 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-3	LC594327	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-4	LC594328	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-5	LC594329	55.4% (279/503)	Host 18S rRNA sequence
Nymph 1-6	LC594330	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-7	LC594331	82.2% (418/508)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 1-8	LC594332	76.5% (382/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-1	LC594316	76.5% (382/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-2	LC594317	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-3	LC594318	77.3% (386/499)	NR_115996; <i>Rhizobium soli</i> DS-42 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-4	LC594319	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-5	LC594320	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-6	LC594321	79.7% (398/499)	NR_026519; <i>Agrobacterium larrymoorei</i> strain AF3.10 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-7	LC594322	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-8	LC594323	78.5% (392/499)	NR_113713; <i>Neorhizobium galegae</i> strain NBRC 14965 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-1	LC594333	77.1% (385/499)	NR_115996; <i>Rhizobium soli</i> DS-42 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-2	LC594334	86.8% (444/511)	NR_152004; <i>Acinetobacter lactucae</i> strain NRRL B-41902 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-3	LC594335	77.1% (385/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S

			ribosomal RNA, partial sequence
Nymph 2-4	LC594336	85.9% (439/511)	NR_044454; <i>Acinetobacter soli</i> strain B1 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-5	LC594337	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-6	LC594338	100% (515/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-7	LC594339	86.6% (443/511)	NR_152004; <i>Acinetobacter lactucae</i> strain NRRL B-41902 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-8	LC594340	86.8% (444/511)	NR_152004; <i>Acinetobacter lactucae</i> strain NRRL B-41902 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
CKSI20-18			
Mother	LC594357	100% (515/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-1	LC594341	75.6% (380/502)	NR_125697; <i>Trichocoleus desertorum</i> (Cyanobacteria) strain ATA4-8-CV2 16S ribosomal RNA, partial sequence
Egg1-2	LC594342	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-3	LC594343	67.7% (334/493)	NR_109614; <i>Caldicoprobacter guelmensis</i> strain D2C22 (Firmicutes) 16S ribosomal RNA, partial sequence
Egg1-4	LC594344	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-5	LC594345	55.0% (277/503)	Host 18S rRNA sequence
Egg1-6	LC594346	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-7	LC594347	100% (515/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg1-8	LC594348	100% (515/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-1	LC594358	77.8% (390/501)	NR_113149; <i>Brevifollis gellanilyticus</i> strain DC2c-G4 (Verrucomicrobia) 16S ribosomal RNA, partial sequence
Nymph1-2	LC594359	100% (515/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-3	LC594360	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-4	LC594361	98.6% (508/515)	NR_041697; <i>Citrobacter gillenii</i> strain CDC 4693-86 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-5	LC594362	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-6	LC594363	97.6% (501/513)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-7	LC594364	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph1-8	LC594365	99.6% (513/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-1	LC594349	78.6% (398/506)	NR_026519; <i>Agrobacterium larrymoorei</i> strain AF3.10 (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-2	LC594350	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-3	LC594351	79.0% (280/354)	NR_044762; <i>Anaplasma phagocytophilum</i> strain Webster (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-4	LC594352	94.8% (480/506)	NR_118335; <i>Klebsiella michiganensis</i> strain W14 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-5	LC594353	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-6	LC594354	94.5% (484/512)	NR_118335; <i>Klebsiella michiganensis</i> strain W14 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-7	LC594355	76.7% (383/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Egg2-8	LC594356	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-1	LC594366	77.3% (393/508)	NR_134768; <i>Microbacterium panaciterrae</i> strain DCY56 (Actinobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-2	LC594367	99.8% (514/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence

Nymph 2-3	LC594368	99.8% (514/515)	NR_118120; <i>Pantoea rodasii</i> strain LMG 26273 (γ -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-4	LC594369	83.4% (424/508)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-5	LC594370	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-6	LC594371	80.1% (403/503)	NR_117103; <i>Rhodococcus cerastii</i> strain C5 (Actinobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-7	LC594372	76.9% (384/499)	NR_044747; <i>Ehrlichia ewingii</i> strain Stillwater (α -Proteobacteria) 16S ribosomal RNA, partial sequence
Nymph 2-8	LC594373	72.2% (365/505)	NR_041407; <i>Sphingobacterium daejeonense</i> strain TR6-04 (Bacteroidetes) 16S ribosomal RNA, partial sequence

^aEach field-collected mother was individually reared, and first-laid eggs and second-laid eggs were harvested. Two eggs from the first clutch were defined as “Egg1”, and subjected to DNA extraction, PCR and cloning of bacterial 16S rRNA gene. For each egg sample, up to eight 16S rRNA gene clones were picked and sequenced, which were designated as “Egg1-1”–“Egg1-8”. The remaining eggs were maintained, and a newborn nymph was picked as “Nymph1”, and bacterial 16S rRNA clones “Nymph1-1”–“Nymph1-8” were sequenced in the same way. Similarly, two eggs and a nymph from the second clutch were defined as “Egg2” and “Nymph2”, and 16S rRNA gene clones “Egg2-1”–“Egg2-8” and “Nymph2-1”–“Nymph2-8” were determined.

^bPercentage in terms of (number of matched nucleotide sites/number of aligned nucleotide sites), where gap-containing sites were omitted.

^cAmong the BLAST top hit entries, a representative one with species identification is shown with sequence accession number and biological description.