

**Table S1.** List of the studied specimens. LT – lectotype; PT – paratype; PLT – paralectotype; \*— DNA barcodes, mined from BOLD; \*\*—numbers in brackets correspond to sampling localities, shown in Figure 3b. Attribution of samples to *mongola/tamerlana* was based on a geographical distribution of the corresponding taxa suggested in previous studies.

Taxon	Sample ID	Sex	COI haplotype	Wolbachia			Year	Locality
				16S	wsp	ftsZ		
<i>tamerlana</i>	Akr01	♂	hp3a	-	-	-	2016	(01)** China, Xinjiang
<i>tamerlana</i>	Akr02	♂	hp3a	-	-	-	2016	(01) China, Xinjiang
<i>tamerlana</i>	Akr03	♀	hp3a	-	-	-	2016	(01) China, Xinjiang
<i>tamerlana</i>	Akr04	♀	hp3a	-	-	-	2016	(01) China, Xinjiang
<i>tamerlana</i>	CL162	♂	hp3a	-	-	-	2016	(01) China, Xinjiang
<i>tamerlana</i> LT	21128B07	♂	hp1b	n/a	n/a	n/a	1896	(01) China, Xinjiang
<i>tamerlana</i> PLT	20022A02	♀	hp1b	n/a	n/a	n/a	1896	(01) China, Xinjiang
<i>mongola</i>	Mnt03	♂	hp1b	-	-	-	2018	(02) Mongolia, Hovd
<i>mongola</i>	Mnt04	♀	hp3b	-	-	-	2018	(02) Mongolia, Hovd
<i>mongola</i>	CL34m	♂	hp1c	-	-	-	2015	(02) Mongolia, Hovd
<i>mongola</i>	Mnt54	♀	hp1b	-	-	-	2003	(17) Mongolia, Hovd
<i>mongola</i>	Mnt55	♀	hp2	+	+	+	2003	(17) Mongolia, Hovd
<i>mongola</i>	Mnt56	♀	hp1b	-	-	-	2003	(17) Mongolia, Hovd
<i>mongola</i>	Mnt57	♀	hp1b	-	-	-	2003	(17) Mongolia, Hovd
<i>mongola</i>	Mnt58	♀	hp2	+	+	+	2003	(17) Mongolia, Hovd
<i>mongola</i>	Mnt59	♀	hp3a	-	-	-	2003	(17) Mongolia, Hovd
<i>mongola</i>	Mnt60	♀	hp2	+	+	+	2003	(17) Mongolia, Hovd
<i>mongola</i>	Mnt61	♂	hp1b	-	-	-	2003	(17) Mongolia, Hovd
<i>mongola</i>	Mnt62	♂	hp2	+	+	+	2003	(17) Mongolia, Hovd
<i>mongola</i>	Mnt63	♂	hp1b	-	-	-	2003	(17) Mongolia, Hovd
<i>mongola</i>	Mnt01	♀	hp2	+	+	+	2013	(03) Mongolia, Gobi-Altai
<i>mongola</i>	Mnt02	♀	hp2	+	+	+	2013	(03) Mongolia, Gobi-Altai
<i>mongola</i>	CL41m	♀	hp2	+	+	+	2017	(03) Mongolia, Gobi-Altai
<i>mongola</i>	Nsk16	♂	hp2	-	-	-	2005	(04) Mongolia, Bayan-Ulej
<i>mongola</i>	CL39m	♀	hp2	+	+	+	2017	(05) Mongolia, Bayan-Ulej
<i>mongola</i>	CL40m	♀	hp3a	-	-	-	2017	(05) Mongolia, Bayan-Ulej
<i>mongola</i>	CL43m	♀	hp2	+	+	+	2017	(05) Mongolia, Bayan-Ulej
<i>mongola</i>	Mnt24z	♀	hp3a	-	-	-	2017	(05) Mongolia, Bayan-Ulej
<i>mongola</i>	Mnt25z	♀	hp4a	-	-	-	2017	(05) Mongolia, Bayan-Ulej
<i>mongola</i>	Mnt53	♀	hp2	+	+	+	2004	(16) Mongolia, Zavkhan
<i>mongola ukokana</i>	Mnt18	♀	hp2	+	+	+	2022	(06) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt19	♀	hp3c	-	-	-	2022	(06) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt20	♂	hp4a	-	-	-	2022	(06) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt21	♂	hp4a	-	-	-	2022	(06) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt22	♂	hp4a	-	-	-	2022	(06) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt23	♂	hp2	-	-	-	2022	(06) Russia, Republic of Altai
<i>mongola ukokana</i>	Nsk014	♂	hp3a	n/a	n/a	n/a	1997	(07) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt34z	♂	hp3a	n/a	n/a	n/a	1997	(07) Russia, Republic of Altai
<i>mongola ukokana</i> PT	Nsk015	♂	hp4c	n/a	n/a	n/a	1995	(08) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt24	♂	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt25	♀	hp1a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt26	♂	hp4a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt27	♀	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt28	♀	hp4a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt29	♂	hp4a	-	-	-	2001	(09) Russia, Republic of Altai

<i>mongola ukokana</i>	Mnt30	♂	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt31	♂	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt32	♂	hp4a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt33	♂	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt34	♂	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt35	♂	hp4a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt36	♂	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt37	♂	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt38	♂	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt39	♂	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt44	♂	hp4a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt45	♂	hp4a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt46	♂	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt47	♂	hp3d	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt48	♂	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt49	♂	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt50	♂	hp3d	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt51	♂	hp3a	-	-	-	2001	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Ku01	♀	hp3e	-	-	-	2022	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Ku02	♀	hp2	+	+	+	2022	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Ku03	♂	hp4a	-	-	-	2022	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Ku04	♂	hp4a	-	-	-	2022	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt28z	♂	hp3a	-	-	-	2022	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt29z	♀	hp3e	-	-	-	2022	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt30z	♂	hp3d	-	-	-	2022	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	LOWA141-06*	♂	hp3a	n/a	n/a	n/a	1999	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	LOWA818-06*	♂	hp3a	n/a	n/a	n/a	1999	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	LOWA142-06*	♂	hp4b	n/a	n/a	n/a	1999	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	CL42m	♀	hp1a	-	-	-	2017	(09) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt17	♀	hp1a	-	-	-	2022	(10) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt40	♀	hp2	+	+	+	2003	(10) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt41	♂	hp3a	-	-	-	2003	(10) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt42	♂	hp3a	-	-	-	2003	(10) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt43	♂	hp3a	-	-	-	2003	(10) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt09	♂	hp3a	-	-	-	2002	(11) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt10	♂	hp3a	-	-	-	2002	(11) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt08	♂	hp3a	-	-	-	2003	(12) Russia, Republic of Altai
<i>mongola ukokana</i>	Mnt12	♂	hp3a	-	-	-	2003	(12) Russia, Republic of Altai
<i>mongola</i>	Mnt14	♀	hp2	+	+	+	2010	(13) Russia, Republic of Tyva
<i>mongola</i>	Mnt15	♀	hp3a	-	-	-	2010	(13) Russia, Republic of Tyva
<i>mongola</i>	Mnt07	♂	hp2	-	-	-	2002	(14) Russia, Republic of Tyva
<i>mongola</i>	CL35m	♀	hp1b	-	-	-	2002	(14) Russia, Republic of Tyva
<i>mongola</i>	CL37m	♂	hp1b	-	-	-	2002	(14) Russia, Republic of Tyva
<i>mongola</i>	CL38m	♀	hp1a	-	-	-	2002	(14) Russia, Republic of Tyva
<i>mongola</i>	CL54m	♂	hp1b	-	-	-	2002	(14) Russia, Republic of Tyva
<i>mongola</i>	CL55m	♂	hp4a	-	-	-	2002	(14) Russia, Republic of Tyva
<i>mongola</i>	CL56m	♂	hp1b	-	-	-	2002	(14) Russia, Republic of Tyva
<i>mongola</i>	CL57m	♀	hp1b	-	-	-	2002	(14) Russia, Republic of Tyva
<i>mongola</i>	Mnt26z	♂	hp1a	-	-	-	2002	(14) Russia, Republic of Tyva
<i>mongola</i>	Mnt05	♀	hp1b	-	-	-	2001	(15) Russia, Republic of Tyva
<i>mongola</i>	Mnt06	♀	hp1b	-	-	-	2001	(15) Russia, Republic of Tyva
<i>mongola</i> LT	20022A03	♂	hp1b	n/a	n/a	n/a	?	(??) see text for explanation

<i>sidonia</i>	S1-22064B02	♀	hp1b	n/a	n/a	n/a	1967	(18)	Mongolia, Khovsgol
<i>sidonia</i>	S2-22064B03	♀	hp1b	n/a	n/a	n/a	1966	(18)	Mongolia, Khovsgol
<i>sidonia</i>	S3-22064B04	♂	hp1b	n/a	n/a	n/a	1967	(18)	Mongolia, Khovsgol
<i>sidonia</i>	S4-22064B05	♂	hp1b	n/a	n/a	n/a	1967	(18)	Mongolia, Khovsgol