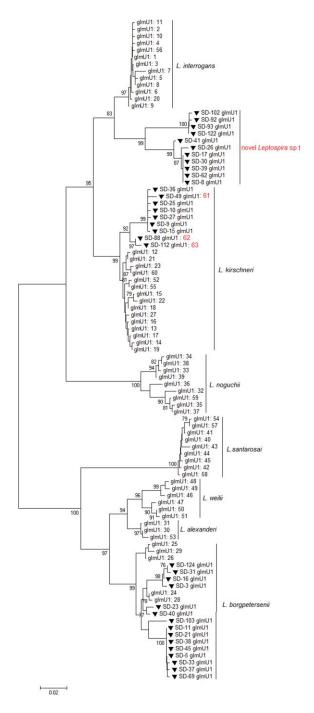
## Pathogenic *Leptospira* Species in Insectivorous Bats, China, 2015

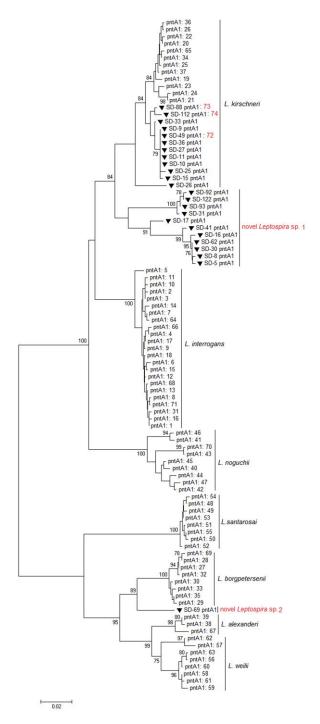
## **Technical Appendix**

Technical Appendix Table. Multilocus sequence typing (MLST) of Leptospira in bats, Mengyin County, Shandong Province, China										
Bat species	Bat no.	glmU	pntA	sucA	tpiA	pfkB	mreA	caiB	ST	Co-infection
M. fimbriatus	SD-88	Lk (62)	Lk (73)	Lk (68)	Lk (63)	Lk (88)	Lk (65)	Lk (60)	ST246	1
M. fimbriatus	SD-112	Lk (63)	Lk (74)	Lk (69)	Lk (64)	Lk (89)	Lk (66)	Lk (60)	ST245	1
M. fimbriatus	SD-124	Lb	_	Lb	_	_	_	_	_	1
M. fimbriatus	SD-122	N1	N1	N1	_	_	N1	_	_	1
M. fimbriatus	SD-93	N1	N1	N1	N1	N1	_	_	_	1
M. fimbriatus	SD-103	Lb	_	N2	Lb	Lb	Lb	_	_	2
M. fimbriatus	SD-102	N1	_	N1/N2	N1	N1/ <i>Lb</i>	N1	_	_	3
M. ricketti	SD-92	N1	N1	N1/ <i>Lb</i>	N1	N1	N1	_	_	2
M. pequinius	SD-49	Lk (61)	Lk (72)	Lk (67)	Lk (62)	Lk (87)	Lk (64)	Lk (59)	ST244	1
M. pequinius	SD-10	Lk	Lk	Lk	_	Lk	Lk	Lk	_	1
M. pequinius	SD-15	Lk	Lk	Lk	_	Lk	Lk	Lk	_	1
M. pequinius	SD-36	Lk	Lk	Lk	_	Lk	_	_	_	1
M. pequinius	SD-21	Lb	_	_	_	_	_	_	_	1
M. pequinius	SD-23	Lb	_	Lb	Lb	Lb	_	Lb	_	1
M. pequinius	SD-38	Lb	_	Lb	Lb	Lb	_	_	_	1
M. pequinius	SD-8	N1	N1	N1	_	_	N1	_	_	1
M. pequinius	SD-30	N1	N1	N1	_	N1	N1	_	_	1
M. pequinius	SD-62	N1	N1	N1	_	N1	N1	_	_	1
M. pequinius	SD-41	N1	N1	N1	N1	N1	_	_	_	1
M. pequinius	SD-39	N1	_	N1	_	N1	N1	_	_	1
M. pequinius	SD-25	Lk	Lk	Lk	_	Lb	_	Lk	_	2
M. pequinius	SD-9	Lk	Lk	Lk	Lb	Lk	Lk	Lk	_	2
M. pequinius	SD-27	Lk	Lk	Lk	Lb	Lk	Lk	Lk	_	2
M. pequinius	SD-3	Lb	_	Lb	_	N2	Lb	_	_	2
M. pequinius	SD-40	Lb	_	Lb	_	N2	Lb	_	_	2
M. pequinius	SD-5	Lb	N1	N1	_	Lb	_	_	_	2
M. pequinius	SD-69	Lb	N2	N2	_	Lb	Lb	_	_	2
M. pequinius	SD-33	Lb	Lk	N2	_	Lb	Lb	_	_	2
M. pequinius	SD-37	Lb	_	N2	_	Lb	Lb	_	_	2
M. pequinius	SD-45	Lb	_	N2	_	Lb	Lb	_	_	2
M. pequinius	SD-26	N1	Lk	N1	N1	N1	N1	Lk	_	2
M. pequinius	SD-31	Lb	N1	Lb	Lb	N2	N1	_	_	3
M. pequinius	SD-16	Lb	N1	Lb	_	N2	Lb	_	_	3
M. pequinius	SD-11	Lb	Lk	N4	_	_	_	Lk	_	3
M. pequinius	SD-17	N1	N1	N3	N1	N1	N1	Lk	_	3

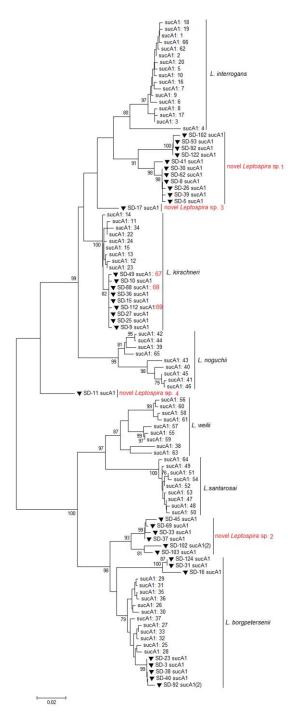
<sup>\*</sup>For SD-49, SD-88, and SD-112, novel alleles assigned are shown in the parentheses. *Lb, L. borgpetersenii*; *Lk, L. kirschneri*; N1, potential new *Leptospira* sp. 1; N2, potential new *Leptospira* sp. 2; N3, potential new *Leptospira* sp. 3; N4, potential new *Leptospira* sp.



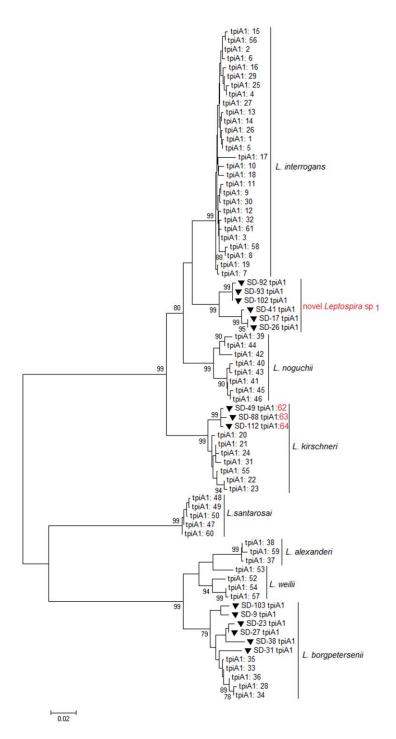
**Technical Appendix Figure 1.** Neighbor-joining phylogenetic tree for *glmU* gene of *Leptospira* in bats, Mengyin County, Shandong Province, China. The tree was constructed with Kimura's 2-parameter model using MEGA 7.0, and bootstrap values were calculated with 1,000 replicates. Alleles of each locus detected in this study are shown with the sample number highlighted with a triangle, and novel allele numbers assigned in this study are indicated in red. *Leptospira* species are shown on the right, and potential new *Leptospira* species detected in this study are shown in red.



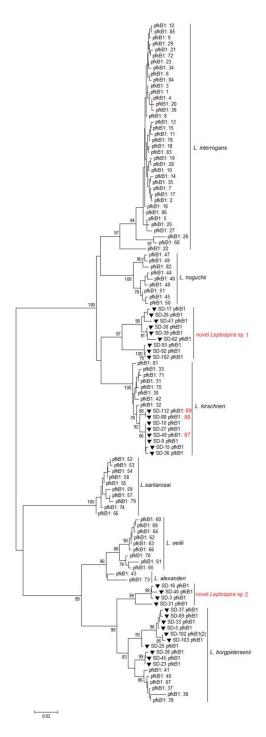
**Technical Appendix Figure 2.** Neighbor-joining phylogenetic tree for *pntA* gene of *Leptospira* in bats, Mengyin County, Shandong Province, China. The tree was constructed with Kimura's 2-parameter model using MEGA 7.0, and bootstrap values were calculated with 1,000 replicates. Alleles of each locus detected in this study are shown with the sample number highlighted with a triangle, and novel allele numbers assigned in this study are indicated in red. *Leptospira* species are shown on the right, and potential new *Leptospira* species detected in this study are shown in red.



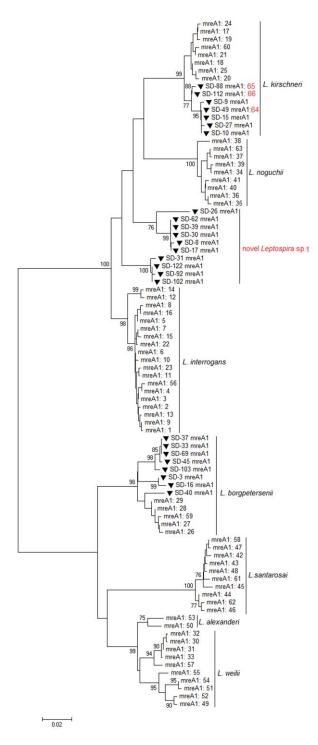
**Technical Appendix Figure 3.** Neighbor-joining phylogenetic tree for *sucA* gene of *Leptospira* in bats, Mengyin County, Shandong Province, China. The tree was constructed with Kimura's 2-parameter model using MEGA 7.0, and bootstrap values were calculated with 1,000 replicates. Alleles of each locus detected in this study are shown with the sample number highlighted with a triangle, and novel allele numbers assigned in this study are indicated in red. *Leptospira* species are shown on the right, and potential new *Leptospira* species detected in this study are shown in red.



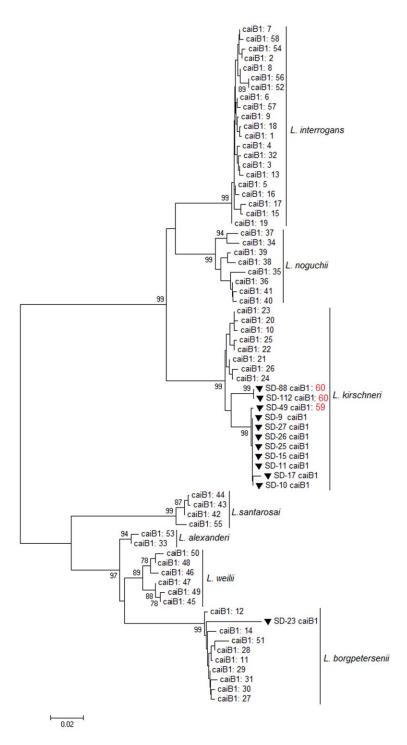
**Technical Appendix Figure 4.** Neighbor-joining phylogenetic tree for *tpiA* gene of *Leptospira* in bats, Mengyin County, Shandong Province, China. The tree was constructed with Kimura's 2-parameter model using MEGA 7.0, and bootstrap values were calculated with 1,000 replicates. Alleles of each locus detected in this study are shown with the sample number highlighted with a triangle, and novel allele numbers assigned in this study are indicated in red. *Leptospira* species are shown on the right, and potential new *Leptospira* species detected in this study are shown in red.



**Technical Appendix Figure 5.** Neighbor-joining phylogenetic tree for *pfkB* gene of *Leptospira* in bats, Mengyin County, Shandong Province, China. The tree was constructed with Kimura's 2-parameter model using MEGA 7.0, and bootstrap values were calculated with 1,000 replicates. Alleles of each locus detected in this study are shown with the sample number highlighted with a triangle, and novel allele numbers assigned in this study are indicated in red. *Leptospira* species are shown on the right, and potential new *Leptospira* species detected in this study are shown in red.



**Technical Appendix Figure 6.** Neighbor-joining phylogenetic tree for *mreA* gene of *Leptospira* in bats, Mengyin County, Shandong Province, China. The tree was constructed with Kimura's 2-parameter model using MEGA 7.0, and bootstrap values were calculated with 1,000 replicates. Alleles of each locus detected in this study are shown with the sample number highlighted with a triangle, and novel allele numbers assigned in this study are indicated in red. *Leptospira* species are shown on the right, and potential new *Leptospira* species detected in this study are shown in red.



**Technical Appendix Figure 7.** Neighbor-joining phylogenetic tree for *caiB* gene of *Leptospira* in bats, Mengyin County, Shandong Province, China. The tree was constructed with Kimura's 2-parameter model using MEGA 7.0, and bootstrap values were calculated with 1,000 replicates. Alleles of each locus detected in this study are shown with the sample number highlighted with a triangle, and novel allele numbers assigned in this study are indicated in red. *Leptospira* species are shown on the right, and potential new *Leptospira* species detected in this study are shown in red.