

Table S1. Sources of mitochondrial genomic data other than in this study.

S/N	Species	Family	Accession No.	Reference
1	<i>Ameletus</i> sp. 1 MT-2014	Ameletidae	KM244682	[57]
2	<i>Cloeon</i> dipterum	Baetidae	MW149047	[58]
3	<i>Baetis</i> sp. PC-2010	Baetidae	GU936204	[59]
4	<i>Takobia yixiani</i>	Baetidae	GU479735	[59]
5	<i>Nigrobaetis niger</i>	Baetidae	MT483692	Direct Submission
6	<i>Procloeon bifidum</i>	Baetidae	MT483677	Direct Submission
7	<i>Caenis</i> sp. JYZ-2020	Caenidae	MN356096	[60]
8	<i>Caenis</i> sp. JYZ-2018	Caenidae	MG910499	[61]
9	<i>Caenis horaria</i>	Caenidae	MT622520	Direct Submission
10	<i>Caenis robusta</i>	Caenidae	MT584126	Direct Submission
11	<i>Caenis robusta</i>	Caenidae	MT628575	Direct Submission
12	<i>Caenis pycnacantha</i>	Caenidae	GQ502451	Unpublished
13	<i>Torleya mikali</i>	Ephemerellidae	MT535766	[62]
14	<i>Cincticostella fusca</i>	Ephemerellidae	MT535767	[62]
15	<i>Torleya nepalica</i>	Ephemerellidae	MT274132	[68]
16	<i>Torleya grandiforceps</i>	Ephemerellidae	MT274131	[68]
17	<i>Serratella zapekinae</i>	Ephemerellidae	MT274130	[68]
18	<i>Ephemerella</i> sp. Yunnan-2018	Ephemerellidae	MT274127	[68]
19	<i>Serratella</i> sp. Liaoning-2019	Ephemerellidae	MT274128	[68]
20	<i>Serratella ignita</i>	Ephemerellidae	MT628582	Direct Submission
21	<i>Ephemerella</i> sp. MT-2014	Ephemerellidae	KM244691	[57]
22	<i>Vietnamella sinensis</i>	Viemamellidae	OK265111	[33]
23	<i>Ephemera serica</i>	Ephemerellidae	OK018134	Direct Submission
24	<i>Hexagenia rigida</i>	Ephemerellidae	OL678102	[21]
25	<i>Ephemera orientalis</i>	Ephemerellidae	EU591678	[64]
26	<i>Ephemera</i> sp. XL-2019	Ephemerellidae	MK951659	[70]
27	Heptagenidae sp. YW03BF02	Heptagenidae	MK642300	[44]
28	<i>Epeorus</i> sp. 06 ZXM-2022a	Heptagenidae	OK495706	[65]
29	<i>Epeorus</i> sp. 05 ZXM-2022a	Heptagenidae	OK495705	[65]
30	<i>Epeorus psi</i>	Heptagenidae	OK495704	[65]
31	<i>Epeorus dayongensis</i>	Heptagenidae	OK495703	[65]
32	<i>Epeorus</i> sp. 04 ZXM-2022a	Heptagenidae	OK495702	[65]
33	<i>Epeorus herklotsi</i>	Heptagenidae	OK495701	[65]
34	<i>Epeorus</i> sp. 03 ZXM-2022a	Heptagenidae	OK495700	[65]
35	<i>Epeorus alexandri</i>	Heptagenidae	OK495699	[65]
36	<i>Epeorus</i> sp. 02 ZXM-2022a	Heptagenidae	OK495698	[65]
37	<i>Epeorus rhithralis</i>	Heptagenidae	OK495697	[65]
38	<i>Epeorus bispinosus</i>	Heptagenidae	OK495696	[65]
39	<i>Epeorus aculeatus</i>	Heptagenidae	OK495695	[65]
40	<i>Epeorus</i> sp. 01 ZXM-2022a	Heptagenidae	OK495694	[65]
41	<i>Epeorus unispinosus</i>	Heptagenidae	OK495693	[65]
42	<i>Cinygmina</i> sp. 07BF96	Heptagenidae	MW450878	[44]
43	<i>Stenonema femoratum</i>	Heptagenidae	MK642306	[44]
44	<i>Stenacron interpunctatum</i>	Heptagenidae	MK642305	[44]
45	<i>Maccaffertium vicarium</i>	Heptagenidae	MK642304	[44]
46	<i>Leucrocuta aphrodite</i>	Heptagenidae	MK642301	[44]
47	<i>Afronurus yixingensis</i>	Heptagenidae	MK642297	[44]
48	<i>Cinygmina</i> sp. 1 YW01BF06	Heptagenidae	MK642295	[44]
49	<i>Afronurus levis</i>	Heptagenidae	OQ863614	Direct Submission
50	<i>Rhithrogena germanica</i>	Heptagenidae	MT584121	Direct Submission
51	<i>Electrogena lateralis</i>	Heptagenidae	MT874480	Direct Submission
52	<i>Paegniodes cupulatus</i>	Heptagenidae	MW381300	[62]
53	<i>Notacanthurus lamellosus</i>	Heptagenidae	MW381298	[62]

54	<i>Parafronurus youi</i>	Heptagenidae	EU349015	[36]
55	<i>Isonychia kiangsinensis</i>	Isonychidae	MH119135	[66]
56	<i>Isonychia ignota</i>	Isonychidae	HM143892	Unpublished
57	<i>Choroterpes yixingensis</i>	Leptophlebiidae	MW717290	[67]
58	<i>Deleatidium vernale</i>	Leptophlebiidae	OR414023	Direct Submission
59	<i>Leptophlebia vespertina</i>	Leptophlebiidae	MT622515	Direct Submission
60	<i>Leptophlebia marginata</i>	Leptophlebiidae	MT622514	Direct Submission
61	<i>Habrophlebiodes zjiensis</i>	Leptophlebiidae	GU936203	[59]
62	<i>Potamanthellus edmundsi</i>	Neophemeridae	OK272543	Direct Submission
63	<i>Neophemera projecta</i>	Neophemeridae	OK272542	Direct Submission
64	<i>Ephoron yunnanensis</i>	Polymitarcyidae	MF352159	[68]
65	<i>Potamanthus kwangsiensis</i>	Potamanthidae	MF352158	[68]
66	<i>Rhoenanthus</i> sp.	Potamanthidae	MF352145	[68]
67	<i>Potamanthus</i> sp. MT-2014	Potamanthidae	KM244674	[57]
68	<i>Siphonurus immanis</i>	Siphonuridae	FJ606783	Unpublished
69	<i>Siphonurus aestivalis</i>	Siphonuridae	MT862395	Direct Submission
70	<i>Siphonurus</i> sp. MT-2014	Siphonuridae	KM244684	[57]
71	<i>Siphuriscus chinensis</i>	Siphuriscidae	HQ875717	[69]
72	<i>Siphuriscus</i> sp. I JZ-2022	Siphuriscidae	ON729391	[20]
73	<i>Teloganodidae</i> sp.	<i>Teloganodidae</i>	KM244703	[57]
