

Table S1. List of specimens used for DNA extraction, with GenBank accession numbers

Species	Voucher code	Sampling locality and year	COI	28S	16S
<i>Asioditomyia bruneicola</i> sp. nov.	JSD5	Brunei, 2014	KT316838	KP288793	-
	JSD5B	Brunei, 2014	OL743128	-	-
<i>Asioditomyia japonica</i> (Sasakawa, 1963)	JSD10	Japan, 2015	OL743144	OL741620	-
<i>Asioditomyia lacii</i> sp. nov.	JSTW38	Taiwan, 2018	OL743120	OL741621	-
<i>Bibio marci</i> (Linnaeus, 1758)	JSOUT1	Czech Republic, 2013	KT316846	KJ136761.1	-
<i>Bolitophila nikolae</i> Ševčík sp. nov.	JSBN20	Taiwan, 2019	OL743127	-	-
<i>Catocha angulata</i> Jaschhof, 2009	JSC26	Slovakia, 2014	KT316837	-	KP288711
<i>Catocha brachycornis</i> (Spungis & Jaschhof, 2000)	JSC86	Estonia, 2015	MG684831	-	N/A
<i>Catocha incisa</i> Jaschhof, 2009	JSC84	Czech Republic, 2016	MG684811	-	MG684522
	JSTW32B	Taiwan, 2019	OL743123	-	OL711947
<i>Catocha jingfui</i> sp. nov.	JSTW32D	Taiwan, 2019	OL743140		
<i>Catocha latipes</i> Haliday, 1833	JSBA51	Czech Republic, 2020	OL743121	-	OL711945
	JSTW32I	Taiwan, 2019	OL743124	-	OL711948
<i>Catocha manmiao</i> sp. nov.	JSTW32L	Taiwan, 2019	OL743137	-	-
	JSTW32	Taiwan, 2019	OL743122	-	OL711946
<i>Catocha shengfengi</i> sp. nov.	JSTW32C	Taiwan, 2019	OL743136	-	-
<i>Catotricha subobsoleta</i> (Alexander, 1924)	JSOUT42	USA, 2014	KT316873	-	MG554124
<i>Celebesomyia inocellata</i> Saigusa, 1973	JSD8	Indonesia, 2007	OL743119	OL741618	-
	JSK59	Brunei, 2015	MT446924	-	-
<i>Chetoneura davidi</i> sp. nov.	JSK59B	Brunei, 2014	OL743129	-	-
	JSTW28B	Taiwan, 2018	OL743134	-	-
<i>Diadocidia pseudospinusola</i> sp. nov.	JSTW28	Taiwan, 2019	OL743133	-	-
	JSBA46	Thailand, 2014	OL743118	OL741615	-
<i>Ditomyia asiatica</i> sp. nov.	JSBA46D	Thailand, 2014	OL743126	-	-
	JSSJ3	Czech Republic, 2010	-	KJ136770	-
<i>Ditomyia fasciata</i> (Meigen, 1818)	JSDITFAS	Czech Republic, 2013	MT446886	-	-
<i>Ditomyia macroptera</i> Winnertz, 1852	JSD1A	Slovakia, 2013	OL743141	OL741616	-
<i>Euceroptatus mantici</i> sp. nov.	JSBA24	Thailand, 2017	MT446879	-	-
<i>Hadroneura martini</i> sp. nov.	JSTW25	Taiwan, 2019	OL743139	-	-
<i>Lestremia cinerea</i> Macquart, 1826	JSOUT6	Czech Republic, 2014	KJ136765	-	KJ136728
<i>Nepaetricha sikorai</i> sp. nov.	JSBA25A	Thailand, 2017	MT446880	-	-

<i>Nervijuncta</i> sp.	JSD11	New Zealand, 2016	MT446884	MT446784	-
<i>Paratinia furcata</i> sp. nov.	JSPAR-SKB	Slovakia, 2017	OL743130	-	-
<i>Paratinia sciarina</i> Mik, 1874	JSS6	Slovakia, 2016	KC435658	-	-
<i>Penthetria funebris</i> Meigen, 1804	JSOUT14	Slovakia, 2014	KT316858	KP288804	-
<i>Planetella taiwanensis</i> sp. nov.	JSPLA5	Taiwan, 2016	OL743131	-	-
<i>Platyceridion yunfui</i> sp. nov.	JSK81A	China, 2016	MT446937	-	-
<i>Rhipidita</i> sp.	JSD9	French Guiana, 2012	OL743143	OL741619	-
<i>Setostylus fangshuoi</i> sp. nov.	JSTW36	Taiwan, 2019	MT446958	-	-
	JSTW36B	Taiwan, 2019	OL743138	-	-
<i>Symmerus annulatus</i> (Meigen, 1830)	JSD2	Slovakia, 2012	KX453757	KX453708	-
<i>Symmerus kubani</i> Sevcik, 2000	JSD4	Thailand, 2007	OL743142	OL741617	-
<i>Symmerus nobilis</i> Lackschewitz, 1937	JSB3	Slovakia, 2012	KT316831	KJ136751	-
<i>Symmerus pectinatus</i> Saigusa, 1966	JSTW46	Taiwan, 2019	OL743125	OL741622	-
<i>Terocelion adami</i> sp. nov.	JSTW31	Taiwan, 2019	OL743135	-	-