

Tabel S1. List of the distribution on *Claassenia* spp.

Region	Country	Province	Species name
Oriental realm	Bhutan		<i>C. drukpa</i> (Stark & Sivec, 2010) *
	Myanmar	E Putao	<i>C. MyA</i> Stark & Gaufin, 1976 <sup>#</sup>
	China	Guangdong	<i>C. bischoffi</i> (Wu, 1935)
		Sichuan	<i>C. caudata</i> (Klapálek, 1916)
		Hubei	<i>C. fulva</i> Wu, 1973
		Sichuan	<i>C. gigas</i> (Klapálek, 1916)
		Sichuan	<i>C. longistyla</i> Wu, 1973
		Fujian, Guangdong, Hunan, Guangxi	<i>C. magna</i> Wu, 1948
		Chongqing, Shaanxi	<i>C. xucheni</i> Chen, 2019
		Guizhou	<i>C. tincta</i> (Navás, 1923)
		Sichuan, Yunnan Gansu,	<i>C. semibrachyptera</i> Wu & Claassen, 1934*
		Tibet, Qinghai	<i>C. qingzanga</i> Xiang, Huo & Du*
Palearctic		Shaanxi	<i>C. shaanxiensis</i> sp. nov.
		Liaoning, Jilin	<i>C. radiata</i> (Klapálek, 1916)
		Heilongjiang	<i>C. brachyptera</i> Brinck, 1954*
	Russia	Far East	<i>C. brachyptera</i> Brinck, 1954*
	North Korea		<i>C. radiata</i> (Klapálek, 1916)
Nearctic	USA		<i>C. sabulosa</i> (Banks, 1900) *
	Canada		<i>C. sabulosa</i> (Banks, 1900) *

\* Brachypterous species

<sup>#</sup> Informally described and supported species

Tabel S2. List of downloaded data with accession number from NCBI and EMBL.

Family	Subfamily	Species	GenBank Accession Number	EMBL-EBI ID
Perlidae	Perlinae	<i>Claassenia xucheni</i>	OK021653	URS00019BE08C_2898275
		<i>Claassenia magna</i>	OK012602	URS000278DBCC_3049377
		<i>Claassenia qingzanga</i>	MN419914	URS000273A68F_3049376
		<i>Neoperla ignacsiveci</i>	KX091858	URS00019CC53F_2021294
		<i>Neoperla clymene</i>	JN200655	URS00004D84F4_466750
		<i>Neoperla</i> sp. FS-2017	KX091859	URS00019E3E7A_2021305
		<i>Dinocras cephalotes</i>	KF484757	URS000056F7

				D8_441509
		<i>Oyamia seminigra</i>	OL505578	URS000010FD 30_1268355
		<i>Togoperla</i> sp. KW-2014	KM409708	URS0000A6C3 09_1562207
		<i>Neoperlops gressitti</i>	MN400756	URS0001A05F 81_2684670
	Acroneuriinae	<i>Acroneuria carolinensis</i>	MN969989	URS00022417 62_219317
		<i>Acroneuria hainana</i>	KM199685	URS00007F74 29_1571577
Styloperlidae		<i>Styloperla spinicercia</i>	NC_034809	URS0000DDE D98_1987586

Table S3. Location coordinates of *Claassenia* from GBIF and literatures.

genus	longitude	latitude
<i>claassenia</i>	102.0208	37.3125
<i>claassenia</i>	102.2292	29.9375
<i>claassenia</i>	102.8125	30.35417
<i>claassenia</i>	103.0625	30.02083
<i>claassenia</i>	103.4375	29.5625
<i>claassenia</i>	103.6458	30.97917
<i>claassenia</i>	103.7708	29.5625
<i>claassenia</i>	103.8542	30.0625
<i>claassenia</i>	103.8542	36.0625
<i>claassenia</i>	103.8958	27.77083
<i>claassenia</i>	104.0625	30.6875
<i>claassenia</i>	104.1458	30.8125
<i>claassenia</i>	104.6458	28.77083
<i>claassenia</i>	105.2292	32.5625
<i>claassenia</i>	105.6042	30.52083
<i>claassenia</i>	106.2708	32.85417
<i>claassenia</i>	106.5625	31.0625
<i>claassenia</i>	107.7708	34.10417
<i>claassenia</i>	107.8958	31.10417
<i>claassenia</i>	108.3542	23.47917
<i>claassenia</i>	108.5208	31.89583
<i>claassenia</i>	108.6875	31.9375
<i>claassenia</i>	109.0625	23.4375
<i>claassenia</i>	110.1875	24.14583
<i>claassenia</i>	110.2292	24.1875
<i>claassenia</i>	110.9792	30.39583

<i>claassenia</i>	111.0208	26.39583
<i>claassenia</i>	112.3125	25.5625
<i>claassenia</i>	112.8958	24.97917
<i>claassenia</i>	113.0208	24.9375
<i>claassenia</i>	113.2708	23.14583
<i>claassenia</i>	117.4792	27.35417
<i>claassenia</i>	117.6875	27.72917
<i>claassenia</i>	118.0208	27.77083
<i>claassenia</i>	119.3125	26.10417
<i>claassenia</i>	122.3542	53.47917
<i>claassenia</i>	124.4375	40.1875
<i>claassenia</i>	125.3958	43.85417
<i>claassenia</i>	126.5625	43.85417
<i>claassenia</i>	97.85417	29.6875
<i>claassenia</i>	98.60417	29.6875
<i>claassenia</i>	99.1875	25.10417
<i>claassenia</i>	99.5625	25.47917
<i>claassenia</i>	99.60417	24.85417