Supplement material for the article «The first attempt of studying the species diversity of fish in the lake Khanka using DNA-barcoding methods» by Turanov S.V., Kartavtsev Yu.Ph., Shapovalov M.E.; Russian Journal of Genetics.

Table 1. The information about fish specimens from the lake Khanka and nucleotide sequences of *Co-1* gene used in the analysis.

Order	Family	Species	Genetic ID in the local collection	Museum number of voucher specimen (MIMB)	BOLD Process ID	GenBank accession number	Sampling location*
Cypriniformes	Cyprinidae	*Acheilognathus* sp. 1	AC12-3	28580	FOLK001-15	MF805623	1
		Acheilognathus sp. 1	AC12-1	28631	FOLK002-15	MF805626	1
		Acheilognathus sp. 1	AC12-2	28579	FOLK003-15	MF805625	1
		Acheilognathus sp. 1	AC12-4	28581	FOLK004-15	MF805624	1
		Acheilognathus sp. 2	AC12-6	28583	FOLK065-16	MF805627	1
		Carassius gibelio	CAG12-2	28577	FOLK006-15	MF805628	1
		Carassius gibelio	CAG12-1	28630	FOLK005-15	MF805629	1
		Carassius gibelio	CAG12-3	28578	FOLK007-15	MF805630	1

Order	Family	Species	Genetic ID in the local collection	Museum number of voucher specimen (MIMB)	BOLD Process ID	GenBank accession number	Sampling location*
		Chanodichthys erythropterus	CHE12-4	28706	FOLK030-15	MF805636	2
		Chanodichthys erythropterus	CHE12-7	28613	FOLK032-15	MF805637	2
		Chanodichthys erythropterus	CHE12-1	28867	FOLK008-15	MF805632	2
		Chanodichthys erythropterus	CHE12-2	28704	FOLK009-15	MF805633	2
		Chanodichthys erythropterus	CHE12-3	28866	FOLK010-15	MF805634	2
		Chanodichthys erythropterus	CHE12-6	28607	FOLK011-15	MF805635	2
		Chanodichthys erythropterus	CHE12-5	28605	FOLK031-15	MF805631	2
		Chanodichthys mongolicus	CHM12-5	28599	FOLK036-15	MF805642	2
		Chanodichthys mongolicus	CHM12-4	28597	FOLK035-15	MF805638	2
		Chanodichthys	CHM12-3	28596	FOLK034-15	MF805639	2

Order	Family	Species	Genetic ID in the local collection	Museum number of voucher specimen (MIMB)	BOLD Process ID	GenBank accession number	Sampling location*
		mongolicus					
		Chanodichthys mongolicus	CHM12-1	28608	FOLK033-15	MF805640	1
		Chanodichthys mongolicus	CHM12-2	28619	FOLK012-15	MF805641	1
		Chanodichthys oxycephalus	CHO12-7	28623	FOLK039-15	MF805643	1
		Chanodichthys oxycephalus	CHO12-3	28703	FOLK037-15	MF805644	1
		Chanodichthys oxycephalus	CHO12-1	28699	FOLK013-15	MF805645	1
		Chanodichthys oxycephalus	CHO12-2	28698	FOLK014-15	MF805646	1
		Chanodichthys oxycephalus	CHO12-4	28700	FOLK015-15	MF805647	1
		Chanodichthys oxycephalus	CHO12-8	28624	FOLK016-15	MF805648	1

Order	Family	Species	Genetic ID in the local collection	Museum number of voucher specimen (MIMB)	BOLD Process ID	GenBank accession number	Sampling location*
		Chanodichthys oxycephalus	CHO12-6	28616	FOLK038-15	MF805649	1
		Culter alburnus	CUA12-2	28602	FOLK040-15	MF805653	2
		Culter alburnus	CUA12-1	–	FOLK062-15	MF805651	2
		Culter alburnus	CUA12-5	28598	FOLK042-15	MF805652	2
		Culter alburnus	CUA12-4	28587	FOLK041-15	MF805650	2
		Culter alburnus	CUA12-3	28586	FOLK017-15	MF805654	2
		Cyprinus rubrofuscus	CYR12-3	28609	FOLK044-15	MF805655	1
		Cyprinus rubrofuscus	CYR12-4	28610	FOLK045-15	MF805656	1
		Cyprinus rubrofuscus	CYR12-1	28697	FOLK018-15	MF805654	1
		Cyprinus rubrofuscus	CYR12-5	28614	FOLK046-15	MF805657	1
		Cyprinus rubrofuscus	CYR12-2	28606	FOLK043-15	MF805659	1

Order	Family	Species	Genetic ID in the local collection	Museum number of voucher specimen (MIMB)	BOLD Process ID	GenBank accession number	Sampling location*
		Hemibarbus maculatus	HEM12-1	28627	FOLK019-15	MF805660	2
		Hemibarbus maculatus	HEM12-2	28628	FOLK047-15	MF805661	2
		Hemiculter leucisculus	HEL12-2	28591	FOLK049-15	MF805665	2
		Hemiculter leucisculus	HEL12-5	28594	FOLK052-15	MF805667	2
		Hemiculter leucisculus	HEL12-4	28593	FOLK051-15	MF805662	2
		Hemiculter leucisculus	HEL12-3	28592	FOLK050-15	MF805666	2
		Hemiculter leucisculus	HEL12-6	28595	FOLK020-15	MF805663	2
		Hemiculter leucisculus	HEL12-1	28590	FOLK048-15	MF805664	2
		Hemiculter lucidus	HELU12-5	28625	FOLK053-15	MF805669	1
		Hemiculter	HELU12-3	28618	FOLK023-15	MF805670	1

Order	Family	Species	Genetic ID in the local collection	Museum number of voucher specimen (MIMB)	BOLD Process ID	GenBank accession number	Sampling location*
		lucidus					
		Hemiculter lucidus	HELU12-4	28621	FOLK024-15	MF805673	1
		Hemiculter lucidus	HELU12-6	28626	FOLK025-15	MF805672	1
		Hemiculter lucidus	HELU12-2	28701	FOLK022-15	MF805671	1
		Hemiculter lucidus	HELU12-1	28702	FOLK021-15	MF805668	1
Siluriformes	Bagridae	*Tachysurus brashnikowi*	PEB12-1	– -	FOLK063-15	MF805674	1
		Tachysurus fulvidraco	PEF12-5	28575	FOLK054-15	MF805686	2
		Tachysurus fulvidraco	PEF12-2	28534	FOLK027-15	MF805687	2
		Tachysurus fulvidraco	PEF12-1	28528	FOLK026-15	MF805685	2
Cypriniformes	Cyprinidae	*Plagiognathops*	PMI14-1	-–	FOLK064-15	MF805675	2

Order	Family	Species	Genetic ID in the local collection	Museum number of voucher specimen (MIMB)	BOLD Process ID	GenBank accession number	Sampling location*
		microlepis					
Perciformes	Percidae	*Sander lucioperca*	SAL12-3	28617	FOLK028-15	MF805676	1
		Sander lucioperca	SAL12-1	28611	FOLK055-15	MF805677	1
		Sander lucioperca	SAL12-2	28612	FOLK056-15	MF805678	1
		Sander lucioperca	SAL12-4	28620	FOLK057-15	MF805679	1
Cypriniformes	Cyprinidae	*Saurogobio dabryi*	SAD12-1	28622	FOLK058-15	MF805682	1
		Saurogobio dabryi	SAD12-3	28600	FOLK059-15	MF805680	1
		Saurogobio dabryi	SAD12-4	28601	FOLK060-15	MF805681	1
Siluriformes	Siluridae	*Silurus asotus*	PAA12-2	28603	FOLK061-15	MF805683	2
		Silurus asotus	PAA12-1	28705	FOLK029-15	MF805684	1

* Coordinates: 1 – 44.9612 N, 132.238 E; 2 – 44.931 N, 132.129 E

Table 2. Matrix of the mean intraspecific (diagonally) and interspecific (lower-left) genetic K2P-corrected pairwise distances, calculated based on the nucleotide sequences of *Co-1* gene from the fishes of the lake Khanka.

	Species name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	*Acheilognathus* sp. 1	000																
2	*Acheilognathus* sp. 2	2.1	n/c*															
3	*Carassius gibelio*	19.8	20.3	000														
4	*Chanodichthys erythropterus*	20.9	21.9	18.3	000													
5	*Chanodichthys mongolicus*	21.4	22.5	18.6	3.5	000												
6	*Chanodichthys oxycephalus*	20.6	21.1	18.4	3.1	3.9	0.1											
7	*Culter alburnus*	21.5	22.0	19.1	5.9	4.6	5.8	0.2										
8	*Cyprinus rubrofuscus*	18.4	17.7	12.0	18.3	18.3	17.9	17.4	0.3									
9	*Hemibarbus maculatus*	24.2	24.7	15.2	17.6	17.3	16.1	16.9	16.2	0.2								
10	*Hemiculter leucisculus*	20.2	21.8	18.6	8.3	9.6	9.2	10.1	17.9	17.2	0.1							
11	*Hemiculter lucidus*	22.2	23.1	17.4	7.8	9.6	7.9	9.6	16.7	14.5	6.8	0.1						
12	*Tachysurus brashnikovi*	22.2	21.9	22.9	22.7	22.7	22.2	23.2	21.6	21.8	21.7	21.1	n/c*					
13	*Tachysurus fulvidraco*	25.7	26.0	22.9	22.7	22.8	22.5	24.4	24.3	23.7	21.7	20.9	12.4	000				
14	*Plagiognathops microlepis*	24.1	24.1	17.4	11.7	12.0	12.0	13.5	19.0	16.9	11.9	10.1	21.2	22.3	n/c*			
15	*Sander lucioperca*	24.4	23.9	25.3	23.9	25.6	24.7	25.0	24.8	24.6	24.7	25.3	22.7	24.8	25.8	000		
16	*Saurogobio dabryi*	19.4	20.2	18.9	16.1	15.7	16.5	15.8	18.5	17.2	16.8	16.3	22.6	23.8	18.1	26.6	0.1	
17	*Silurus asotus*	22.7	23.5	23.6	23.5	22.6	22.2	23.7	23.8	19.9	21.0	22.3	19.5	19.0	24.0	22.9	22.4	0.8

* - not calculated

Table 3. Taxonomic position (following Bogutskaya, Naseka, 2004; Parin et al., 2014) of the fish species investigated in this study. The names of different taxa based on different authors' opinion are provided in brackets. Explanation is given in the manuscript.

Order	Family	Subfamily	Genus and species
Cypriniformes	(Acheilognathidae)	Acheilognathinae	*Acheilognathus sp. 1*
			Acheilognathus sp. 2
	Cyprinidae	Cultrinae	*Chanodichthys erythropterus* (Basilewsky, 1855)
			Ch. mongolicus (Basilewsky, 1855)
			Ch. oxycephalus (Bleeker, 1871)
			Culter alburnus Basilewsky, 1855
			Hemiculter lucidus (Dybowski, 1872)
			H. leucisculus (Basilewsky, 1855)
		Xenocyprininae	*Plagiognathops microlepis (Bleeker, 1871)*
		Gobioninae (*Hemibarbus* group)	*Hemibarbus maculatus* Bleeker, 1871
		(Sarcocheilichthyini) (*Pseudogobio* group)	*Saurogobio dabryi* Bleeker, 1871
		Cyprininae	*Cyprinus rubrofuscus* LaCepede, 1803
			Carassius gibelio (Bloch, 1782)
Siluriformes	Siluridae		*Silurus asotus (Linnaeus, 1758)*
	Bagridae		*Tachysurus fulvidraco (Richardson, 1846)*
			T. brashnikowi (Berg, 1907)
Perciformes	Percidae		*Sander lucioperca (Linnaeus, 1758)*