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SUPPLEMENTARY MATERIAL

Exploring high-mountain limnic faunas: discovery of a novel endemic bivalve species (Sphaeriidae : *Pisidium*) in the Nepal Himalayas

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Table S1. List of studied specimens including taxon, haplotype number, DNA voucher number, locality information (including locality codes, which were generated according to the standard ISO 3166-1 alpha 2, for all sites illustrated in Fig. 1), and GenBank accession numbers

Locality details (including habitat type and nearest town/city) are given for the sampling sites located in Nepal. All sphaeriid specimens collected in Nepal are highlighted in green (newly sequenced specimens are in bold). Source: *Clewing *et al.* 2013, **Schultheiß *et al.* 2008.

Genus	Species	DNA voucher no.	UGSB no.	Specimen code	Locality	Coordinates	COI GenBank accession no.	16S GenBank accession no.	H3 GenBank accession no.	28S GenBank accession no.
<i>Musculium</i>	<i>indicum</i>	17488	UGSB 9098	NP03/4	Nepal, Bagmati, small stream in the Godavari Botanical Gardens (south of Kathmandu)	27.59693°N 85.37914°E	KF483411 *	KF483311 *	KU376220	KF483345 *
		17486	UGSB 9096	NP03/5	Nepal, Bagmati, small stream in the Godavari Botanical Gardens (south of Kathmandu)	27.59693°N 85.37914°E	KU376201	KU376172		
		17485	UGSB 9095	NP03/6	Nepal, Bagmati, small stream in the Godavari Botanical Gardens (south of Kathmandu)	27.59693°N 85.37914°E	KU376202	KU376173		
<i>kashmirensis</i>	17245	UGSB 8379	CN10/2	China, Tibet	30.76610°N 85.01230°E	KF483370 *	KF483263 *	KU376221	KF483325 *	
		UGSB 8412	CN08/3	China, Tibet	30.81483°N 81.56236°E	KF483368 *	KF483258 *			
	17470	UGSB 9048	GE03/1	Georgia, Gurein	42.04722°N 41.76638°E	KF483391 *	KF483289 *	KU376222		
<i>Pisidium</i>	<i>alexiei</i>	5143	UGSB 10577	NP04/1	Nepal, Mechi, tributary of Tamor River (~300 m northeast of Tapethok)	27.51667°N 87.70000°E	KF483412 *	KF483312 *	KU376223	KF483346 *
		5240	UGSB 10583	NP05/1	Nepal, Mechi, floodplain of Tamor River (~1 km northeast of Chiruwa)	27.48717°N 87.74000°E	KF483414 *	KF483314 *	KU376224	
		5241	UGSB 10584	NP05/2	Nepal, Mechi, floodplain of Tamor River (~1 km northeast of Chiruwa)	27.48717°N 87.74000°E		KU376174		
		5232	UGSB 10578	NP19/1	Nepal, Mechi, livestock water with freshwater inflow in the village Kunjari	27.36667°N 87.76667°E		KU376175		
		5233	UGSB 10579	NP20/1	Nepal, Mechi, tributary of Tamor River (~1.5 km north of Siwan)	27.45300°N 87.70633°E		KU376176		
<i>annandalei</i>	15009	UGSB	NP06/1	Nepal, Seti, side valley of Jadari	29.47972°N	KF483415	KF483315			

	7004			Khola, floodplain (near Talla Bagar)	81.12778°E	*	*		
	17484	UGSB 9094	NP03/2	Nepal, Bagmati small stream in the Godavari Botanical Gardens (south of Kathmandu)	27.59693°N 85.37914°E	KF483409 *	KF483309 *	KU376225	KF483330 *
	17483	UGSB 9093	NP03/7	Nepal, Bagmati small stream in the Godavari Botanical Gardens (south of Kathmandu)	27.59693°N 85.37914°E			KU376203	KU376177
<i>atkinsonianum</i>	3328	UGSB 10571	NP02/1	Nepal, Karnali, inflow of Chaudhabise Khola (Murligaon)	29.30000°N 82.28333°E	KF483408 *	KF483307 *		KU376226
	6024	UGSB 10594	NP04/2	Nepal, Mechi, tributary of Tamor River (~300 m northeast of Tapethok)	27.51667°N 87.70000°E	KF483413 *	KF483313 *		KU376227
	6025	UGSB 10595	NP04/3	Nepal, Mechi, tributary of Tamor River (~300 m northeast of Tapethok)	27.51667°N 87.70000°E			KU376204	KU376178
<i>casertanum</i>	17462	UGSB 9075	GR01/1	Greece, West Macedonia	40.90222°N 21.82500°E	KF483392 *	KF483290 *	KU376228	KF483338 *
	5044	UGSB 10544	AL01/1	Albania, Qark Korca	40.89623°N 20.71040°E	KF483356 *	EU559094 **		
	5130	UGSB 10562	DE02/1	Germany, Brandenburg	52.24666°N 14.45416°E	KF483386 *	EU559092 **		
	15012	UGSB 11142	IR01/1	Iran, Fars	29.57083°N 51.94250°E	KF483394 *	KF483293 *	KU376229	KF483341 *
	17454	UGSB 9067	TR02/1	Turkey, Antalya	37.10960°N 30.58551°E	KF483418 *	KF483316 *		KF483348 *
<i>cf. casertanum</i>	5016	UGSB 10556	MK03/1	Macedonia, municipality of Struga	41.34999°N 20.62245°E	KF483399 *	KF483299 *		KU376192
	15838	UGSB 10568	LS02/1	Lesotho, Mokhotlong	-29.11645°N 28.86351°E	KF483396 *	KF483295 *	KU376230	KU376193
<i>clarkeanum</i>	16180	UGSB 7836	NP07/1	Nepal, Narayani, inflow of River Rapti, Chitwan National Park (3.5 km east of Kasara)	27.55194°N 84.36639°E			KU376205	KU376231
<i>costulosum</i>	15815	UGSB 10599	ZA01/1	South Africa, Mpumalanga	-27.01371°N 29.87412°E	KF483422 *	KF483323 *	KU376232	KU376194
<i>dammermani</i>	22764	UGSB 16707	ID04/1	Indonesia, Sulawesi	-05.05116°N 119.71847°E			KU376200	KU376249
<i>cf. dammermani</i>	18467	UGSB 10984	ID02/1	Indonesia, Sulawesi	02.47667°N 121.25977°E	KF483393 *	KF483292 *	KU376248	KF483340 *
<i>edlaueri</i>	17444	UGSB 9058	MK08/1	Macedonia, municipality of Struga	41.09974°N 20.63804°E	KF483403 *	KF483301 *		KF483342 *
<i>ellisi</i>	15010	UGSB	NP18/1	Nepal, Seti, stream in the Khaptad	29.39278°N			KU376219	KU376179

	17259			National Park (~11 km southeast of Koiralakot)	81.13639°E				
	15011	UGSB 11141	NP10/1	Nepal, Seti (near Lokanda)	29.66000°N 81.35000°E	KU376208	KU376180	KU376233	KU376196
	5561	UGSB 10586	NP11/1	Nepal, Mechi, Omjee Khola, source stream (~200 m southwest of Omjee)	27.48333°N 87.90833°E	KU376209	KU376181		
	5562	UGSB 10587	NP11/2	Nepal, Mechi, Omjee Khola, source stream (~200 m southwest of Omjee)	27.48333°N 87.90833°E	KU376210	KU376182		
	5563	UGSB 10588	NP12/1	Nepal, Mechi, Ghunsa Khola, spring (~2 km north of Sekathum)	27.55233°N 87.83867°E	KU376211	KU376183		
	5564	UGSB 10589	NP12/2	Nepal, Mechi, Ghunsa Khola, spring (~2 km north of Sekathum)	27.55233°N 87.83867°E	KU376212	KU376184		
	8464	UGSB 10596	NP13/1	Nepal, Mechi, source stream (~1 km east of Taplejung)	27.35000°N 87.66667°E	KU376214	KU376185		
<i>cf. ellisi</i>	3324	UGSB 10569	NP14/1	Nepal, Karnali, source stream (near Pahada)	29.06667°N 82.70000°E	KU376215	KU376186		
	5565	UGSB 10590	NP15/1	Nepal, Karnali, Bheri Khola, limnocene spring and source stream (near Kaigaon)	29.10717°N 82.58867°E	KU376216	KU376187		KU376197
	5569	UGSB 10592	NP16/1	Nepal, Karnali, source streams (near Rimi)	29.13400°N 82.55900°E	KU376217	KU376188		
	3502	UGSB 10572	NP12/3	Nepal, Mechi, Ghunsa Khola, spring (~2 km north of Sekathum)	27.55233°N 87.83867°E	KU376213	KU376189	KU376234	
<i>globulare</i>	5131	UGSB 10563	DE03/1	Germany, Sachsen	51.33000°N 14.48250°E	KF483423 *	EU559114 **	KU376235	KF483334 *
<i>henslowanum</i>	4862	UGSB 10546	MK01/1	Macedonia, municipality of Resen	40.93665°N 20.94414°E	KF483398 *	KF483297 *		
<i>javanum</i>	22767	UGSB 16710	ID03/1	Indonesia, Java, small pond in the Botanical Garden Bogor (Kebun Raya Bogor)	-06.59891°N 106.80190°E		KU376190		KU376198
<i>kuiperi</i>	3327	UGSB 10570	NP01/1	Nepal, Karnali, helocene spring and source stream (near Kaigaon)	29.08333°N 82.65000°E	KF483407 *	KF483306 *		
	17487	UGSB 9097	NP03/3	Nepal, Bagmati small stream in the Godavari Botanical Gardens (south of Kathmandu)	27.59693°N 85.37914°E	KF483410 *	KF483310 *	KU376236	KF483344 *
	8466	UGSB 10597	NP17/1	Nepal, Mechi, source stream (~1.5 km southwest of Gyabla)	27.60333°N 87.86917°E	KU376218	KU376191	KU376237	
<i>lilljeborgii</i>	5136	UGSB 10598	NO01/1	Norway, Nordland	68.25166°N 13.65750°E	KF483406 *	KF483305 *	KU376238	KF483343 *

<i>nevillianum</i>	3510	UGSB 7845	NP09/1	Nepal, Rapti, River Rapti (~850 m southwest of Badha Ghumna)	27.83527°N 82.53972°E	KU376206	EU559132 **	KU376239
	3511	UGSB 7844	NP09/2	Nepal, Rapti, River Rapti (~850 m southwest of Badha Ghumna)	27.83527°N 82.53972°E	KU376207	EU559133 **	
	18469	UGSB 10986	VN01/1	Vietnam, Ninh Binh	20.23361°N 105.72194°E		KF483322 *	KF483350 *
<i>nitidum</i>	3323	UGSB 10561	DE01/1	Germany, Mecklenburg-Vorpommern	53.58138°N 10.95250°E	KF483385 *	EU559134 **	
	18483	UGSB 11000	CN21/5	China, Tibet	33.57666°N 79.86945°E	KF483384 *	KF483286 *	KU376240
<i>obtusale</i>	6027	UGSB 10565	DE05/1	Germany, Thüringen	51.08027°N 10.48500°E	KF483387 *	EU559137 **	KF483335 *
<i>personatum</i>	17456	UGSB 9069	TR02/2	Turkey, Antalya	37.10960°N 30.58551°E	KF483417 *	KF483318 *	KU376241
	17466	UGSB 9045	GE01/1	Georgia, Mzcheta-Mtianeti	42.07222°N 44.95972°E	KF483389 *	KF483288 *	KF483336 *
sp. 1	17477	UGSB 9087	CN14/1	China, Qinghai	35.28861°N 98.34894°E	KF483371 *	KF483269 *	KU376242 *
sp.	18466	UGSB 10983	ID01/1	Indonesia, Sulawesi	02.76075°N 121.55860°E		KF483291 *	KF483339 *
<i>stewarti</i>	17479	UGSB 9089	CN15/1	China, Qinghai	35.28861°N 80.89935°E	KF483373 *	KF483267 *	KU376243 *
	17969	UGSB 10006	CN16/1	China, Tibet	32.45972°N 80.89935°E	KF483375 *	KF483271 *	
<i>subtruncatum</i>	17469	UGSB 9047	GE02/1	Georgia, Samegreto-Zemo Svaneti	42.23306°N 41.84722°E	KF483390 *	KF483287 *	KU376244 *
	17478	UGSB 9088	CN14/2	China, Qinghai	35.28861°N 98.34894°E	KF483372 *	KF483270 *	KF483327 *
<i>supinum</i>	6019	UGSB 10564	DE04/1	Germany, Brandenburg	52.48727°N 13.64439°E	KF483388 *	EU559148 **	KU376245
<i>viridarium</i>	15834	UGSB 10567	LS01/1	Lesotho, Thaba-Tseka	-29.51302°N 28.52350°E	KF483397 *	KF483296 *	KU376246 *
<i>zugmayeri</i>	18472	UGSB 10989	CN18/1	China, Tibet	33.62848°N 79.76558°E	KF483377 *	KF483275 *	KU376247
	18480	UGSB 10997	CN22/1	China, Tibet	33.62711°N 79.77509°E	KF483382 *	KF483283 *	KF483333 *
<i>Sphaerium</i> sp.	12687	UGSB 4856	UG01/1	Uganda, Mukono	0.22240°N 32.63433°E	KF483419 *	KF483319 *	KF483349 *

Supplementary references

Literature consulted for the compilation of the distribution and elevational range data provided in Table 3

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