



Complete list of sequences used in the molecular phylogenetic analysis

Electronic supplementary material 2 to the article:

Tumanov D.V. & Tsvetkova A.Yu. 2023. Some have drops and some do not, but can we rely on that? Re-investigation of *Diphascion tenue* (Tardigrada: Eutardigrada) with discussion of the phylogeny and taxonomy of the superfamily Hypsibioidae. *Zoosystematica Rossica*, **32**(1): 50–74.

Species	18S rRNA	28S rRNA
Hypsibioidae		
Acuntucidae		
<i>Acutuncus antarcticus</i> (Richters, 1904)	OM278641	OM278644
<i>Acutuncus mariae</i> Zawierucha, 2020	MW012739	MW012742
Calohypsibiidae		
<i>Calohypsibius ornatus</i> (Richters, 1900)	OM304865	OM304872
Hypsibiidae		
<i>Borealibius zetlandicus</i> (Murray, 1907)	HQ604923, HQ604924	
<i>Cryobiotus klebelsbergi</i> (Mihelčič, 1959)	KT901827	KC582835
<i>Diphascion greveni</i> Dastych, 1984, stat. resurr. (= <i>Adropion greveni</i>)	OQ351322, OQ351323, OQ351324, OQ351325, OQ351326	OQ357550, OQ357551, OQ357552, OQ357553, OQ357554
<i>Diphascion higginsii</i> Binda, 1971	HQ604932	
<i>Diphascion mauccii</i> Dastych et McInnes, 1996, stat. resurr. (= <i>Adropion mauccii</i>)	EU266945	
<i>Diphascion pingue</i> (Marcus, 1936)	FJ435734, FJ435736	FJ435776, FJ435777
<i>Diphascion cf. pingue</i> (Marcus, 1936)	OP035716, OQ351320, OQ351321	OP035795, OP035796, OQ357549
<i>Diphascion puniceum</i> (Jennings, 1976)	EU266946, EU266947, EU266948, EU266949	
<i>Hypsibius dujardini</i> (Doyère, 1840)	MG777532	MG777533
<i>Hypsibius exemplaris</i> Gąsiorek et al., 2018	HQ604943	MG800337
<i>Hypsibius repentinus</i> Tumanov et Avdeeva, 2021	MN927184	MW549064
<i>Hypsibius scabropygus</i> Cuénot, 1929	AM500649, KC582831	
<i>Hypsibius</i> sp. “Japan”	ON898549, ON898549	ON927924, ON927925
<i>Kararehnius gregorii</i> Zawierucha, 2023	OP191647, OP191648	OP191640, OP191641
<i>Kopakaius nicolae</i> Zawierucha, 2023	OP191650	
<i>Kopakaius</i> sp. 1	OP191642, OP191646	OP191651, OP191654
Itaquaconidae		
<i>Adropion belgicae</i> (Richters, 1911)	HQ604925, HQ604926	
<i>Adropion scoticum</i> (Murray, 1905)	MT126752, MT126753, OP035715	MT126770, MT126771, OP035794
<i>Adropion</i> “sp n 1_PL 276”	MT126748	MT126766
<i>Adropion</i> “sp n 2_NO 018”	MT126749	MT126767
<i>Arctodiphascion tenue</i> (Thulin, 1928), comb. nov. (= <i>Diphascion tenue</i>)	OQ351311, OQ351312, OQ351313, OQ351314, OQ351315, OQ351316	OQ357540, OQ357541, OQ357542, OQ357543, OQ357544, OQ357545

Species	18S rRNA	28S rRNA
<i>Arctodiphasccon wuyingensis</i> (Sun, 2020), comb. nov. (= <i>Diphasccon wuyingensis</i>)	MK387067	
<i>Astatumen trinacriae</i> (Arcidiacono, 1962)	FJ435731, FJ435732, FJ435733	FJ435773, FJ435774, FJ435775
<i>Astatumen bartosi</i> (Węglarska, 1959)	MT126754	MT126772
<i>Astatumen</i> sp.	OQ351318	OQ357547
<i>Astatumen</i>(?) sp. “Spitsbergen”	OQ351319	OQ357548
<i>Guidettion prorsirostre</i> (Thulin, 1928)	MT126750, MT126751	MT126768, MT126769
<i>Guidettion</i> sp.	OM304861, OQ351310	OM304868, OQ357539
<i>Insulobius orientalis</i> Gąsiorek et Michalczyk, 2020	MT126764	MT126783
<i>Itaquascon</i> sp. “Ughanda”	MT126759	MT126778
<i>Mesocrista revelata</i> Gąsiorek et al., 2016	KU528627, KU528627, KU528627, KU528627, OP035717	KX347536, KU528631, KU528630, KU528628, OP035797
<i>Mesocrista spitzbergensis</i> (Richters, 1903)	KX347532	KX347533
<i>Meplitumen</i> sp.	OQ351317	OQ357546
<i>Platicrista</i> aff. <i>angustata</i> (Murray, 1905)	MT126760, MT126761, MT126762	MT126779, MT126780, MT126781
<i>Platicrista horribilis</i> Kaczmarek et Michalczyk, 2003	MT126763	MT126782
<i>Raribius</i> sp.	MT126758	MT126777
Microhypsibiidae		
<i>Microhypsibius</i> sp. 1	OM304866	OM304873
<i>Microhypsibius</i> sp. 2	OM304867	OM304874
Pilatobiidae		
<i>Notahypsibius pallidoides</i> (Pilato et al., 2011)	MN912103	MK967962
<i>Pilatobius</i> cf. <i>bullatus</i> (Murray, 1905)	OM304862	OM304869
<i>Pilatobius glacialis</i> Zawierucha et al., 2020	MW012733	MW012743, MW012744
<i>Pilatobius islandicus</i> Buda et Zawierucha, 2018	MH682258	MH682257
<i>Pilatobius nuominensis</i> Sun et al., 2021	MT330115	MT330116
<i>Pilatobius recamieri</i> (Richters, 1911)	KX347526	KX347527
Ramazzottiidae		
<i>Cryoconicus kaczmareki</i> Zawierucha et al., 2018	MG432796	MG432797
<i>Hebesuncus ryani</i> Dastych et Harris, 1994	EU266956	
<i>Ramazzottius oberhaeuseri</i> (Doyère, 1840)	MG573241	MG573242
<i>Ramazzottius varieornatus</i> Bertolani et Kinchin, 1993	AP013352	MG432818
Incerta familia		
<i>Mixibius saracenus</i> (Pilato, 1973)	HQ604955	
Macrobiotioidea		
<i>Richtersius coronifer</i> (Richters, 1903)	MH681760	MH681757
<i>Macrobiotus shonaicus</i> Stec et al., 2018	MG757132	MG757133

Note. Sequences produced in this study and the respective taxa are given in bold.