

Supplementary Material S1

Table S1. List of specimens used for the molecular analyses in Korshunova et al. 2020 with the addition of the new data (highlighted in bold).

<i>Species name</i>	<i>Voucher</i>	<i>Locality</i>	<i>COI</i>	<i>16S</i>
<i>Cabangus regius</i>	CASIZ:179492	Philippines	HM162708	HM162629
<i>Cabangus regius</i>	CASIZ:179493	Philippines	JN869451	JN869407
<i>Crosslandia viridis</i>	CASIZ192342		KP871637	KP871685
<i>Dendronotus albus</i>	ZMMU:Op-566	USA: Washington	KX788135	KX788123
<i>Dendronotus albus</i>	LACM:2004-2.2	USA: California	KX058081	KX058121
<i>Dendronotus arcticus arcticus</i>	ZMMU:Op-561	Russia: Laptev Sea	KX788140	KX788129
<i>Dendronotus arcticus arcticus</i>	ZMMU:Op-562	Russia: Laptev Sea	KX788141	KX788130
<i>Dendronotus arcticus arcticus</i>	ZMMU:Op-563	Russia: Laptev Sea	KX788142	KX788131
<i>Dendronotus arcticus arcticus</i>	ZMMU: Op-564	Russia: Laptev Sea	OQ588822	OQ594740
<i>Dendronotus arcticus arcticus</i>	ZMMU:Op-356 (the correct voucher number)	Russia: Kara Sea	KP984995	KP984989
<i>Dendronotus arcticus gartensis n. subsp.</i>	ZMMU Op-804	Norway	OQ588823	OQ594741
<i>Dendronotus arcticus gartensis n. subsp.</i>	ZMMU Op-802	Norway	OQ588824	OQ594742
<i>Dendronotus claguei</i>	LACM 3554	Mexico	-	-
<i>Dendronotus dalli</i>	ZMMU:Op-330	Russia: Kamchatka	KM396999	KM397081
<i>Dendronotus dalli</i>	ZMMU:Op-331	Russia: Kamchatka	KM397000	KM397082
<i>Dendronotus dalli</i>	-	USA, North Atlantic?	AF249800	AF249252
<i>Dendronotus frondosus</i>	ZMMU:Op-380	Norway	KM396976	KM397056
<i>Dendronotus frondosus</i>	ZMMU:Op-589	Norway: Gulen	KY391833	KY391853
<i>Dendronotus frondosus</i>	ZMMU:Op-591	Norway: Gulen	KY391835	KY391855
<i>Dendronotus frondosus</i>	ZMMU:Op-592	Norway: Gulen	KY391836	KY391856
<i>Dendronotus frondosus</i>	CCMMO069-21	UK: N. Ireland	OQ588829	-
<i>Dendronotus frondosus</i>	CCMMO071-21	UK: N. Ireland	OQ588830	-
<i>Dendronotus elegans</i>	NF09	Canada: Newfoundland	KU695598	-
<i>Dendronotus elegans</i>	ZMMU:Op-713	Greenland	MT654640	MT655312
<i>Dendronotus elegans</i>	ZMMU:Op-269	Russia: White sea	KM396996	KM397078
<i>Dendronotus elegans</i>	ZMMU:Op-279	Russia: Barents Sea	KM396995	KM397077
<i>Dendronotus elegans</i>	ZMMU:Op-274.1	Norway : Barents Sea	KC660037	KC611293
<i>Dendronotus elegans</i>	ZMMU:Op-274.2	Norway : Barents Sea	KM396993	KM397076
<i>Dendronotus elegans</i>	ZMMU:Op-274.3	Norway : Barents Sea	KM396994	KM397075
<i>Dendronotus elegans</i>	ZMMU:Op-270	Russia: White sea	KM396997	KM397079
<i>Dendronotus elegans</i>	WS1102	Russia: White sea	KC660036	KC611292
<i>Dendronotus elegans</i>	WS2005	Russia: White sea	KM396998	KM397080
<i>Dendronotus elegans</i>	ZMMU:Op-715	Russia: Laptev sea	MT654635	MT655308
<i>Dendronotus elegans</i>	ZMMU:Op-716	Russia: Laptev sea	MT654638	MT655311
<i>Dendronotus elegans</i>	ZMMU:Op-717	Russia: Laptev sea	MT654639	-
<i>Dendronotus elegans</i>	WS9130	Russia: White sea	MN138334	MN138100
<i>Dendronotus elegans</i>	WS9123	Russia: Kara Sea	MN138331	MN138097
<i>Dendronotus elegans</i>	WS9124	Russia: Kara Sea	MN138332	MN138098
<i>Dendronotus elegans</i>	WS9125	Russia: Kara Sea	MN138333	MN138099

<i>Dendronotus elegans</i>	IE211	Russia: Kara Sea	MN138330	MN138096
<i>Dendronotus europaeus</i>	ZMMU:Op-554	Norway	KY391823	KY391842
<i>Dendronotus europaeus</i>	ZMMU:Op-581	UK	KY391826	KY391845
<i>Dendronotus europaeus</i>	ZMMU:Op-579	UK	KY391824	KY391843
<i>Dendronotus europaeus</i>	ZMMU:Op-578	Norway	KY391821	KY391840
<i>Dendronotus europaeus</i>	ZMMU:Op-555	Norway	KY391837	KY391839
<i>Dendronotus iris</i>	CASIZ:174471	USA: Washington	KX058083	HM162631
<i>Dendronotus iris</i>	LACM:174194	USA: Washington	KX058082	GU339188
<i>Dendronotus jamsteci</i>	JAMSTEC No.1160047463	Japan	MN808558	MN811023
<i>Dendronotus jamsteci</i>	JAMSTEC No.1160047475	Japan	MN808559	MN811024
<i>Dendronotus kalikal</i>	ZMMU:Op-284.1	Russia: Kamchatka	KC660026	KC611285
<i>Dendronotus kalikal</i>	ZMMU:Op-284.2	Russia: Kamchatka	KC660025	KC611286
<i>Dendronotus kalikal</i>	ZMMU:Op-284.3	Russia: Kamchatka	KM396988	KM397070
<i>Dendronotus kalikal</i>	ZMMU:Op-283	Russia: Kamchatka	KC660024	KC611284
<i>Dendronotus kalikal</i>	ZMMU:Op-285	Russia: Bering Strait	KC660027	KC611287
<i>Dendronotus kalikal</i>	ZMMU:Op-349.1	Russia: Kamchatka	KM396986	KM397068
<i>Dendronotus kalikal</i>	ZMMU:Op-349.2	Russia: Kamchatka	KM396987	KM397069
<i>Dendronotus kalikal</i>	ZMMU:Op-657	Russia: Kuril Islands	MK302458	MK302453
<i>Dendronotus kalikal</i>	ZMMU Op-808	Russia: Kuril Islands	OQ588825	OQ594743
<i>Dendronotus kalikal</i>	WS9131	Russia: Kuril Islands	MN138314	MN138079
<i>Dendronotus kalikal</i>	WS9132	Russia: Kuril Islands	MN138315	MN138080
<i>Dendronotus kamchaticus</i>	ZMMU:Op-245	Russia: Kamchatka	KC660032	KC611288
<i>Dendronotus kamchaticus</i>	ZMMU:Op-565	USA: Washington	KX788144	KX788111
<i>Dendronotus keatleyae</i> n. sp.	NTNU-VM-82154	Norway	OQ588826	OQ594744
<i>Dendronotus keatleyae</i> n. sp.	NTNU-VM-82155	Norway	OQ588827	OQ594745
<i>Dendronotus keatleyae</i> n. sp.	CCMMO067-21	UK: N. Ireland	OQ588828	-
<i>Dendronotus keatleyae</i> n. sp.	MT09656	North Sea	KR084744	-
<i>Dendronotus keatleyae</i> n. sp.	MT09657	North Sea	KR084934	-
<i>Dendronotus lacteus</i>	ZMMU:Op-584	Norway	KY391830	KY391849
<i>Dendronotus lacteus</i>	ZMMU:Op-587	Russia	KY391838	KY391851
<i>Dendronotus lacteus</i>	ZMMU:Op-586	Norway	KY391829	KY391848
<i>Dendronotus lacteus</i>	ZMMU:Op-585	Norway	KY391831	KY391850
<i>Dendronotus nordenskioeldi</i>	ZMMU:Op-665	Russia: Laptev sea	MT654636	MT655309
<i>Dendronotus patricki</i>	SIO-BIC M12133	USA: California	HQ225828	HQ225829
<i>Dendronotus primorjensis</i>	ZMMU:Op-419	Russia: Sea of Japan	KX672010	KX672008
<i>Dendronotus primorjensis</i>	ZMMU:Op-420	Russia: Sea of Japan	KX672011	KX672009
<i>Dendronotus primorjensis</i>	W196	-	KT031812	KT031825
<i>Dendronotus robilliardi</i>	ZMMU:Op-568	Russia: Kamchatka	KX788138	KX788126
<i>Dendronotus robilliardi</i>	ZMMU:Op-659	USA: Washington	MK302459	MK302454
<i>Dendronotus robilliardi</i>	IE251	Russia: Kamchatka	KX058077	KX058117
<i>Dendronotus robilliardi</i>	IE252	Russia: Kamchatka	KX058078	KX058118
<i>Dendronotus robustus</i>	ZMMU:Op-343	Russia: Barents Sea	KM397002	KM397084

<i>Dendronotus robustus</i>	ZMMU:Op-344	Russia: Barents Sea	KM397003	KM397085
<i>Dendronotus robustus</i>	ZMMU:Op-390.5	Russia: Barents Sea	KM396968	KM397051
<i>Dendronotus rufus</i>	LACM:174861	USA: Alaska	KX058084	GU339191
<i>Dendronotus rufus</i>	LACM:174863	USA: Alaska	KX058085	KX058122
<i>Dendronotus subramosus</i>	ZMMU:Op-699	USA: Washington	MN808564	MN811029
<i>Dendronotus subramosus</i>	WS9098	USA: Oregon	MN138347	MN138113
<i>Dendronotus velifer</i>	ZMMU:Op-348	Russia: Kara Sea	MF685027	KY996407
<i>Dendronotus velifer</i>	ZMMU:Op-546	Russia: Laptev Sea	KY996409	KY996405
<i>Dendronotus velifer</i>	IE182	-	MN138352	MN138118
<i>Dendronotus venustus</i>	ZMMU:Op-660	USA: Washington	MK302460	MK302455
<i>Dendronotus venustus</i>	CPIC-01179	Canada: British Columbia	MN138363	MN138129
<i>Dendronotus yrjargul</i>	ZMMU: Op-718	Norway: Norwegian Sea	MT654641	MT655313
<i>Dendronotus yrjargul</i>	NTNU-VM-76302	Norway: Norwegian Sea	MT654642	MT655314
<i>Dendronotus yrjargul</i>	NTNU-VM-76306	Norway: Norwegian Sea	MT654643	MT655315
<i>Dendronotus yrjargul</i>	NTNU-VM-76308	Norway: Norwegian Sea	MT654644	MT655316
<i>Dendronotus yrjargul</i>	NTNU-VM-76305	Norway: Norwegian Sea	MT654645	MT655317
<i>Dendronotus yrjargul</i>	WS9116	Russia: Kara Sea	MN138317	MN138082
<i>Dendronotus yrjargul</i>	WS9113	Russia: Kara Sea	MN138316	MN138081
<i>Dendronotus yrjargul</i>	WS9117	Russia: Kara Sea	MN138318	MN138083
<i>Dendronotus yrjargul</i>	WS9103	Russia: White Sea	MN138311	MN138076
<i>Dendronotus yrjargul</i>	WS9126	Russia: White Sea	MN138312	MN138077
<i>Dendronotus yrjargul</i>	WS9127	Russia: White Sea	MN138313	MN138078
<i>Dendronotus zakuro</i>	KSNHM: OP0485	Japan	MN808562	MN811027
<i>Dendronotus zakuro</i>	ZMMU:Op-700	Russia: Kamchatka	MN808561	MN811026
<i>Doto coronata</i>	ZMMU:Op-571	Russia: Barents Sea	KX788145	KX788133
<i>Doto tuberculata</i>	BELUM Mn33142	UK	KJ486734	KJ486756
<i>Duvaucelia odhneri</i>	CASIZ:176219	South Africa	HM162716	HM162641
<i>Duvaucelia plebeia</i>	ZMMU:Op-572	Norway	KX788134	KX788122
<i>Marionia arborescens</i>	CASIZ:177578	Philippines	HM162722	HM162646
<i>Marionia blainvillea</i>	CASIZ:176812	Portugal	HM162721	HM162645
<i>Notobryon thompsoni</i>	CASIZ:176362	South Africa	JN869456	JN869413
<i>Notobryon wardi</i>	CASIZ:177540	Philippines	JN869454	JN869411
<i>Pseudobornella orientalis</i>	ZMMU: Op-664	Russia: Sea of Japan	MT654637	MT655310
<i>Pseudobornella orientalis</i>	CASIZ:174989	China	-	HM162628
<i>Pseudobornella orientalis</i>	CASIZ:174988	China	-	-
<i>Scyllaea pelagica</i>	CASIZ184317	Philippines	JN869459	JN869416
<i>Scyllaea fulva</i>	SRR3726701		KX889746	MK100991
<i>Tethys fimbria</i>	-	-	AY345035	AY345035

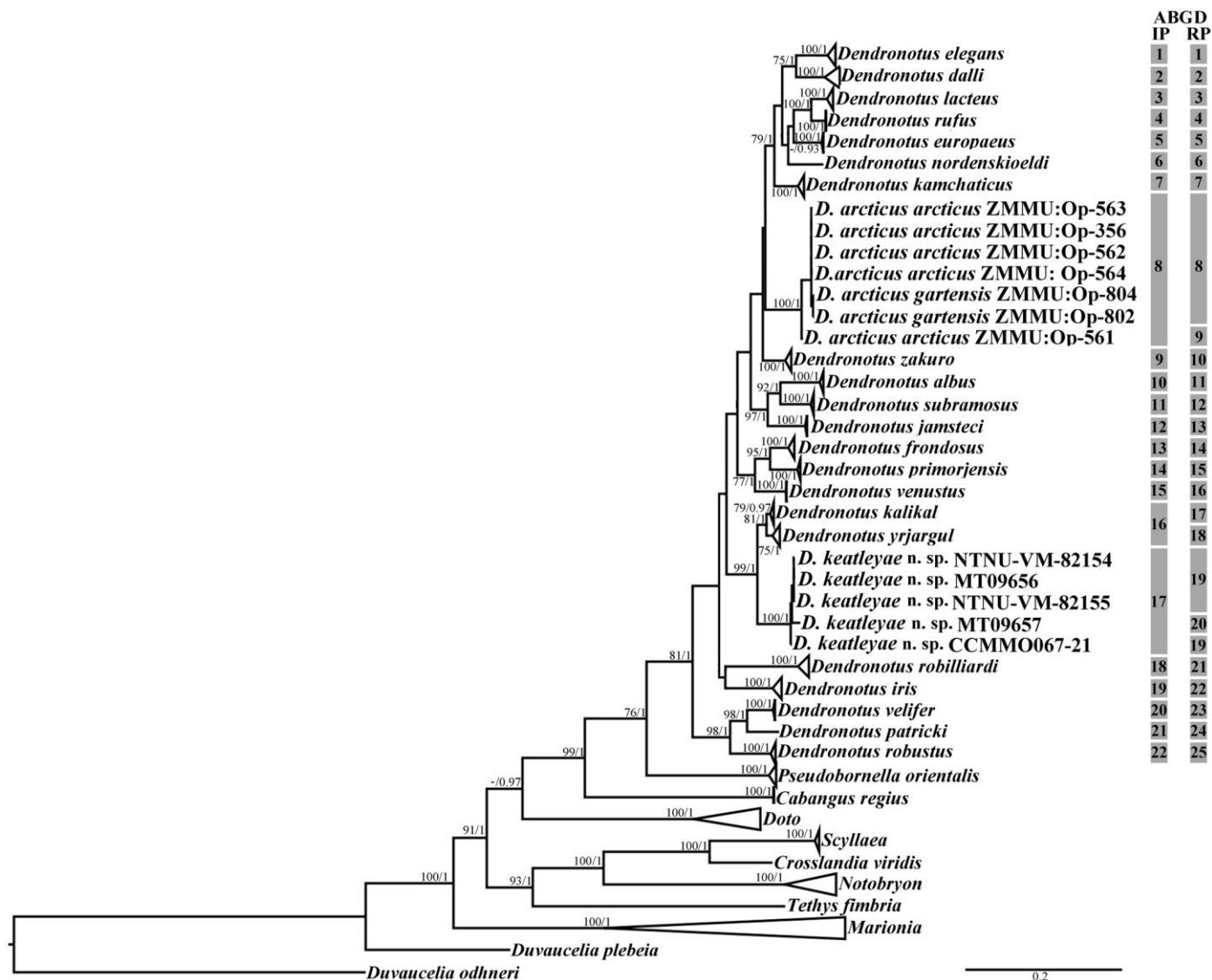


Figure S1. Phylogenetic relationships of the species of the genus *Dendronotus* based on COI + 16S concatenated dataset inferred by Maximum Likelihood. Numbers represent bootstrap values for Maximum Likelihood and posterior probabilities from Bayesian Inference. Some branches are collapsed at species level. The phylogenetic analyses summarize the dataset provided for recently published synoptic review of the family Dendronotidae (Korshunova et al., 2020), and the new data (highlighted in bold). Summary of species delimitation results from ABGD analyses for the COI dataset is shown. The grey bars depict putative species recognized by the initial (IP) and recursive (RP) partitioning of ABGD.