

Table S1. Measurements (in μm) and *pt* values of morphological structures of the holotype and paratypes of *Macrobiotus kyoukenus* sp. nov.

CHARACTER	N	RANGE					MEAN		SD		Holotype		Thorpe's Normalization			
		μm		pt			μm	pt	μm	pt	μm	pt	b	a*	p_value	
Body length	30	214	–	535	748	–	1183	362	934	79	105	363	924	1.4335	90.2592	0.4738
Buccopharyngeal tube																
Buccal tube length	30	28.5	–	48.1		–		38.5	–	5.6	–	39.2	–	1.0000	0.0000	1.0000
Stylet support insertion point	30	21.5	–	37.8	70.4	–	79.4	29.2	75.8	4.5	2.0	29.3	74.8	1.0624	-2.9876	0.9606
Buccal tube external width	30	3.8	–	7.4	12.4	–	16.4	5.6	14.4	1.1	1.0	6.0	15.2	1.3046	-2.6166	0.7416
Buccal tube internal width	30	2.5	–	5.2	8.6	–	11.6	3.9	10.1	0.9	1.0	4.5	11.6	1.4894	-2.5604	0.6617
Placoid lengths																
Macroplacoid 1	30	7.2	–	14.3	22.3	–	31.7	10.3	26.8	2.1	2.6	10.3	26.3	1.1868	-1.6845	0.6733
Macroplacoid 2	30	4.1	–	8.3	13.3	–	17.8	5.9	15.3	1.3	1.3	5.7	14.5	1.3478	-2.8446	0.6579
Microplacoid	30	1.8	–	3.9	5.0	–	8.8	2.5	6.5	0.6	0.9	3.1	7.9	1.0167	0.7512	0.9399
Macroplacoid row	30	12.3	–	22.8	40.0	–	50.3	17.3	45.0	3.2	3.1	16.9	43.1	1.1409	-2.7832	0.8176
Placoid row	30	14.7	–	27.3	47.1	–	59.7	20.5	53.2	3.6	3.4	20.9	53.4	1.1066	-1.7757	0.8487
Claw 1 heights																
External primary branch	30	7.3	–	11.1	21.9	–	28.9	9.5	24.8	1.1	1.5	10.2	25.9	0.7394	3.2172	0.4294
External secondary branch	30	6.1	–	9.5	15.1	–	22.1	7.3	19.1	0.9	1.9	7.2	18.4	0.5978	2.4741	0.0038
Claw 2-3 heights																
External primary branch	30	8.1	–	11.7	23.6	–	31.6	10.2	26.8	0.9	2.1	10.3	26.3	0.5920	4.6595	0.0997
External secondary branch	30	6.4	–	9.8	17.3	–	23.3	7.6	20.0	0.7	1.9	7.9	20.1	0.4927	3.9120	0.0001
Claw 4 lengths																
Posterior primary branch	30	8.8	–	13.8	27.4	–	37.4	12.1	31.5	1.4	2.3	12.4	31.5	0.7172	4.2409	0.2308
Posterior secondary branch	30	6.4	–	11.1	19.2	–	28.1	8.8	23.1	1.2	2.3	8.2	20.9	0.7742	2.9594	0.2376