

**Table S1** Base composition of *Sebastiscus* mitochondrial genomes.

	<i>S. albofasciatus</i>					<i>S. tertius</i>					<i>S. marmoratus</i>				
	A	T	G	C	A+T	A	T	G	C	A+T	A	T	G	C	A+T
Whole	28.15	26.59	17.00	28.26	54.73	28.21	26.48	16.76	28.55	54.69	28.48	26.49	16.64	28.39	54.97
12S rRNA	29.81	19.87	22.62	27.70	49.68	29.67	19.96	22.70	27.67	49.63	30.02	19.77	22.41	27.80	49.79
16S rRNA	32.62	21.16	20.98	25.24	53.78	32.45	21.22	21.16	25.18	53.66	32.74	20.98	20.86	25.41	53.72
COI	24.95	30.37	17.86	26.82	55.32	24.63	30.37	18.12	26.89	55.00	25.02	30.63	17.79	26.56	55.64
COII	28.94	28.22	16.35	26.48	57.16	28.80	28.08	16.50	26.63	56.87	28.36	28.36	16.79	26.48	56.73
COIII	25.10	27.39	17.32	30.19	52.48	25.61	27.77	17.07	29.55	53.38	25.48	27.64	16.94	29.94	53.12
ATPase 6	26.94	29.72	13.32	30.01	56.66	26.94	29.72	13.62	29.72	56.66	27.09	29.14	13.03	30.75	56.22
ATPase 8	28.57	23.21	13.69	34.52	51.79	29.17	23.21	13.10	34.52	52.38	29.17	22.02	13.10	35.71	51.19
ND1	24.82	27.90	15.49	31.79	52.72	24.72	27.28	15.28	32.72	52.00	24.82	27.59	15.49	32.10	52.41
ND2	27.25	26.20	12.62	33.94	53.44	27.34	26.48	12.43	33.75	53.82	26.77	26.77	13.10	33.37	53.54
ND3	22.06	32.66	15.76	29.51	54.73	21.78	32.66	15.76	29.80	54.44	21.78	32.95	16.05	29.23	54.73
ND4L	21.89	28.28	16.84	33.00	50.17	20.88	28.28	17.17	33.67	49.16	22.22	27.61	16.50	33.67	49.83
ND4	26.21	28.60	15.06	30.12	54.82	25.92	28.31	15.35	30.41	54.24	26.36	27.66	14.84	31.14	54.02
ND5	27.95	27.24	14.46	30.34	55.19	27.95	26.75	14.25	31.05	54.70	28.28	27.08	14.25	30.40	55.36
ND6	14.56	36.78	33.52	15.13	51.34	14.37	37.55	34.10	13.98	51.92	14.75	38.51	33.33	13.41	53.26
Cyt b	24.89	30.06	15.43	29.62	54.95	25.24	30.15	15.34	29.27	55.39	24.80	30.85	15.43	28.92	55.65