



Supplementary Material

Relationships between Body Weight and Morphological Traits in Female and Male Spotted Scat (*Scatophagus argus*)

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Supplementary Table SI.- The model summary in different gender.

Gender	Model	R	R ²	Adjusted R ²	Standard error
Female	1	0.870 ^a	0.757	0.756	8.423
	2	0.944 ^b	0.891	0.889	5.671
	3	0.949 ^c	0.901	0.899	5.411
	4	0.954 ^d	0.911	0.909	5.141
Male	1	0.792 ^a	0.627	0.625	7.088
	2	0.900 ^b	0.811	0.809	5.064
	3	0.915 ^c	0.836	0.834	4.718
	4	0.918 ^d	0.843	0.840	4.632
	5	0.923 ^e	0.852	0.848	4.516
	6	0.925 ^f	0.855	0.851	4.472

In female, a: Predictors: (Constant), BL. b: Predictors: (Constant), BL, BT. c: Predictors: (Constant), BL, BT, HL. d: Predictors: (Constant), BL, BT, HL, BH. In male, a: Predictors: (Constant), BH. b: Predictors: (Constant), BH, BT. c: Predictors: (Constant), BH, BT, BL. d: Predictors: (Constant), BH, BT, BL, OL. e: Predictors: (Constant), BH, BT, BL, OL, HL. f: Predictors: (Constant), BH, BT, BL, OL, HL, PA.

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Supplementary Table SII.- The calculation regression coefficient of female *Scatophagus argus*.

Regression step	Variables	Unstandardized coefficient		Standardized coefficient	t	Sig.
		B	Standard error	Beta		
1	(Constant)	-135.519	8.959		-15.127	0.000
	BL	17.635	0.713	0.870	24.738	0.000
2	(Constant)	-153.551	6.145		-24.988	0.000
	BL	14.137	0.531	0.698	26.622	0.000
	BT	19.908	1.292	0.404	15.404	0.000
3	(Constant)	-161.456	6.121		-26.379	0.000
	BL	12.410	0.636	0.612	19.524	0.000
	BT	20.579	1.242	0.417	16.569	0.000
	HL	8.847	1.967	0.130	4.498	0.000
4	(Constant)	-158.521	5.849		-27.102	0.000
	BL	8.177	1.088	0.404	7.518	0.000
	BT	19.676	1.196	0.399	16.455	0.000
	HL	9.060	1.870	0.133	4.846	0.000
	BH	7.235	1.546	0.238	4.680	0.000

Supplementary Table SIII.- The calculation regression coefficient of male *Scatophagus argus*.

Regression step	Variables	Unstandardized coefficient		Standardized coefficient	t	Sig.
		B	Standard error	Beta		
1	Constant	-120.636	8.066		-14.956	0.000
	BH	28.484	1.157	0.859	24.621	0.000
2	Constant	-122.194	5.999		-20.368	0.000
	BH	21.737	1.000	0.655	21.746	0.000
	BT	16.188	1.221	0.399	13.253	0.000
3	Constant	-135.965	6.081		-22.361	0.000
	BH	12.668	1.826	0.382	6.937	0.000
	BT	16.251	1.139	0.401	14.270	0.000
	BL	6.270	1.086	0.306	5.774	0.000
4	Constant	-140.816	6.136		-22.950	0.000
	BH	12.025	1.798	0.363	6.688	0.000
	BT	16.367	1.115	0.404	14.680	0.000
	BL	5.300	1.104	0.259	4.800	0.000
	HL	6.966	2.151	0.100	3.238	0.001
5	Constant	-132.640	6.376		-20.802	0.000
	BH	12.430	1.752	0.375	7.094	0.000
	BT	15.275	1.125	0.377	13.576	0.000
	BL	5.757	1.081	0.281	5.325	0.000
	HL	9.890	2.241	0.142	4.413	0.000
	OL	-27.451	7.547	-0.104	-3.637	0.000
6	Constant	-132.710	6.250		-21.234	0.000
	BH	12.188	1.719	0.367	7.089	0.000
	BT	14.849	1.111	0.366	13.361	0.000
	BL	4.270	1.163	0.209	3.673	0.000
	HL	7.985	2.281	0.114	3.501	0.001
	OL	-32.945	7.606	-0.125	-4.331	0.000
	PA	3.896	1.254	0.135	3.108	0.002

Supplementary Table SIV.- Analysis of variance (ANOVA) in multiple regression equation of *Scatophagus argus* at different gender.

Gender	Model	Sum of squares	df	Mean square	F	Sig.
Female	Regression	52222.035	4	13055.509	493.887	0.000
	Residual	5101.798	193	26.434		
	Total	57323.833	197			
Male	Regression	21421.231	6	3570.205	178.541	0.000
	Residual	3619.375	181	19.997		
	Total	25040.606	187			