



Supplementary Material

Polymorphic Analysis of the *GH* Gene (Exon 3 and 4) and its Association with Growth Traits in Pakistani Quail (*Coturnix japonica* PK)

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Supplementary Table I. Level of variation in the dependent variable that can be explained by the independent variable *C. japonica* PK.

Genotypes	R	R square	Adjusted R square
c.31T>C (Exon 3)	0.82	0.68	0.66
c.161A>C (Exon 3)	0.90	0.81	0.79
n.12C>T (Inton 5)	0.51	0.26	0.20

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Supplementary Table II. Linear regression equation coefficients of *C. japonica* PK *GH* gene position c.31T>C (Exon 3).

Body measurements	Unstandardized coefficients		Standardized coefficients	t	Sig.	95.0% confidence interval for B		Collinearity statistics	
	B	Std. Error				Lower bound	Upper bound	Tolerance	VIF
	3.223	.429		7.507	.000	2.374	4.072		
Weight categories	.242	.062	.825	3.911	.000	.120	.364	.050	19.836
Body weight	.002	.002	.290	1.293	.198	-.001	.005	.045	22.335
Body length	-.078	.018	-.449	-4.412	.000	-.113	-.043	.216	4.619
Wing spread	-.006	.009	-.036	-.690	.491	-.023	.011	.806	1.240
Shank length	.003	.052	.004	.053	.958	-.099	.105	.377	2.652
Shank circumference	.002	.108	.001	.016	.987	-.212	.216	.326	3.071
Drumstick length	-.102	.035	-.259	-2.926	.004	-.171	-.033	.286	3.500
Drumstick circumference	-.023	.030	-.075	-.778	.438	-.082	.036	.243	4.115
Breast width	-.018	.035	-.053	-.526	.599	-.088	.051	.222	4.501
Keel length	.004	.028	.012	.143	.886	-.051	.059	.305	3.274

Supplementary Table III. Linear regression equation coefficients of *C. japonica* PK *GH* gene position c.161A>C (Exon 3).

Body measurements	Unstandardized coefficients		Standardized coefficients	t	Sig.	95.0% confidence interval for B		Collinearity statistics	
	B	Std. Error				Lower bound	Upper bound	Tolerance	VIF
	2.305	.396		5.813	.000	1.521	3.089		
Weight categories	-.304	.057	-.879	-5.334	.000	-.417	-.192	.050	19.836
Body weight	-.001	.002	-.066	-.380	.704	-.004	.002	.045	22.335
Body length	.011	.016	.055	.696	.487	-.021	.044	.216	4.619
Wing spread	-.010	.008	-.052	-1.252	.213	-.026	.006	.806	1.240
Shank length	-.038	.048	-.048	-.801	.425	-.132	.056	.377	2.652
Shank circumference	-.207	.100	-.135	-2.075	.040	-.405	-.010	.326	3.071
Drumstick length	.034	.032	.074	1.068	.287	-.029	.098	.286	3.500
Drumstick circumference	.059	.027	.162	2.163	.032	.005	.114	.243	4.115
Breast width	.088	.032	.214	2.722	.007	.024	.152	.222	4.501
Keel length	-.015	.026	-.038	-.570	.570	-.066	.036	.305	3.274

Supplementary Table IV. Linear regression equation coefficients of *C. japonica* PK *GH* gene position n.12C>T (Intron 5).

Body measurements	Unstandardized coefficients		Standardized coefficients	t	Sig.	95.0% confidence interval for B		Collinearity statistics	
	B	Std. Error				Lower bound	Upper bound	Tolerance	VIF
	1.501	1.182		1.270	.206	-.836	3.838		
Weight categories	-.460	.170	-.878	-2.701	.008	-.796	-.123	.050	19.836
Body weight	.007	.005	.549	1.592	.114	-.002	.016	.045	22.335
Body length	.009	.049	.030	.189	.851	-.087	.105	.216	4.619
Wing spread	-.021	.024	-.070	-.861	.390	-.068	.027	.806	1.240
Shank length	-.104	.142	-.087	-.734	.464	-.385	.177	.377	2.652
Shank circumference	-.007	.298	-.003	-.024	.981	-.596	.582	.326	3.071
Drumstick length	.162	.096	.229	1.679	.095	-.029	.352	.286	3.500
Drumstick circumference	-.172	.082	-.311	-2.099	.038	-.333	-.010	.243	4.115
Breast width	.176	.097	.283	1.829	.070	-.014	.367	.222	4.501
Keel length	-.029	.077	-.050	-.379	.705	-.181	.123	.305	3.274