

Supplementary Material

Comparative Analysis on Carcass Traits of Three Egg Quail Populations (*Coturnix coturnix*)

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Supplementary Table 1. Correlation coefficient of carcass traits of laying quail.

Varie- ties	Carcass traits	Body weight (g)	Carcass weight (g)	Whole net carcass weight(g)	Heart weight (g)	Liver weight (g)	Breast mus- cle weight (total) (g)	Leg muscle weight (single) (g)	Dressing percent- age (%)	Whole net carcass rate (%)	Heart rate (%)	Liver rate(%)	Breast muscle rate (total) (%)
Chinese yellow quail	Body weight(g)	1											
	Carcass weight(g)	0.997**	1										
	Whole net carcass weight(g)	0.808**	0.807**	1									
	Heart weight(g)	0.374**	0.378**	0.326*	1								
	Liver weight(g)	0.641**	0.643**	0.373**	0.276*	1							
	Breast muscle weight(total)(g)	0.695**	0.695**	0.813**	0.060	0.287*	1						
	Leg muscle weight(single)	0.351**	0.353**	0.590**	0.312*	-0.007	0.373**	1					
	Dressing percentage(%)	0.292*	0.362**	0.249	0.164	0.229	0.244	0.152	1				
	Whole net carcass rate(%)	-0.368**	-0.366**	0.247	-0.098	-0.459**	0.133	0.369**	-0.081	1			
	Heart rate(%)	-0.120	-0.116	-0.287*	0.807**	0.048	-0.443**	-0.078	0.006	-0.253	1		
	Liver rate(%)	0.335*	0.338*	-0.025	0.149	0.915**	-0.035	-0.254	0.141	-0.583**	0.165	1	
	Breast muscle rate(total)(%)	0.305*	0.307*	0.291*	-0.227	0.083	0.792**	0.017	0.140	-0.051	-0.419**	-0.035	1
	Leg muscle rate(single)(%)	-0.371**	-0.367**	-0.271*	0.031	-0.365**	-0.349*	0.614**	-0.075	0.204	0.163	-0.270	-0.268
Beijing white quail	Body weight(g)	1											
	Carcass weight(g)	0.997**	1										
	Whole net carcass weight(g)	0.797**	0.799**	1									
	Heart weight(g)	0.170	0.173	0.221	1								
	Liver weight(g)	0.413**	0.419**	0.325*	0.073	1							
	Breast muscle weight(total)(g)	0.716**	0.719**	0.789**	0.172	0.233	1						
	Leg muscle weight(single)	0.561**	0.554**	0.660**	0.409**	0.413**	0.413**	1					
	Dressing percentage(%)	0.434**	0.498**	0.400**	0.152	0.288*	0.359*	0.198	1				
	Whole net carcass rate(%)	-0.509**	-0.503**	0.111	0.044	-0.232	-0.047	0.006	-0.154	1			
	Heart rate(%)	-0.172	-0.169	-0.203	0.906**	-0.062	-0.160	0.135	0.004	0.007	1		
	Liver rate(%)	0.058	0.064	-0.150	-0.026	0.883**	-0.142	0.118	0.129	-0.326*	0.044	1	
	Breast muscle rate(total)(%)	0.313*	0.315*	0.220	0.057	0.045	0.771**	-0.031	0.149	-0.187	-0.034	-0.060	1
	Leg muscle rate(single)(%)	-0.047	-0.058	-0.123	0.328*	0.221	-0.238	0.663**	-0.127	-0.110	0.389**	0.307*	-0.260

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Varie- ties	Carcass traits	Body weight (g)	Carcass weight (g)	Whole net carcass weight(g)	Heart weight (g)	Liver weight (g)	Breast mus- cle weight (total)(g)	Leg muscle weight (single)	Dressing percent- age (%)	Whole net carcass rate (%)	Heart rate (%)	Liver rate(%)	Breast muscle rate (total) (%)
Korean quail	Body weight(g)	1	1	1	1	1	1	1	1	1	1	1	1
	Carcass weight(g)	0.997**	1	1	1	1	1	1	1	1	1	1	1
	Whole net carcass weight(g)	0.794**	0.790**	1	1	1	1	1	1	1	1	1	1
	Heart weight(g)	0.386**	0.392**	0.309*	1	1	1	1	1	1	1	1	1
	Liver weight(g)	0.190	0.200	-0.075	0.039	1	1	1	1	1	1	1	1
	Breast muscle weight(total)(g)	0.640**	0.641**	0.806**	0.104	-0.142	1	1	1	1	1	1	1
	Leg muscle weight(single)	0.437**	0.406**	0.667**	-0.135	-0.042	0.531**	1	1	1	1	1	1
	Dressing percentage(%)	0.167	0.248	0.126	0.137	0.171	0.149	-0.233	1	1	1	1	1
	Whole net carcass rate(%)	-0.200	-0.200	0.432**	-0.067	-0.415**	0.357*	0.413**	-0.020	1	1	1	1
	Heart rate(%)	-0.176	-0.171	-0.376**	0.752**	0.068	-0.456**	-0.584**	0.013	-0.348*	1	1	1
	Liver rate(%)	-0.024	-0.014	-0.290*	-0.068	0.968**	-0.320*	-0.161	0.120	-0.450**	0.119	1	1
	Breast muscle rate(total)(%)	-0.005	0.002	0.024	-0.250	-0.179	0.608**	0.006	0.064	0.065	-0.282*	-0.195	1
	Leg muscle rate(single)(%)	-0.243	-0.279*	-0.172	-0.508**	0.056	-0.147	0.618**	-0.443**	0.069	-0.385**	0.124	-0.020

Note: In the list, shoulder marker; ** indicates extremely significant correlation ($P < 0.01$); shoulder * indicates significant correlation ($P < 0.05$), and not marked indicates no significant correlation ($P > 0.05$).