Table 3. Genetic (above diagonal) and phenotypic (below) correlations for post-weaning growth traits and carcass distribution traits

Trait	WW	SW	DG	HLW	FLW	LOW	TCW	HLM	FLM	LOM	TCM	HLB	FLB	LOB	TCB
i. Post-weaning growth traits															
• Weaning weight (WW)	-	0.59	0.01	-0.32	0.17	0.11	-0.07	0.00	-0.15	0.03	0.16	0.03	-0.09	0.10	-0.10
• Slaughter weight (SW)	0.50	-	0.81	-0.29	0.20	0.06	0.04	-0.08	-0.31	0.25	0.26	0.03	-0.08	0.04	-0.09
• Daily gain (DG)	0.08	0.90	-	-0.13	0.12	0.01	0.10	-0.10	-0.28	0.29	0.21	0.01	-0.03	-0.01	-0.04
ii. Carcass weight distribution as % in:															
• Hind leg cut (HLW)	-0.21	-0.21	-0.13	-	-0.18	-0.59	-0.32	0.52	0.00	-0.49	-0.22	0.37	0.26	-0.43	-0.21
• Fore leg cut (FLW)	0.04	-0.19	-0.24	-0.24	-	-0.34	-0.31	-0.10	0.28	-0.14	-0.07	0.00	0.04	0.04	-0.12
• Loin cut (LOW)	0.12	0.29	0.28	-0.66	-0.26	-	-0.14	-0.38	-0.09	0.61	0.00	-0.43	-0.26	0.56	0.15
• Thoracic cage cut (TCW)	-0.02	-0.01	0.00	-0.10	-0.23	0.02	-	-0.06	-0.28	0.06	0.56	-0.03	-0.07	-0.18	0.35
iii. Carcass tissues weight distribution as:															
a. Percentage of meat occurring in:															
• Hind leg (HLM)	0.01	-0.03	-0.04	0.41	-0.20	-0.11	0.45	-	-0.47	-0.56	-0.04	0.21	0.21	-0.29	-0.13
• Fore leg (FLM)	-0.08	-0.13	-0.11	-0.02	0.20	-0.27	-0.51	-0.73	-	-0.30	-0.61	0.06	0.01	0.06	-0.14
• Loin (LOM)	0.01	0.13	0.14	-0.48	0.07	0.47	-0.31	-0.63	0.06	-	0.17	-0.32	-0.24	0.37	0.16
• Thoracic cage (TCM)	0.09	0.12	0.10	-0.13	-0.11	0.22	0.62	0.40	-0.71	-0.21	-	-0.17	0.07	-0.11	0.36
b. Percentage of bone occurring in:															
• Hind leg (HLB)	0.01	-0.04	-0.05	0.41	-0.02	-0.50	-0.07	0.01	0.25	-0.27	-0.23	-	-0.04	-0.71	-0.66
• Fore leg (FLB)	-0.06	-0.03	-0.01	0.12	0.08	-0.34	-0.33	-0.26	0.40	0.00	-0.34	0.15	-	-0.41	-0.04
• Loin (LOB)	0.08	0.08	0.05	-0.36	-0.02	0.60	0.07	0.08	-0.31	0.27	0.19	-0.72	-0.50	-	0.09
• Thoracic cage (TCB)	-0.07	-0.04	-0.02	-0.19	-0.03	0.20	0.35	0.17	-0.32	-0.02	0.37	-0.64	-0.29	0.14	-

Table 5. Expected genetic change to selection (per generation) based on unrestricted indices in post-weaning growth traits and carcass distribution traits (selection intensity = 1)

Expected genetic changes in:	Unit	Full index	Reduced index			Single index		
		I_1	I_2	I_3	I_4	I_5	I_6	I_7
		WW, SW, DG	WW, SW	WW, DG	SW, DG	WW	SW	DG
i. Post-weaning growth traits								
• Weaning weight (WW)	gm	88.80	91.20	90.95	91.2	108.10	47.64	0.92
• Slaughter weight (SW)	gm	146.65	144.11	144.43	143.5	111.50	139.11	105.31
• Daily gain (DG)	gm/day	0.92	0.83	0.85	0.82	0.03	1.47	1.69
ii. Carcass weight distribution as % in:								
• Hind leg cut (HLW)	%	-0.42	-0.41	-0.41	-0.41	-0.43	-0.28	-0.12
• Fore leg cut (FLW)	%	0.20	0.19	0.19	0.19	0.18	0.15	0.09
• Loin cut (LOW)	%	0.11	0.12	0.12	0.12	0.14	0.06	-0.01
• Thoracic cage cut (TCW)	%	-0.0٢	-0.01	-0.01	-0.01	-0.05	0.02	0.05
iii. Carcass tissues weight distribution as:								
a. Percentage of meat occurring in:								
1. Hind leg (HLM)	%	-0.26	-0.21	-0.21	-0.20	-0.01	-0.36	-0.42
2. Fore leg (FLM)	%	-1.41	-1.32	-1.32	-1.30	-0.91	-1.39	-1.17
3. Loin (LOM)	%	0.64	0.57	0.58	0.56	0.13	0.89	0.97
4. Thoracic cage (TCM)	%	0.58	0.57	0.57	0.56	0.45	0.54	0.40
b***. Percentage of bone occurring in:***								
1. Hind leg (HLB)	%	-0.09	0.06	0.05	0.09	0.07	0.04	-0.01
2. Fore leg (FLB)	%	-0.07	-0.08	-0.07	-0.07	-0.08	-0.05	-0.02
3. Loin (LOB)	%	0.11	0.12	0.12	0.12	0.15	0.05	-0.01
4. Thoracic cage (TCB)	%	-0.12	-0.12	-0.12	-0.12	-0.12	-0.08	-0.03