

Table 55. Partial regression coefficients of carcass traits from body weight and measurements of laabs at 6 months of age.

Traits	Reg. on BW		Reg. on BL		Reg. on H6		Reg. on CD	
	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic
Empty body wt. (Kg)	0.698 ± 0.19	- 0.021 ± 0.01	- 0.07 ± 0.07	- 0.01 ± 0.01	- 0.03 ± 0.17	- 0.01 ± 0.01	- 0.06 ± 0.09	- 0.003 ± 0.03
Carcass length (cm)	1.047 ± 1.13	- 0.02 ± 0.06	0.15 ± 0.44	- 0.12 ± 0.08	- 1.06 ± 1.04	- 0.0007 ± 0.07	0.07 ± 0.56	0.03 ± 0.16
Fat-tail weight (Kg)	0.17 ± 0.09	- 0.006 ± 0.005	- 0.02 ± 0.03	0.0005 ± 0.006	- 0.06 ± 0.08	0.004 ± 0.005	- 0.08 ± 0.04	- 0.01 ± 0.01
Fat depth / L.D (cm)	0.124 ± 0.03	- 0.0002 ± 0.002	- 0.0003 ± 0.01	0.001 ± 0.002	- 0.11 ± 0.03	- 0.001 ± 0.002	- 0.03 ± 0.02	0.002 ± 0.004
Fat depth / Brisket (cm)	0.03 ± 0.07	- 0.0003 ± 0.004	0.05 ± 0.03	- 0.004 ± 0.005	0.015 ± 0.06	0.0001 ± 0.004	- 0.03 ± 0.03	0.02 ± 0.01
Edible offal wt. (Kg)	0.05 ± 0.09	- 0.006 ± 0.005	- 0.03 ± 0.04	- 0.004 ± 0.007	0.03 ± 0.09	0.007 ± 0.006	0.08 ± 0.05	0.005 ± 0.01
Lean % of L.D	0.195 ± 0.82	- 0.03 ± 0.04	- 0.22 ± 0.32	- 0.06 ± 0.06	- 0.08 ± 0.75	0.01 ± 0.05	0.34 ± 0.41	- 0.08 ± 0.12
Fat % of L.D	0.197 ± 1.54	0.03 ± 0.08	0.16 ± 0.59	0.05 ± 0.11	0.38 ± 1.41	- 0.03 ± 0.09	- 0.57 ± 0.76	0.08 ± 0.22
Bone % of L.D	- 0.48 ± 0.53	0.01 ± 0.03	0.18 ± 0.20	0.04 ± 0.04	0.23 ± 0.48	0.004 ± 0.03	0.14 ± 0.26	0.04 ± 0.08
Prime cut weight (Kg)	0.38 ± 0.10	- 0.007 ± 0.005	0.06 ± 0.04	0.002 ± 0.007	- 0.02 ± 0.09	0.0003 ± 0.006	- 0.11 ± 0.05	0.02 ± 0.01
Second cut weight (Kg)	0.16 ± 0.05	- 0.002 ± 0.003	- 0.01 ± 0.02	0.003 ± 0.003	0.01 ± 0.05	- 0.0002 ± 0.003	- 0.05 ± 0.02	- 0.002 ± 0.01
Dressing % "A"	0.28 ± 0.23	- 0.03 ± 0.01	- 0.09 ± 0.09	- 0.02 ± 0.02	- 0.09 ± 0.21	0.008 ± 0.01	- 0.20 ± 0.12	- 0.02 ± 0.03
Dressing % "B"	0.26 ± 0.17	0.001 ± 0.01	0.03 ± 0.06	- 0.002 ± 0.01	- 0.07 ± 0.15	- 0.007 ± 0.01	- 0.25 ± 0.08	- 0.02 ± 0.02

Table 55. Prediction equations of carcass traits from body weight and measurements of male lambs at 6 months of age.

Prediction equations

EDW	=	$23.82 + 0.70 (LBW - 36.80) - 0.02 (LBW - 36.8)^2 - 0.07 (BL - 65.8) - 0.01 (BL - 65.8)^2 - 0.03 (H6 - 76) + 0.01 (H6 - 76)^2 - 0.06 (CD - 33.5) - 0.003 (CD - 33.5)^2$
CI	=	$65.5 + 1.047(LBW - 36.80) - 0.02 (LBE - 36.8)^2 + 0.15 (BL - 65.8) - 0.12 (BL - 65.8)^2 - 1.06 (H6 - 76) - 0.0007 (H6 - 76)^2 + 0.07 (CD - 33.5) + 0.03 (CD - 33.5)^2$
FTW	=	$2.25 + 0.17 (LBW - 36.80) - 0.006 (LBW - 36.8)^2 - 0.02 (BL - 65.8) + 0.0005(BL - 65.8)^2 - 0.06 (H6 - 76) + 0.004 (H6 - 76)^2 - 0.08 (CD - 33.5) - 0.01 (CD - 33.5)^2$
FD/LD	=	$0.87 + 0.12 (LBW - 36.80) - 0.0002(LBW - 36.8)^2 - 0.0003(BL - 65.8) + 0.001 (BL - 65.8)^2 - 0.11 (H6 - 76) - 0.001 (H6 - 76)^2 - 0.003(CD - 33.5) + 0.002 (CD - 33.5)^2$
FD/B	=	$3.24 + 0.03 (LBW - 36.80) - 0.0003(LBW - 36.8)^2 + 0.05 (BL - 65.8) - 0.004 (BL - 65.8)^2 + 0.02 (H6 - 76) + 0.0001 (H6 - 76)^2 - 0.03 (CD - 33.5) + 0.02 (CD - 33.5)^2$
EDW	=	$3.72 + 0.05 (LBW - 36.80) - 0.006 (LBE - 36.8)^2 - 0.03 (BL - 65.8) - 0.004 (BL - 65.8)^2 + 0.03 (H6 - 76) + 0.01 (H6 - 76)^2 + 0.08 (CD - 33.5) + 0.005 (CD - 33.5)^2$
L X /LD	=	$63.1 + 0.19 (LBW - 36.80) - 0.03 (LBW - 36.8)^2 - 0.22 (BL - 65.8) - 0.06 (BL - 65.8)^2 - 0.48 (H6 - 76) + 0.01 (H6 - 76)^2 + 0.34 (CD - 33.5) - 0.07 (CD - 33.5)^2$
F X /LD	=	$18.3 + 0.19 (LBW - 36.80) + 0.03 (LBW - 36.8)^2 + 0.16 (BL - 65.8) + 0.05 (BL - 65.8)^2 + 0.38 (H6 - 76) - 0.03 (H6 - 76)^2 - 0.57 (CD - 33.5) + 0.08 (CD - 33.5)^2$
B X /LD	=	$18.6 + 0.48 (LBW - 36.80) + 0.01 (LBW - 36.8)^2 + 0.18 (BL - 65.8) + 0.04 (BL - 65.8)^2 + 0.23 (H6 - 76) + 0.004 (H6 - 76)^2 + 0.14 (CD - 33.5) + 0.04 (CD - 33.5)^2$
PCW	=	$12.41 + 0.38 (LBW - 36.80) - 0.007 (LBW - 36.8)^2 + 0.06 (BL - 65.8) + 0.002 (BL - 65.8)^2 - 0.02 (H6 - 76) + 0.0003 (H6 - 76)^2 - 0.11 (CD - 33.5) + 0.02 (CD - 33.5)^2$
SCW	=	$5.13 + 0.16 (LBW - 36.80) - 0.002 (LBW - 36.8)^2 - 0.01 (BL - 65.8) + 0.003 (BL - 65.8)^2 + 0.01 (H6 - 76) - 0.0002 (H6 - 76)^2 - 0.05 (CD - 33.5) - 0.002 (CD - 33.5)^2$
D X "A"	=	$52.4 + 0.28 (LBW - 36.80) - 0.03 (LBE - 36.8)^2 - 0.09 (BL - 65.8) - 0.02 (BL - 65.8)^2 - 0.09 (H6 - 76) + 0.01 (H6 - 76)^2 - 0.20 (CD - 33.5) - 0.02 (CD - 33.5)^2$
D X "B"	=	$83.9 + 0.26 (LBW - 36.80) + 0.001 (LBW - 36.8)^2 + 0.03 (BL - 65.8) - 0.002 (BL - 65.8)^2 - 0.07 (H6 - 76) - 0.01 (H6 - 76)^2 - 0.25 (CD - 33.5) - 0.02 (CD - 33.5)^2$

Traits	Reg. on BW			Reg. on BL			Reg. on H6			Reg. on CD		
	Linear	± SE	Quadratic ± SE	Linear	± SE	Quadratic ± SE	Linear	± SE	Quadratic ± SE	Linear	± SE	Quadratic ± SE
Empty body wt. (Kg)	0.65	± 0.08	0.01 ± 0.01	- 0.04	± 0.10	- 0.01 ± 0.03	0.06	± 0.08	- 0.04 ± 0.03	0.27	± 0.17	- 0.01 ± 0.03
Carcass length (cm)	0.04	± 0.38	- 0.03 ± 0.05	0.79	± 0.50	0.05 ± 0.16	0.51	± 0.39	- 0.02 ± 0.15	- 0.32	± 0.83	- 0.01 ± 0.14
Mat-tail weight (Kg)	0.11	± 0.03	0.01 ± 0.004	- 0.18	± 0.05	- 0.05 ± 0.01	0.06	± 0.04	0.06 ± 0.01	- 0.13	± 0.07	0.001 ± 0.01
Mat depth / L.D (cm)	0.05	± 0.05	0.004 ± 0.006	0.07	± 0.06	0.01 ± 0.02	- 0.09	± 0.05	- 0.02 ± 0.02	0.04	± 0.11	0.02 ± 0.02
Mat depth / Brisket (cm)	0.05	± 0.03	- 0.003 ± 0.004	0.04	± 0.04	0.02 ± 0.01	0.04	± 0.03	- 0.02 ± 0.01	0.005	± 0.03	0.02 ± 0.01
Edible offals wt. (Kg)	0.17	± 0.04	0.003 ± 0.005	0.11	± 0.06	0.02 ± 0.02	- 0.01	± 0.04	- 0.02 ± 0.02	- 0.02	± 0.09	0.004 ± 0.01
Lean % of L.D	- 0.07	± 0.19	0.05 ± 0.03	- 0.27	± 0.25	0.01 ± 0.08	- 0.08	± 0.19	- 0.03 ± 0.07	- 0.62	± 0.42	0.01 ± 0.07
Fat % of L.D	0.13	± 0.32	- 0.07 ± 0.04	- 0.48	± 0.42	- 0.006 ± 0.13	0.002	± 0.33	0.05 ± 0.12	0.80	± 0.60	0.0005 ± 0.12
Bone % of L.D	0.36	± 0.19	- 0.02 ± 0.03	0.20	± 0.26	0.13 ± 0.08	0.41	± 0.20	- 0.06 ± 0.07	- 0.54	± 0.43	- 0.02 ± 0.07
Prime cut weight (Kg)	0.30	± 0.03	0.01 ± 0.004	0.10	± 0.04	0.04 ± 0.01	0.03	± 0.03	- 0.05 ± 0.01	0.11	± 0.07	- 0.02 ± 0.01
Second cut weight (Kg)	0.22	± 0.03	0.01 ± 0.004	- 0.17	± 0.04	- 0.04 ± 0.01	0.06	± 0.03	0.04 ± 0.01	- 0.03	± 0.07	0.01 ± 0.01
Pressing Z "A"	- 0.0002	± 0.11	- 0.01 ± 0.01	- 0.06	± 0.14	- 0.02 ± 0.04	0.16	± 0.11	0.004 ± 0.04	0.11	± 0.23	- 0.04 ± 0.04
Pressing Z "B"	- 0.003	± 0.10	- 0.03 ± 0.01	- 0.19	± 0.14	- 0.003 ± 0.04	0.08	± 0.11	0.06 ± 0.04	- 0.14	± 0.23	- 0.05 ± 0.04