Table (1): Least-squares means ±SE of carcass traits of the slaughtered lambs.

Items	Breed		Treatment			Overall mean
	Farafra	Chios	I	II	III	
No. of lambs	9	9	6	6	6	18
Slaughter weight, kg	43.11±2.01	37.44 ±2.01	38.33±2.47	40.00±2.47	42.50±2.47	40.28±6.04
Empty body weight, kg	39.17±1.79*	32.33±1.79	34.36±2.19	35.64±2.19	37.24±2.19	35.75±5.37
Hot carcass weight, kg	21.61±1.08*	17.97±1.08	19.10±1.32	19.60±1.32	20.68±1.32	19.80±3.24
Dressing A%	50.11±0.68*	47.89±0.68	49.50±0.78	48.83±0.78	48.67±0.78	49.00±2.05
Dressing B%	55.11±0.77	55.44±0.77	55.33±0.88	54.83±0.88	55.67±0.88	55.28±2.32
	Carcass cuts weight, kg					
Shoulder (SH)	3.91±0.20	3.44±0.20	3.66±0.25	3.53±0.25	3.83±0.25	3.68±0.60
Leg (LE)	6.68±0.31	5.89±0.31	6.23±0.38	6.08±0.38	6.55±0.38	6.29±0.93
Loin (LO)	1.35±0.08	1.17±0.08	1.12±0.10	1.28±0.10	1.39±0.10	1.26±0.25
Rack (RA)	4.44±0.26	3.71±0.26	3.84±0.32	4.05±0.32	4.33±0.32	4.08±0.79
Neck (NE)	1.34±0.12	1.28±0.12	1.28±0.14	1.28±0.14	1.36±0.14	1.31±0.35
Brisket (BR)	0.89±0.04*	0.70±0.04	0.82±0.05	0.82±0.05	0.74±0.05	0.79±0.13
Flank (FL)	1.30±0.09	1.07±0.09	1.01±0.11	1.30±0.11	1.25±0.11	1.19±0.26
Tail (TA)	1.70±0.17**	0.71±0.17	1.15±0.21	1.26±0.21	1.22±0.21	1.21±0.50
	Carcass cuts as percentage. [1]					
Shoulder (SH)	18.10±0.28*	19.22±0.28	19.29±0.35^{a}	18.13±0.35^{b}	18.56±0.35^{ab}	18.66±0.85
Leg (LE)	31.00±0.41**	32.86±0.41	32.75±0.51	31.27±0.51	31.79±0.51	31.94±1.26
Loin (LO)	6.27±0.21	6.47±0.21	5.87±0.25^{b}	6.51±0.25^{ab}	6.74±0.25^{a}	6.37±0.63
Rack (RA)	20.54±0.46	20.48±0.46	20.10±0.56	20.58±0.56	20.85±0.56	20.51±1.39
Neck (NE)	6.24±0.33	7.01±0.33	6.66±0.40	6.64±0.40	6.57±0.40	6.63±0.99
Brisket (BR)	4.12±0.20	3.97±0.20	4.26±0.25	4.27±0.25	3.59±0.25	4.04±0.62
Flank (FL)	6.03±0.27	5.93±0.27	5.31±0.33^{b}	6.61±0.33^{a}	6.01±0.33^{ab}	5.98±0.81
Tail (TA)	7.71±0.71**	4.05±0.71	5.76±0.85	5.97±0.85	5.89±0.85	5.88±2.14
Prime cuts[2]	75.89±0.57**	79.11±0.57	78.00±0.70	76.50±0.70	78.00±0.70	77.50±1.72

a , b: means of the same row having different superscript different significantly ($p<0.05$) - [1] Relative to hot carcass weight. [2] Prime cuts = [SH + LE + LO + RA, kg / carcass weight, kg] × 100

* Significant at ($P<0.05$) ** Significant at ($P<0.01$).

Table (2): Least-squares means ±SE of the edible offal and non-edible parts weights (kg) of the slaughtered lambs.

Items	Breed		Treatments			Overall mean
	Farafra	Chios	I	II	III	
No. of lambs	9	9	6	6	6	18
Slaughter weight	43.11±2.01	37.44±2.01	38.33±2.47	40.00±2.47	42.50±2.47	40.28±6.04
Edible offals						
Liver	0.765±0.04	0.702±0.04	0.707±0.05	0.694±0.05	0.800±0.05	0.734±0.13
Kidneys	0.114±0.01	0.107±0.01	0.104±0.01	0.112±0.01	0.115±0.01	0.110±0.01
Testes	0.391±0.04	0.322±0.04	0.271±0.05	0.370±0.05	0.430±0.05	0.357±0.13
Spleen	0.063±0.01	0.079±0.01*	0.065±0.01	0.072±0.01	0.076±0.01	0.071±0.02
Heart	0.216±0.01	0.213±0.01	0.220±0.01	0.204±0.01	0.220±0.01	0.215±0.03
Lungs & trachea	0.663±0.04	0.692±0.04	0.639±0.05	0.647±0.05	0.747±0.05	0.677±0.11
Total edible offals	2.213±0.11	2.115±0.11	2.006±0.14	2.099±0.14	2.388±0.14	2.164±0.34
Internal fat	0.448±0.06**	0.219±0.06	0.260±0.07	0.433±0.07	0.307±0.07	0.333±0.18
Kidneys fat	0.085±0.01	0.063±0.01	0.075±0.01	0.076±0.01	0.071±0.01	0.074±0.02
Tail fat	2.232±0.19**	0.996±0.19	1.482±0.23	1.766±0.23	1.594±0.23	1.614±0.57
Non-edible parts						
Pelt	6.116±0.22**	4.020±0.22	$4.368±0.27^{b}$	$5.218±0.27^{a}$	$5.618±0.27^{a}$	5.068±0.67
Head	2.420±0.14	2.535±0.14	2.455±0.17	2.448±0.17	2.530±0.17	2.477±0.41
4 Feet	1.069±0.05	0.973±0.05	0.964±0.06	1.002±0.06	1.096±0.06	1.021±0.16
GIT full	6.701±0.41	7.788±0.41	6.740±0.50	6.949±0.50	8.055±0.50	7.245±1.22
GIT empty	2.756±0.13	2.671±0.13	2.764±0.15	2.581±0.15	2.795±0.15	2.713±0.38
GIT content	3.945±0.33	5.118±0.33*	3.976±0.40	4.358±0.40	5.260±0.40	4.531±0.99

a , b means of the same row having different superscript different significantly ($p<0.05$)

GIT content = GIT full – GIT empty * Significant at ($P<0.05$) ** Significant at ($P<0.01$).

Table (3): Least-squares means ±SE of physical and chemical composition of 9,10 and11th ribs cut of the slaughtered lambs.

Item	Breed		Treatment			Overall mean
	Farafra	Chios	I	II	III	
No. of lambs	9	9	6	6	6	18
Weight of 9,10 and11th ribs cut, g	530±0.04	423±0.04	462±0.05	466±0.05	502±0.05	476±0.11
Meat, g	287±0.02**	217±0.02	247±0.02	242±0.02	267±0.02	252±0.05
Fat, g	152±0.02	113±0.02	122±0.02	133±0.02	142±0.02	133±0.06
Bone, g	91±0.01	94±0.01	93±0.01	91±0.01	93±0.01	92±0.02
Meat %	54.55±1.85	52.46±1.85	53.27±2.27	53.03±2.27	54.22±2.27	53.50±5.56
Fat %	28.33±2.41	24.75±2.41	26.01±2.95	26.97±2.95	26.65±2.95	26.54±7.24
Bone %	17.12±0.94	22.79±0.94**	20.72±1.16	20.01±1.16	19.13±1.16	19.95±2.83
Boneless meat %(1)	82.88±0.94**	77.21±0.94	79.28±1.16	79.99±1.16	80.87±1.16	80.05±2.83
Meat : fat ratio	2.02±0.35	2.43±0.35	2.16±0.42	2.21±0.42	2.32±0.42	2.23±1.04
Meat : bone ratio	3.21±0.11**	2.33±0.11	2.66±0.13	2.69±0.13	2.97±0.13	2.77±0.33
Coefficient of meat(2)	4.90±0.22**	3.47±0.22	3.98±0.27	4.09±0.27	4.49±0.27	4.18±0.67
Eye muscle area cm^2	11.91±0.11**	11.42±0.11	11.75±0.13	11.58±0.13	11.67±0.13	11.67±0.33
Carcass meat, kg	11.73±0.46**	9.30±0.46	10.16±0.56	10.23±0.56	11.16±0.56	10.52±1.37
Carcass fat, kg	6.18±0.67	4.66±0.67	5.07±0.82	5.53±0.82	5.65±0.82	5.42±2.01
Carcass bone, kg	3.70±0.18	4.02±0.18	3.87±0.22	3.84±0.22	3.87±0.22	3.86±0.54
Chemical analysis						
Moisture %	72.75±0.64	71.37±0.64	71.20±0.78	72.38±0.78	72.58±0.78	72.06±1.93
On dry matter basis						
Protein %	73.77±0.71	71.86±0.86	72.53±0.86	72.45±0.86	73.47±0.86	72.82±2.13
Ether extract %	23.05±0.74	25.15±0.74	24.24±0.91	24.69±0.91	23.37±0.91	24.10±2.23
Ash %	3.10±0.11	2.99±0.11	3.14±0.13	2.83±0.13	3.17±0.13	3.05±0.33

(1): [(Meat weight + fat weight)/ sample weight] x100 (2): [(Meat weight + fat weight)/ bone weigh

* Significant at (P<0.05) ** Significant at (P<0.01).