

Table (2): Chemical analysis and cell wall constituents (%) of the tested materials and the experimental diets.

Items	Tested materials		Experimental diets			
	Berseem hay	<i>Salix safsaf</i> (stems + leaf)	T1	T2	T3	T4
Chemical analysis (%)						
Dry matter	91.5	90.47	90.5	91.22	91.07	91.23
Chemical analysis on DM basis						
Organic matter (OM)	79.7	76.7	82.8	83.4	83.0	82.3
Crude protein (CP)	11.2	12.3	17.1	17.2	17.5	17.6
Crude fiber (CF)	25.9	22.9	13.0	12.9	13.1	13.3
Ether extract (EE)	1.7	3.3	2.9	3.0	3.0	3.0
Nitrogen-free extract (NFE)	41.0	38.3	49.8	50.3	49.4	48.4
Ash	12.0	13.8	8.7	8.6	8.6	8.8
Gross energy (Kcal/kg DM) ¹	3564	3537	3847	3876	3863	3835
Digestible energy (Kcal/kg DM) ²	1680	1516	2572	2592	2580	2549
Non fibrous carbohydrates (NFC) ³	29.2	26.8	33.8	33.8	33.4	33.0
Cell wall constituents						
Neutral detergent fiber (NDF)	45.9	43.9	37.5	37.4	37.5	37.7
Acid detergent fiber (ADF)	40.9	38.7	22.2	22.2	22.3	22.5
Acid detergent lignin (ADL)	27.3	22.7	10.0	9.7	9.4	9.1
Hemicellulose	5.0	5.3	15.2	15.2	15.2	15.1
Cellulose	13.6	15.9	12.3	12.5	13.0	13.4
Phenolic compounds	ND	8.32	ND	ND	ND	ND
Condensed tannins	ND	3.7	ND	ND	ND	ND
Salicin (g/kg dry matter)	ND	1.2	ND	ND	ND	ND

¹Gross energy (kilo calories per kilogram DM) was calculated according to Blaxter (1968), where, each g of crude protein (CP) = 5.65 kcal, each g of ether extract (EE) = 9.40 kcal and each g crude fiber (CF) and nitrogen-free extract (NFE) = 4.15 kcal. ²Digestible energy (DE) was calculated according to Fekete and Gippert (1986) using the following equation: DE (kcal/ kg DM) = 4253-32.6 (CF %) -144.4 (total ash). ³ Non fibrous carbohydrates (NFC), calculated according to Calsamiglia *et al.* (1995) using the following equation: NFC = 100-{CP + EE + Ash + NDF}. Hemicellulose = NDF-ADF. Cellulose = ADF-ADL. ND: Not determines.

T1= Basal diet contained 34 Kg/100Kg Berseem hay. T2=Basal diet contained 10.75 *Salix safsaf* + 23.25 Berseem hay Kg/100 Kg.

T3=Basal diet contained 17 *Salix safsaf* + 17 Berseem hay Kg/100 Kg. T4: Basal diet contained 23.25 *Salix safsaf* + 10.75 Berseem hay Kg/100Kg.

