

Table (4): Effect energy sources, protein sources and their interaction on nutrient digestibilities (%)

Items	Coefficients of digestibility (%)					
	DM	OM	CP	CF	EE	NFE
Sources of energy:	ns	ns	*	*	*	*
Yellow corn	75.00 ± 1.01	78.90 ± 0.73	70.41 ± 1.24 ^a	42.02 ± 1.50 ^b	80.17 ± 4.47 ^a	86.61 ± 2.41 ^a
Sugar beet pulp (SBP)	73.48 ± 6.79	75.49 ± 6.48	64.34 ± 9.70 ^b	52.50 ± 8.10 ^a	67.49 ± 5.79 ^b	83.40 ± 4.81 ^b
Sources of protein:	*	*	*	*	*	*
Cottonseed meal (CSM)	68.73 ± 3.43 ^a	72.10 ± 4.08 ^b	59.63 ± 6.38 ^b	42.59 ± 1.10 ^b	81.09 ± 3.83 ^a	79.90 ± 2.33 ^b
Horse bean (HB)	79.76 ± 2.35 ^b	82.29 ± 1.76 ^a	75.12 ± 2.09 ^a	51.93 ± 8.51 ^a	66.58 ± 5.14 ^b	90.11 ± 0.06 ^a
Interaction effect:	*	*	*	*	*	*
Yellow corn x CSM (CFM1)	73.58 ± 2.0 ^b	77.88 ± 0.37 ^b	68.65 ± 0.49 ^b	44.15 ± 1.92 ^b	86.50 ± 1.16 ^a	83.20 ± 0.30 ^b
Yellow corn x HB (CFM3)	76.43 ± 1.34 ^b	79.93 ± 2.25 ^{ab}	72.17 ± 0.50 ^b	39.89 ± 1.80 ^b	73.85 ± 1.19 ^b	90.02 ± 1.14 ^a
SBP x CSM (CFM2)	63.88 ± 1.06 ^c	66.32 ± 1.65 ^c	50.60 ± 0.81 ^c	41.04 ± 1.18 ^b	75.68 ± 0.63 ^b	76.60 ± 2.14 ^c
SBP x HB (CFM4)	83.08 ± 1.82 ^a	84.65 ± 1.73 ^a	78.07 ± 1.14 ^a	63.96 ± 1.27 ^a	59.30 ± 1.37 ^c	90.20 ± 1.17 ^a

a, b, c, d ... Means in the same column with different superscripts differ significantly (P<0.05).

* P<0.05

ns : Not significant

Table (5): Effect of energy sources, protein sources and their interaction on nutrient nutritive values, rumen parameters and daily body weight gain

Items	Nutritive values %		Nutritive values intake (g)		pH	Rumen parameters		Daily body weight gain (g)
	TDN	DCP	TDN	DCP		NH3-N (mg/100 ml)	TVFA's (mleq/100 ml)	
Sources of energy:								
Yellow corn	*	ns	ns	ns	ns	ns	ns	ns
Yellow corn	77.94 ± 1.23 ^a	9.55 ± 0.94	518 ± 8.0	63.13 ± 4.2	6.47 ± 0.19	23.10 ± 2.53	6.86 ± 1.25	56.12 ± 3.62
Sugar beet pulp (SBP)	72.79 ± 4.46 ^b	9.54 ± 2.16	496 ± 12	64.31 ± 12.44	6.61 ± 0.05	22.73 ± 3.02	7.09 ± 0.82	52.86 ± 4.04
Sources of protein:								
Cottonseed meal (CSM)	*	*	ns	*	ns	*	*	*
Cottonseed meal (CSM)	71.34 ± 3.43 ^b	7.36 ± 0.62 ^b	504 ± 18	51.95 ± 3.71 ^b	6.44 ± 0.17	31.11 ± 3.13 ^a	8.44 ± 0.13 ^a	51.19 ± 2.86 ^b
Horse beans (HB)	79.39 ± 0.21 ^a	11.74 ± 0.61 ^a	510 ± 3.0	75.49 ± 4.54 ^a	6.63 ± 0.07	14.72 ± 3.39 ^b	5.51 ± 0.29 ^b	57.79 ± 0.56 ^a
Interaction effect:								
Yellow corn x CSM (CFM1)	*	*	*	*	*	*	*	*
Yellow corn x CSM (CFM1)	76.20 ± 2.82 ^a	8.23 ± 0.10 ^c	530 ± 19 ^a	57.20 ± 0.71 ^c	6.20 ± 0.10 ^b	26.68 ± 0.90 ^b	8.62 ± 0.43 ^a	55.24 ± 0.95 ^a
Yellow corn x HB (CFM3)	79.68 ± 0.58 ^a	10.88 ± 0.13 ^b	506 ± 4.0 ^{ab}	69.07 ± 0.84 ^b	6.73 ± 0.09 ^a	19.52 ± 2.54 ^c	5.10 ± 0.33 ^b	57.00 ± 2.02 ^a
SBP x CSM (CFM3)	66.49 ± 0.82 ^b	6.49 ± 0.18 ^d	479 ± 6.0 ^b	46.71 ± 1.31 ^d	6.67 ± 0.14 ^a	35.54 ± 1.40 ^a	8.25 ± 0.41 ^a	47.14 ± 1.72 ^a
SFM x HB (CFM4)	79.10 ± 0.96 ^a	12.60 ± 0.32 ^a	514 ± 6.0 ^a	81.90 ± 2.08 ^a	6.54 ± 0.13 ^{ab}	9.92 ± 0.46 ^d	5.92 ± 0.11 ^b	58.57 ± 2.21 ^a

a, b, c, d ... Means in the same column with different superscripts differ significantly (P<0.05).

* P<0.05

ns : Not significant