

Table 2. Chemical composition and digestion coefficients of corn cobs and cell wall constituents without or with enzyme supplementation.

Items	Tested corn cobs %						Cell wall constituents %				
	OM	CP	EE	CF	NFE	Ash	NDF	ADF	ADL	Hemi.	Cellu.
Chemical composition (%)	96.52	2.74	1.43	38.51	53.84	3.48	86.180	41.812	5.338	44.368	36.474
<i>Digestion coefficients (%)</i>											
Without Enz.	69.16	38.19	76.77	54.88	78.99	-	40.46	28.42	0.08	66.88	30.50
With Enz.	80.15	60.57	80.11	88.99	80.88	-	61.58	34.37	0.09	90.80	41.63
% of improvement	15.89	58.60	4.35	62.15	2.25	-	52.19	20.95	5.88	35.75	36.46

NDF =Neutral detergent fiber, ADF= Acid detergent fiber, ADL=Acid detergent lignin, Hemi. = Hemi cellulose, Cellu = Cellulose

Table 3: Growth performance traits of rabbits from 5 to 12 weeks of age as affected by experimental treatments.

Items	Initial BW (g)	Final BW (g)	DBG (g)	RGR %	DFI (g)	FC (g FI/g BG)
Corn cobs(%) effects:						
Control (0%)	771.15±14.08	2066.60 ^a ±52.49	26.44 ^a ±0.87	106.32 ^a ±2.83	108.45 ^a ±0.51	4.12 ^b ±0.12
10%	770.65±14.07	2037.40 ^a ±54.78	25.85 ^a ±0.94	103.97 ^a ±3.18	103.97 ^b ±0.49	4.11 ^b ±0.13
20%	771.00±14.08	1871.50 ^b ±48.12	22.46 ^b ±0.79	90.33 ^b ±2.62	90.33 ^c ±0.50	4.60 ^a ±0.14
Sig.	NS	*	*	*	*	*
Enzymes effects:						
Without enzyme	771.10±11.13	1913.6 ^b ± 40.99	23.32 ^b ±0.69	93.77 ^b ± 2.37	104.51±0.82	4.51 ^a ±0.11
With enzyme	770.77±11.13	2070.0 ^b ± 44.70	26.52 ^a ±0.77	106.64 ^a ±2.62	106.75±0.82	4.05 ^b ± 0.10
Sig.	NS	*	*	*	NS	*
Interaction effects:						
Control (0% corn cobs) xwithout Enz.	771.00±22.26	1989.40 ^{ab} ±60.26	24.87 ^b ±0.78	100.00±0.00	107.31 ^{ab} ±0.93	4.32 ^b ±0.14
Control (0% corn cobs) x with Enz.	771.30±22.27	2143.80 ^a ±64.71	28.01 ^a ±0.87	112.65±0.03	109.59 ^a ±0.76	3.92 ^{bc} ±0.12
10% corn cobs x without Enz.	771.30±22.27	1951.40 ^{ab} ±59.16	24.08 ^b ±0.75	96.86±0.01	104.58 ^{bc} ±1.08	4.35 ^b ±0.14
10% corn cobs x with Enz.	770.00±22.23	2123.40 ^a ±64.13	27.62 ^a ±0.86	111.08±0.03	106.78 ^{ab} ±1.11	3.87 ^c ±0.12
20% corn cobs x without Enz.	771.00±22.26	1800.10 ^b ±54.79	21.00 ^c ±0.66	84.46±0.04	101.64 ^c ±1.14	4.85 ^a ±0.15
20% corn cobs x with Enz.	771.00±22.26	1943.00 ^{ab} ±58.92	23.92 ^b ±0.75	96.19±0.01	103.89 ^{bc} ±1.08	4.35 ^b ±0.14
Sig.	NS	*	*	*	*	*

^{a-h} Means within a column not sharing similar superscripts in each classification are significantly ($P \leq 0.05$) different.

NS : Not significant, * $P \leq 0.05$, Enz.=Enzymes (Cellulase, β -glucanase, α -amylase, Protease and Lipase)

Table 6: Some blood constituents of rabbits as affected by experimental treatment groups

Items	Total protein (g/dl)	Albumin (g/dl)	Globulin (g/dl)	AST (U/L)	ALT (U/L)	Urea (mg/dl)
<i>Corn cobs(%) effect:</i>						
Control (0%)	7.53 ^a ±0.15	4.09±0.31	3.45 ^a ±0.18	12.81 ^c ±0.82	14.13 ^b ±0.83	062±0.05
10 %	5.64 ^b ±0.22	3.86±0.15	2.58 ^b ±0.26	70.80 ^b ±1.82	47.83 ^a ±0.83	0.62±0.05
20%	5.66 ^b ±0.25	3.65±0.15	1.91 ^c ±0.17	80.35 ^a ±1.13	48.52 ^a ±1.49	0.55±0.06
Sig.	*	NS	*	*	*	NS
<i>Enzymes effects:</i>						
Without enzyme	6.32±0.31	3.60±0.22	2.71±0.23	57.89 ^a ±9.22	36.90±4.48	0.62±0.05
With enzyme	6.17±0.33	3.59±0.21	2.58±0.27	51.41 ^b ±8.79	36.74±5.32	0.57±0.03
Sig.	NS	NS	NS	*	NS	NS
<i>Interaction effects:</i>						
Control (0% corn cobs) x without Enz.	7.57 ^a ±0.23	4.10±0.47	3.47 ^a ±0.27	14.91 ^e ±0.31	16.16 ^d ±0.47	0.72 ^a ±0.05
Control (0% corn cobs) x with Enz.	7.49 ^a ±0.23	4.07±0.47	3.43 ^a ±0.27	10.71 ^f ±0.31	12.10 ^e ±0.47	0.52 ^b ±0.05
10% corn cobs x without Enz.	5.78 ^b ±0.30	3.01±0.23	2.77 ^{ab} ±0.13	75.52 ^c ±0.40	49.89 ^a ±0.43	0.72 ^a ±0.04
10% corn cobs x with Enz.	5.49 ^b ±0.33	3.11±0.23	2.38 ^b ±0.52	66.08 ^d ±0.68	45.78 ^b ±0.43	0.52 ^b ±0.23
20% corn cobs x without Enz.	5.60 ^b ±0.36	3.71±0.23	1.89 ^b ±0.25	83.26 ^a ±0.48	44.67 ^c ±0.60	0.43 ^b ±0.06
20% corn cobs x with Enz.	5.53 ^b ±0.42	3.60±0.23	1.93 ^b ±0.27	77.44 ^b ±0.40	44.01 ^c ±0.34	0.67 ^a ±0.05
Sig.	*	NS	*	*	*	*

^{a-h} Means within a column not sharing similar superscripts in each classification are significantly ($P \leq 0.05$) different.

NS : Not significant, * $P \leq 0.05$, , Enz.=Enzymes (Cellulase, β -glucanase, α - amylase, Protease and Lipase)

Table 8. Economical efficiency (EEF) of rabbits as affected by experimental treatment.

Items	B.W.G (gm)	Total feed intake kg	Price kg Feed L.E	Feed cost (LE)	Net Reven. L.E	E.E.F	R.E.E.F %
Control (0% corn cobs) x without Enz.	1392.72	6.009	1.8765	11.276	13.793	1.223	100
Control (0% corn cobs) x with Enz.	1568.56	6.137	1.9115	11.731	16.503	1.407	115.0
10% corn cobs x without Enz.	1348.48	5.856	1.7841	10.448	13.825	1.323	108.2
10% corn cobs x with Enz.	1546.72	5.979	1.8191	10.876	16.965	1.560	127.5
20% corn cobs x without Enz.	1176.00	5.691	1.6809	9.566	11.602	1.213	0.992
20% corn cobs x with Enz.	1339.52	5.817	1.7159	9.981	14.130	1.416	115.8

Price of kg live body weight was 18.0 L.E, Price of kg Kemzyme enzyme was 70.0 L.E at experimental time

Net revenue = body revenue – feed cost. * E.E.F = (Net revenue / feed cost).

R.E.E.F, assuming control treatment = 100%, , Enz.=Enzymes (Cellulase, β -glucanase, α -amylase, Protease and Lipase).