



Production performance, carcass characteristics, intestinal morphometry and serum biochemistry in dual purpose chicken fed diet incorporated with rice distillers grain with soluble

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Supplementary Table 1. Effect of dietary supplementation rDDGS on efficiency parameters of dual-purpose chicken

Attribute	Treatment				SEM	P-value
	0%	10%	14%	18%		
<i>Production efficiency factor (PEF)</i>						
3 rd week	289.80 ^a	373.99 ^b	410.13 ^b	348.63 ^b	17.46	0.047
7 th week	775.17	734.42	747.81	809.54	44.99	0.956
<i>Protein efficiency ratio (PER)</i>						
0-3 weeks	1.78	1.57	1.59	1.84	0.04	0.070
4-7 weeks	1.18	1.10	1.12	1.11	0.02	0.478
0-7 weeks	1.28	1.19	1.20	1.23	0.02	0.549
<i>Energy efficiency ratio (EER)</i>						
0-3 weeks	12.68	11.22	11.27	13.08	0.03	0.072
4-7 weeks	8.41	7.88	7.93	7.86	0.16	0.478
0-7 weeks	9.09	8.48	8.55	8.78	0.15	0.555
<i>Economic Index Score (EIS)</i>						
3 rd week	7.10 ^a	9.79 ^b	11.05 ^b	10.49 ^b		0.015
7 th week	18.99	19.22	20.14	22.03		0.840

Means bearing superscripts in the same row differ significantly ($P < 0.05$). SEM, Standard error of mean; P, Probability.

Supplementary Table 2. Effect of dietary supplementation of graded levels of rDDGS on serum biochemical parameters of dual-purpose chicken

Attribute	Treatment				SEM	P-value
	0%	10%	14%	18%		
Haemoglobin (g/dl)	16.08	17.17	16.54	16.10	0.46	0.784
Glucose (mg/dl)	225.09	242.22	233.05	233.73	7.06	0.889
Total Protein (g/dl)	2.91	2.74	2.85	2.81	0.07	0.889
Albumin (g/dl)	1.42	1.36	1.32	1.35	0.02	0.514
Globulin (g/dl)	1.49	1.38	1.54	1.46	0.13	0.755
A:G ratio	0.97	1.03	0.86	0.93	0.05	0.681
Cholesterol (mg/dl)	129.13	130.37	123.05	129.75	3.70	0.919
Serum enzymes						
Aspartate amino transferase (IU/L)	173	167.33	172.33	172	3.55	0.958
Alanine amino transferase (IU/L)	29.22	22.58	20.42	22.32	2.14	0.553
Alkaline Phosphatase (U/L)	58.93	64.95	55.93	58.87	3.46	0.857
Kidney function test						
Uric acid (mg/dl)	2.94	1.88	2.68	2.48	0.22	0.425
Creatinine (mg/dl)	0.326	0.418	0.327	0.337	3.46	0.846

SEM, Standard error of mean; P, Probability.

Supplementary Table 3. Effect of dietary supplementation of graded levels of rDDGS on metabolizability of nutrients of dual-purpose chicken

Attribute	Treatment				SEM	P-value
	0%	10%	14%	18%		
Dry matter	63.35	61.31	62.27	62.30	0.30	0.067
Organic matter	66.78	65.34	66.18	64.24	0.38	0.104
Ether extract	75.04	73.47	73.97	70.08	0.70	0.104
Crude protein	62.22	60.54	62.05	61.52	0.27	0.104
Crude fibre	13.37	12.38	12.11	12.13	0.24	0.210
Nitrogen free extract	73.35	71.02	72.11	75.12	0.58	0.083

SEM, Standard error of mean; P, Probability.

Supplementary Table 4. Effect of dietary supplementation of graded levels of rDDGS on intestinal morphometry of dual-purpose chicken

Attribute	Treatment				SEM	P-value
	0%	10%	14%	18%		
Villi height (µm)	87.41	81.47	82.26	82.02	2.03	0.729
Villi width (µm)	20.26	18.72	16.48	19.23	0.98	0.602
Crypt depth (µm)	15.44	10.55	11.74	11.63	0.71	0.069
Villi area (mm ²)	1.10	0.92	0.72	0.97	0.10	0.585
Villi height/Crypt depth (µm)	6.05	8.38	7.87	7.42	0.50	0.150
Villi height/Villi width (µm)	4.73	4.68	5.40	4.50	0.30	0.145

SEM, Standard error of mean; P, Probability.

Supplementary Table 5. Effect of dietary supplementation of graded levels of rDDGS on economics of production in dual purpose chicken

Attribute	Treatment			
	0%	10%	14%	18%
Intake of feed/bird (kg)	3.37	3.39	3.27	3.48
Cost of feed/kg	40.82	38.22	37.13	36.75
Total cost of feed/bird	137.41	129.73	121.27	128.01
Fixed cost/bird	37	37	37	37
Total expenditure/bird	174.41	166.73	158.27	165.01
Final BW (kg)	0.904	0.844	0.826	0.897
Cost of live bird @400/kg	361.73	337.78	330.35	358.76
Return/bird	187.32	171.05	172.08	193.75
Profit/kg live weight	207.14	202.56	208.36	216.02