

การพนัน

Appendix Table 1. Interaction of species, level of protein and supplementation on intake and ADG

Item	Buffalo				Native Cattle				Dairy Cattle				SE
	Non.		Suppl.		Non.		Suppl.		Non.		Suppl.		
	10%CP	14%CP	10%CP	14%CP	10%CP	14%CP	10%CP	14%CP	10%CP	14%CP	10%CP	14	
Straw intake ,%BW	1.3 ^a	1.7 ^b	1.4 ^a	1.4 ^a	1.48 ^{ac}	1.84 ^b	1.5 ^{ad}	1.71 ^{bce}	1.4 ^a	1.5 ^{ade}	1.3 ^a	1.7 ^b	0.2
Straw intake ,g/kgBW ^{0.75}	52 ^a	69 ^{bc}	58 ^{ac}	58 ^{ac}	57 ^{ac}	72 ^e	56 ^{af}	66 ^{bcefg}	57 ^{ag}	59 ^{ab}	51 ^a	71 ^{be}	1.5
Total feed intake ,%BW	2.7 ^{ad}	3.1 ^{bc}	2.7 ^{ad}	2.7 ^{ad}	2.8 ^{abd}	3.2 ^c	2.9 ^{abc}	3.1 ^c	2.7 ^{ac}	2.8 ^{abdc}	2.6 ^d	3.0 ^{bce}	0.2
Total feed intake,g/kgBW ^{0.75}	106 ^a	122 ^{bdf}	113 ^{abcdef}	112 ^{abcdef}	108 ^{ce}	124 ^{bdf}	110 ^{abce}	119 ^{abcdef}	110 ^{bcdef}	112 ^{abcdef}	103 ^e	125 ^f	1.7
ADG,kg	0.09 ^a	0.26 ^{ab}	0.19 ^{ab}	0.35 ^{ab}	0.22 ^{ab}	0.64 ^{cd}	0.24 ^{ab}	0.32 ^{ab}	0.26 ^{ab}	0.43 ^{bc}	0.3 ^{ab}	0.79 ^{cd}	0.2

abcdef Values on the same row under each main effect with different superscripts differ (P<.05)

Appendix Table 2. Dependent Variable : Rice straw intake (%BW)

Source	DF	Type III SS	Mean Square	F Value	Pr>F
BLK	1	0.254	0.254	22.95	0.0006
Species	2	0.137	0.068	6.20	0.015
Suppl.	1	0.007	0.007	0.63	0.443
Species*Supp.	2	0.031	0.015	1.43	0.281
Protein	1	0.403	0.403	36.38	0.000
Species*Protein	2	0.002	0.001	0.11	0.893
Supp.*Protein	1	0.006	0.006	0.57	0.465
Species*Supp.*Pro.	2	0.141	0.070	6.40	0.014
R-square	C.V	Root MSE		Mean	
0.889	6.877	0.105		1.530	

Appendix Table 3. Dependent Variable : Rice straw intake ($\text{g/kgW}^{0.75}$)

Source	DF	Type III SS	Mean Square	F Value	Pr>F
BLK	1	95.960	95.960	4.05	0.069
Species	1	60.485	30.242	1.28	0.317
Supp	2	5.106	5.106	0.22	0.651
Species*Supp	1	42.895	21.447	0.90	0.432
Protein	2	691.978	691.978	29.18	0.000
Species*Protein	1	11.309	5.654	0.24	0.791
Supp*Protein	2	3.117	3.117	0.13	0.723
Species*Supp*Pro.	1	302.121	151.060	6.37	0.014
R-square	C.V	Root MSE		Mean	
0.823	8.046	4.869		60.517	

Appendix Table 4. Dependent Variable : Total dry matter intake (%BW)

=====					
Source	DF	Type III SS	Mean Square	F Value	Pr>F
BLK	1	0.308	0.308	20.01	0.0009
Species	2	0.214	0.107	6.98	0.011
Suppl.	1	0.002	0.002	0.16	0.700
Species*Supp.	2	0.047	0.023	1.54	0.256
Protein	1	0.345	0.345	32.44	0.000
Species*Protein	2	0.004	0.002	0.16	0.857
Supp.*Protein	1	0.008	0.008	0.57	0.465
Species*Supp.*Pro.	2	0.135	0.067	4.41	0.039
=====					
R-square	C.V	Root MSE		Mean	
0.863	4.318	0.124		2.874	
=====					

Appendix Table 5. Dependent Variable : Total dry matter intake ($\text{g/kgW}^{0.75}$)

Source	DF	Type III SS	Mean Square	F Value	Pr>F
BLK	1	9.856	9.856	0.27	0.612
Species	1	34.034	17.017	0.47	0.637
Supp	2	0.101	0.101	0.00	0.958
Species*Supp	1	19.760	0.880	0.27	0.766
Protein	2	639.220	639.220	17.63	0.001
Species*Protein	1	22.939	11.469	0.32	0.735
Supp*Protein	2	2.112	2.112	0.06	0.813
Species*Supp*Pro.	1	377.565	188.782	5.21	0.025
R-square	C.V	Root MSE		Mean	
0.863	4.318	0.124		2.874	

Appendix Table 6. Dependent Variable : Average daily gain (ADG)

Source	DF	Type III SS	Mean Square	F Value	Pr>F
INTWT	2	0.007	0.007	1.04	0.336
BLK	1	0.037	0.037	4.85	0.058
Species	2	0.114	0.057	7.51	0.014
Supp	1	0.012	0.012	1.70	0.228
Species*Supp	2	0.111	0.055	7.32	0.015
Protein	1	0.270	0.270	35.32	0.000
Species*Protein	2	0.011	0.006	0.76	0.500
Supp*Protein	1	0.000	0.000	0.06	0.813
Species*Supp*Pro.	2	0.100	0.050	6.57	0.020
R-square	C.V	Root MSE		Mean	
0.923	24.86	0.087		0.352	

Appendix Table 7. Dependent Variable : PH value at 4 h. post-feeding

Source	DF	Type III SS	Mean Square	F Value	Pr>F
BLK	1	0.002	0.002	0.14	0.719
Species	2	0.167	0.083	4.02	0.052
Suppl.	1	0.047	0.047	2.27	0.162
Species*Supp.	2	0.246	0.123	5.92	0.020
Protein	1	0.207	0.207	9.97	0.010
Species*Protein	2	0.031	0.015	0.76	0.491
Supp.*Protein	1	0.052	0.052	2.52	0.143
Species*Supp.*Pro.	2	0.0006	0.0003	0.02	0.985
R-square	C.V	Root MSE		Mean	
0.797	2.131	0.144		6.771	

Appendix Table 8. Dependent Variable : PH value at 6 h. post-feeding

=====					
Source	DF	Type III SS	Mean Square	F Value	Pr>F
REP	1	0.001	0.001	1.05	0.821
Species	2	0.066	0.033	1.18	0.342
Suppl.	1	0.000	0.000	0.02	0.895
Species*Supp.	2	0.052	0.026	0.93	0.422
Protein	1	0.367	0.367	13.07	0.004
Species*Protein	2	0.008	0.004	0.15	0.864
Supp.*Protein	1	0.001	0.001	0.07	0.803
Species*Supp.*Pro.	2	0.193	0.096	3.45	0.068
=====					
R-square	C.V	Root MSE		Mean	
0.691	2.485	0.167		6.747	
=====					

Appendix Table 9. Dependent Variable : Ruminal NH₃-N concentration at 0 h.
post-feeding

Source	DF	Type III SS	Mean Square	F Value	Pr>F
Blk	1	0.010	0.010	0.01	0.928
Species	2	14.457	7.233	5.90	0.038
Suppl.	1	10.122	10.122	8.26	0.028
Species*Supp.	2	1.888	0.944	0.77	0.503
Protein	1	2.067	2.067	1.69	0.241
Species*Protein	2	9.261	4.630	3.78	0.086
Supp.*Protein	1	6.215	6.21	5.08	0.065
Species*Supp.*Pro.	2	0.000	0.000	0.00	0.985
R-square	C.V	Root MSE	Mean		
0.808	45.638	1.025	2.247		

Appendix Table 10. Dependent Variable : Ruminal NH₃-N concentration at 4 h.
post-feeding

=====					
Source	DF	Type III SS	Mean Square	F Value	Pr>F
Blk	1	0.386	0.386	0.24	0.640
Species	2	9.360	4.680	2.90	0.145
Suppl.	1	13.35	13.35	8.28	0.340
Species*Supp.	2	9.605	4.802	3.41	0.137
Protein	1	5.396	5.396	3.83	0.127
Species*Protein	2	8.445	4.222	3.00	0.166
Supp.*Protein	1	15.662	15.662	11.12	0.066
Species*Supp.*Pro.	2	4.658	4.658	3.31	0.141
R-square	C.V	Root MSE		Mean	
0.865	69.12	1.27		1.837	

Appendix Table 11. Dependent Variable : Ruminant TVFA concentration at 0 h.
post-feeding

Source	DF	Type III SS	Mean Square	F Value	Pr>F
Blk	1	27.106	27.106	0.05	0.829
Species	2	10492.293	5246.146	10.32	0.003
Suppl.	1	2795.129	2795.129	5.50	0.038
Species*Suppl.	2	456.393	228.196	0.45	0.649
Protein	1	358.757	358.757	0.71	0.418
Species*Protein	2	1559.382	779.691	1.53	0.258
Suppl.*Protein	1	694.951	694.951	1.37	0.267
Species*Suppl.*Pro.	2	1978.705	989.352	1.95	0.189
R-square	C.V	Root MSE	Mean		
0.772	43.384	23.589	54.373		

Appendix Table 12. Dependent Variable : Ruminant TVFA Concentration at 2 h.
post-feeding

Source	DF	Type III SS	Mean Square	F Value	Pr>F
Blk	1	149.740	149.740	0.45	0.516
Species	2	5120.201	2560.100	7.30	0.009
Suppl.	1	2545.290	2545.290	7.26	0.020
Species*Supp.	2	584.201	292.100	0.83	0.460
Protein	1	316.752	316.752	0.90	0.362
Species*Protein	2	4347.888	2173.944	6.20	0.015
Supp.*Protein	1	945.021	945.021	2.70	0.128
Species*Supp.*Pro.	2	378.406	189.203	0.54	0.597
R-square	C.V	Root MSE	Mean		
0.767	40.806	18.722	45.880		

Appendix Table 13. Dependent Variable : Protozoal population at 0 h.
post-feeding

Source	DF	Type III SS	Mean Square	F Value	Pr>F
BLK	1	0.0003	0.0003	0.01	0.937
Species	2	0.3339	0.1669	3.26	0.086
Suppl.	1	0.1055	0.1055	2.06	0.184
Species*Supp.	2	0.1855	0.0927	1.81	0.218
Protein	1	0.4847	0.0927	9.47	0.013
Species*Protein	2	0.1854	0.0074	1.81	0.218
Supp.*Protein	1	0.0074	0.0074	0.15	0.711
Species*Supp.*Pro.	2	0.3373	0.1686	0.30	0.084
R-square	C.V	Root MSE	Mean		
0.793	7.229	0.226	3.129		

Appendix Table 14 Dependent Variable : Protozoal population at 2 h.
post-feeding

Source	DF	Type III SS	Mean Square	F Value	Pr>F
BLK	1	0.022	0.022	0.16	0.701
Species	2	0.330	0.165	1.22	0.371
Suppl.	1	0.029	0.029	0.21	0.663
Species*Supp.	2	0.358	0.179	1.32	0.346
Protein	1	0.124	0.124	0.92	0.381
Species*Protein	2	0.029	0.014	0.11	0.899
Supp.*Protein	1	0.007	0.0074	0.15	0.037
Species*Supp.*Pro.	2	0.048	0.048	0.36	0.576
R-square	C.V	Root MSE	Mean		
0.785	12.093	0.368	3.046		

Appendix Table 15. Dependent Variable : Bacterial population at 4 h.
post-feeding

Source	DF	Type III SS	Mean Square	F Value	Pr>F
BLK	1	0.183	0.183	0.09	0.767
Species	2	32.736	16.368	8.30	0.009
Suppl.	1	11.499	11.499	5.83	0.038
Species*Supp.	2	17.050	8.525	4.33	0.048
Protein	1	0.400	0.400	0.20	0.663
Species*Protein	2	11.947	5.973	3.03	0.098
Supp.*Protein	1	7.732	7.732	3.92	0.079
Species*Supp.*Pro.	2	6.742	3.371	1.71	0.234
R-square	C.V	Root MSE	Mean		
0.820	9.557	1.403	14.690		

Appendix Table 16. Dependent Variable : Bacterial population at 6 h.
post-feeding

Source	DF	Type III SS	Mean Square	F Value	Pr>F
BLK	1	6.530	6.530	4.50	0.62
Species	2	84.896	42.448	29.27	0.0001
Suppl.	1	28.364	28.364	19.56	0.0007
Species*Supp.	2	18.590	9.295	6.41	0.0186
Protein	1	15.528	15.528	10.71	0.0097
Species*Protein	2	1.359	0.679	0.47	0.6404
Supp.*Protein	1	3.896	3.896	2.69	0.1356
Species*Supp.*Pro.	2	44.642	22.321	15.39	0.0012
R-square	C.V	Root MSE	Mean		
0.930	8.326	1.204	14.464		

Appendix Table 17. Dependent Variable : Blood urea-Nitrogen concentration (BUN)
at 2 h. post-feeding

Source	DF	Type III SS	Mean Square	F Value	Pr>F
BLK	1	74.827	74.827	3.57	0.095
Species	1	70.173	35.086	1.67	0.247
Supp	2	32.186	32.186	1.53	0.250
Species*Supp	1	70.928	35.464	1.69	0.244
Protein	2	63.716	63.716	3.04	0.119
Species*Protein	1	35.410	17.705	0.84	0.464
Supp*Protein	2	25.982	25.982	1.24	0.298
Species*Supp*Pro.	1	163.119	81.559	3.89	0.066
R-square	C.V	Root MSE		Mean	
0.726	38.914	4.579		11.768	

Appendix Table 18. Dependent Variable : Blood urea-Nitrogen concentration (BUN)
at 4 h. post-feeding

=====					
Source	DF	Type III SS	Mean Square	F Value	Pr>F
BIK	1	78.804	78.804	4.63	0.059
Species	2	2.272	1.136	0.07	0.935
Supp	1	4.110	4.110	0.24	0.634
Species*Supp	2	32.517	16.258	0.96	0.420
Protein	1	89.464	89.464	5.26	0.047
Species*Protein	2	30.701	15.350	0.90	0.439
Supp*Protein	1	26.306	26.306	1.55	0.245
Species*Supp*Pro.	2	13.529	6.764	0.40	0.683
R-square	C.V	Root MSE		Mean	
0.664	39.546	4.124		10.429	

Appendix Table 19 . Dependent Variable: digestibility of NDF

Source	DF	Type I SS	Mean Square	F Value	Pr> F
REP	1	15.860	15.860	1.87	0.1985
Species	2	168.881	84.440	9.97	0.0034
Supp.	1	516.803	516.803	61.02	0.0001
Species*Supp.	2	47.984	23.992	2.83	0.1018
Protein	1	198.087	198.087	23.39	0.0005
Species.*Protein	2	0.432	0.216	0.03	0.9749
Supp.*Protein	1	1.292	1.292	0.15	0.7035
Species*Supp.*Protein	2	0.121	0.060	0.01	0.9929
R-square	C.V	Root MSE		Mean	
0.91	6.80	2.91		42.77	

Appendix Table 20 . Dependent Variable: digestibility of dry matter

Source	DF	Type I SS	Mean Square	F Value	Pr> F
REP	1	0.683	0.683	0.09	0.7675
Species	2	120.444	60.222	8.09	0.0069
Supp.	1	86.070	86.070	11.57	0.0059
Species*Supp.	2	5.011	2.508	0.34	0.7212
Protein	1	61.792	61.792	8.30	0.0149
Species.*Protein	2	0.196	0.098	0.01	0.9869
Supp.*Protein	1	0.142	0.142	0.02	0.8924
Species*Supp.*Protein	2	0.007	0.003	0.00	0.9995
R-square	C.V	Root MSE		Mean	
0.770	4.53	2.73		60.17	