

Activity of the *Hura crepitans* (Linn.) seeds as gastrointestinal antiparasitic in fattening lambs

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Supplementary Data

Supplementary Table S1 — Ingredients and chemical composition of the diet

Ingredients	Inclusion percentage
Alfalfa hay	17
Corn stubble	37
Cracked corn	18
Canola	8
Soybean meal	17
Minerals ¹	3
Chemical composition calculated ²	(%)
DM	87.15
ME	2.58
CP	17.90
NDF	38
EE	2.89
TDN	63
Ashes	9
Calcium	1.17
Phosphorus	0.82

Footnotes: ¹Beef Master[®]; ²NRC (2007); DM: dry matter; ME: metabolizable energy; CP: crude protein; NDF: neutral detergent fiber; EE: ethereal extract; TDN: total digestible nutrients.

Supplementary Table S2 — Feeding and productive behavior

	Doses (g/kg b.w.)	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	\bar{X}
Feed intake (g)	0.16	600	800	875	900	950	1400	985
	0.5	900	800	900	900	950	1390	988
	1	750	1875	920	930	1000	1410	1227
	2	500	1900	1950	950	1000	1420	1444
	4	950	920	800	875	950	1400	989
	6	750	900	950	900	900	1370	1004
Body weight (kg)	0.16	21.5	21.3	22.0	22.0	22.0	21.5	21.8
	0.5	22.8	23.3	23.3	25.0	24.0	24.0	23.9
	1	23.5	23.5	23.3	24.5	23.0	20.5	23.0
	2	25.8	25.0	25.5	26.0	26.0	25.5	25.6
	4	24.5	24.3	25.0	24.5	24.1	20.5	23.7
	6	26.0	26.0	25.0	26.5	27.1	26.1	26.1

\bar{X} : average value in the 5 days.

Supplementary Table S3 — Vital signs

	Doses (g/kg b.w.)	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	\bar{X}
Body temperature (°C)	0.16	39.6	39.2	39.8	39.7	39.5	38.9	39.4
	0.5	40.0	39.3	39.8	39.7	38.8	39.4	39.4
	1	38.9	39.2	39.4	39.3	38.3	38.6	39.0
	2	39.5	39.8	39.6	39.5	39.4	38.9	39.4
	4	39.2	39.2	39.5	39.4	39.6	38.9	39.3
	6	40.0	39.7	38.3	39.0	39.7	39.4	39.2
Heart rate (beats/min)	0.16	130	128	126	124	112	102	118
	0.5	92	132	120	116	122	112	120
	1	70	140	138	126	100	102	121
	2	90	156	140	114	106	104	124
	4	120	142	124	112	134	114	125
	6	130	148	130	108	140	110	127
Respiratory rate (breaths/min)	0.16	76	50	62	60	54	42	54
	0.5	56	42	46	64	62	44	52
	1	54	44	46	58	54	36	48
	2	46	62	66	52	36	42	52
	4	48	40	38	40	66	40	45
	6	66	44	40	66	64	36	50

\bar{X} : average value in the 5 days.

Supplementary Table S4 — Red blood cells, white blood cells and platelets measurement

	Doses (g/kg b.w.)	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	\bar{X}
Erythrocytes ($10^{12}/L$)	0.16	8.17	7.92	7.82	7.61	7.92	7.79	7.81
	0.5	7.26	6.22	6.55	6.11	6.09	6.54	6.30
	1	7.60	7.03	7.57	6.39	7.58	7.41	7.20
	2	9.55	9.00	8.28	9.22	8.50	9.27	8.85
	4	9.21	8.73	8.27	8.87	8.01	8.21	8.42
	6	8.30	8.13	7.99	7.86	7.11	8.45	7.91
Hemoglobin (g/L)	0.16	92	91	90	89	92	90	90
	0.5	83	71	74	70	70	76	72
	1	104	98	101	89	102	99	98
	2	112	105	97	109	101	110	105
	4	107	101	97	104	93	95	98
	6	95	92	92	91	81	96	90
Hematocrit (%)	0.16	26.1	25.4	25.4	24.7	25.9	25.7	25.4
	0.5	23.3	19.7	20.9	19.4	19.7	21.7	20.3
	1	23.1	21.2	23.1	19.3	23.2	22.8	21.9
	2	30.7	28.7	26.2	29.4	26.8	29.6	28.1
	4	31.3	29.2	27.8	29.6	26.5	27.6	28.1
	6	27.4	26.7	26.2	25.4	22.9	28.2	25.9
MCHC (g/L)	0.16	21.8	22.3	22.1	22.3	21.9	21.8	22.1
	0.5	22.1	22.2	21.9	22.3	22.2	21.6	22.1
	1	27.8	28.7	27.1	28.6	27.3	27.0	27.7
	2	22.6	22.7	22.9	23.0	23.4	23.1	23.1
	4	21.1	21.5	21.7	21.7	21.7	21.4	21.6
	6	21.6	21.3	21.6	22.1	21.9	21.2	21.6
MCV (fL)	0.16	32.0	32.1	32.5	32.4	32.7	33.0	32.5
	0.5	32.0	31.7	31.9	31.8	32.3	33.2	32.2
	1	30.0	30.1	30.4	30.2	30.6	30.7	30.4
	2	32.1	31.8	31.6	31.9	31.5	31.9	31.8
	4	34.0	33.5	33.6	33.4	33.1	33.6	33.4
	6	33.0	32.9	32.8	32.4	32.2	33.4	32.7
Leucocytes ($10^9/L$)	0.16	10200	10610	10440	9820	10060	9110	10008
	0.5	11000	12020	11670	11830	11240	11260	11604
	1	14900	14400	15890	15880	14510	14410	15018
	2	9240	7770	6430	6550	6460	6630	6768
	4	10440	10670	10530	9590	9900	12390	10616
	6	5850	8940	5530	5990	5800	6470	6546
Lymphocytes (%)	0.16	0.75	0.76	0.79	0.82	0.82	0.87	0.81
	0.5	0.50	0.54	0.62	0.64	0.48	0.58	0.57
	1	0.78	0.82	0.90	0.82	0.75	0.81	0.82
	2	0.69	0.67	0.79	0.86	0.76	0.77	0.77
	4	0.82	0.75	0.90	0.86	0.90	0.78	0.84
	6	0.78	0.58	0.77	0.89	0.86	0.79	0.78
Neutrophils (%)	0.16	0.22	0.24	0.18	0.18	0.17	0.13	0.18
	0.5	0.46	0.45	0.38	0.34	0.52	0.41	0.42
	1	0.22	0.18	0.10	0.18	0.25	0.19	0.18
	2	0.31	0.33	0.20	0.14	0.24	0.23	0.23
	4	0.18	0.25	0.09	0.13	0.10	0.21	0.16
	6	0.22	0.42	0.23	0.10	0.14	0.21	0.22
Platelets ($10^9/L$)	0.16	546	549	521	636	542	536	556.8
	0.5	798	724	724	717	737	704	721.2
	1	500	472	401	401	494	463	446.2
	2	829	806	803	897	870	901	855.4
	4	638	612	619	648	650	631	632
	6	710	670	705	684	689	775	704.6

\bar{X} : average value in the 5 days.

Supplementary Table S5 — Some variables measured in lambs

	Doses (g/kg B.W.)	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	\bar{X}
Total proteins (g/L)	0.16	58	61	61	64	66	63	63
	0.5	54	51	53	52	53	55	53
	1	65	61	62	61	65	63	62
	2	65	65	61	65	68	69	66
	4	66	66	61	61	61	64	63
	6	58	61	60	57	57	60	59
Albumin (g/L)	0.16	37	37	39	39	41	39	39
	0.5	36	33	34	31	35	35	34
	1	39	35	37	36	37	38	37
	2	40	40	38	41	44	45	42
	4	39	40	38	37	37	38	38
	6	36	38	38	36	37	39	38
Globulins (g/L)	0.16	21	24	22	25	25	24	24
	0.5	18	18	19	21	18	20	19
	1	26	26	25	25	28	25	26
	2	25	25	23	24	24	24	24
	4	27	26	23	24	24	26	25
	6	22	23	22	21	20	21	21
Alb/glob ratio	0.16	1.8	1.55	1.78	1.56	1.64	1.63	1.6
	0.5	2.0	1.84	1.79	1.48	1.95	1.75	1.8
	1	1.5	1.35	1.48	1.10	1.33	1.52	1.4
	2	1.6	1.60	1.66	1.71	1.84	1.88	1.7
	4	1.5	1.54	1.66	1.55	1.55	1.47	1.6
	6	1.6	1.66	1.73	1.72	1.85	1.86	1.8
Urea (mmol/L)	0.16	8.96	10.01	8.45	12.60	11.02	10.08	10.43
	0.5	8.21	9.44	8.08	9.79	9.98	9.40	9.34
	1	6.00	8.99	9.44	10.47	10.17	9.50	9.71
	2	6.49	6.49	9.62	10.71	9.23	9.47	9.11
	4	5.59	10.15	7.02	8.45	8.30	9.27	8.64
	6	9.06	11.08	8.64	8.76	10.39	10.47	9.87
Creatinine ($\mu\text{mol/L}$)	0.16	64.5	69.8	69.8	68.1	70.7	65.4	68.8
	0.5	76.0	69.0	70.7	66.3	69.0	69.8	69.0
	1	69.0	69.8	69.0	70.7	76.0	71.6	71.4
	2	61.0	61.0	55.7	55.7	61.0	64.5	59.6
	4	73.4	73.4	72.5	67.2	68.1	69.0	70.0
	6	77.8	77.8	76.0	76.9	76.9	79.6	77.4
Glucose (mmol/L)	0.16	4.86	4.25	3.88	4.55	3.25	3.24	3.83
	0.5	4.13	4.24	3.56	3.80	3.53	3.56	3.74
	1	4.83	4.59	4.70	4.22	3.23	4.04	4.16
	2	4.81	4.81	4.06	4.31	3.46	3.00	3.93
	4	4.41	4.66	4.50	4.39	4.44	4.16	4.43
	6	4.32	5.65	4.09	4.16	3.79	3.37	4.21

\bar{X} : average value in the 5 days.

Supplementary Table S6 — Enzymes measured in lambs

	Doses (g/kg b.w.)	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	\bar{X}
Lactato deshidrogenasa LDH (UI/L)	0.16	449	448	501	502	519	493	493
	0.5	458	395	408	391	422	458	415
	1	562	442	502	462	501	517	485
	2	521	521	438	463	508	552	496
	4	533	449	429	437	455	524	459
	6	575	483	482	466	444	647	505
Aspartate aminotransferase AST (UI/L)	0.16	113	110	119	120	120	127	119
	0.5	100	80	86	82	92	105	89
	1	151	116	134	134	163	172	144
	2	154	154	134	143	150	155	147
	4	124	102	96	104	107	120	106
	6	147	118	123	125	124	146	127
Alanine aminotransferase ALT (UI/L)	0.16	18	19	19	21	20	20	20
	0.5	29	24	23	29	23	28	25
	1	26	21	22	25	26	30	25
	2	22	18	18	19	20	22	19
	4	26	21	18	19	19	23	20
	6	19	15	14	13	14	16	14
Alkaline phosphatase AP (UI/L)	0.16	26	24	24	29	23	23	25
	0.5	29	24	27	28	23	25	25
	1	21	25	25	20	21	21	22
	2	19	19	22	22	25	22	22
	4	23	20	27	24	22	25	24
	6	28	26	27	23	21	24	24
Gammaglutamil transferase GGT (UI/L)	0.16	44	47	46	48	49	46	47
	0.5	66	64	64	64	68	71	66
	1	65	64	64	63	66	65	64
	2	69	69	67	71	75	75	71
	4	48	50	48	51	54	59	52
	6	62	62	62	63	64	69	64

\bar{X} : average value in the 5 days.