

Supplementary Table I: Haematological variables for Angora goat yearling Y23

Cell type	Variable	Value
Erythrocytes	HGB (g/L)	81
	Cell HGB (g/L)	56
	RBC ($\times 10^{12}/L$)	9.6
	HCT (L/L)	0.17
	MCV (fL)	17.9
	MCH (pg)	8.4
	MCHC (g/dL)	46.9
	CHCM (g/dL)	32.7
	CH (pg)	5.8
	RCDW (%)	26.9
	HDW (g/dL)	27.3
	Reticulocyte count ($\times 10^9/L$)	35.8
	Poikilocytosis (%)	11.6
Leukocytes ($\times 10^9/L$)	WBC	24.05
	Segmented neutrophils	7.22
	Band neutrophils	0
	Lymphocytes	15.39
	Monocytes	0.96
	Eosinophils	0.48
	Basophils	0
Platelets	Platelets ($\times 10^9/L$)	3 538
	MPV (fL)	11.5
	PCT (L/L)	4.08

Supplementary Table II: Haematological variables of South African Angora goat kids at one, 11, and 20 weeks after birth

Cell type	Variable	Age																											
		1 week					11 weeks					20 weeks																	
		K1	K2	K4	K5	K7	K8	Minimum	Maximum	Median	K1	K2	K4	K5	K7	K8	Minimum	Maximum	Median	K1	K2	K4	K5	K7	K8	Minimum	Maximum	Median	
Erythrocytes	HGB (g/L)	90	119	100	88	98	100	88	119	99	93	114	93	95	93	114	97	93	102	100	93	100	95	93	102	100	93	102	98
	Cell HGB (g/L)	94	122	102	91	99	103	91	122	101	99	119	106	105	84	119	103	84	104	103	95	100	95	103	104	95	104	99	
	RBC (x10 ¹² /L)	8.5	9.9	9.1	7.2	9.2	7.2	7.2	9.9	8.8	17.7	20.1	12.8	16.9	15.8	17.2	12.8	20.1	17.1	18.1	18.8	18.4	16.7	19.4	18.6	16.7	19.4	18.5	
	HCT (L/L)	0.32	0.41	0.36	0.32	0.33	0.36	0.32	0.41	0.35	0.27	0.32	0.33	0.28	0.22	0.27	0.22	0.33	0.28	0.26	0.25	0.3	0.25	0.28	0.27	0.25	0.30	0.27	
	MCV (fl)	38.0	41.4	39.7	44.2	36.2	50.2	36.2	50.2	40.6	15.0	16.0	18.0	16.7	13.9	15.6	13.9	18.0	15.8	14.3	13.4	16.3	15.3	14.3	14.8	13.4	16.3	14.6	
	MCH (pg)	10.7	12.1	11	12.1	10.6	13.8	10.6	13.8	11.6	5.2	5.7	5.6	5.9	5.9	5.5	5.2	5.9	5.7	5.2	5.3	5.2	5.6	5.2	5.2	5.4	5.2	5.6	5.3
	MCHC (g/dL)	28.1	29.2	27.8	27.5	29.3	27.5	27.5	29.3	28.0	35	35.6	31.2	35.3	42.2	35.3	31.2	42.2	35.3	36.7	39.6	31.8	36.4	36.8	36.6	31.8	39.6	36.7	
	CHCM (g/dL)	29.2	29.8	28.3	28.7	29.9	28.3	28.3	29.9	29.0	37.2	37.2	32.2	37.1	38.1	37.4	32.2	38.1	37.2	37.4	37.9	33.5	37.4	37	37.8	33.5	37.9	37.4	
	CH (pg)	11.1	12.4	11.3	12.8	10.8	14.3	10.8	14.3	11.9	5.6	6	5.8	6.2	5.4	5.4	6.2	5.9	6.2	5.4	5.4	5.3	5.4	5.8	5.3	5.7	5.3	5.8	5.4
	RCDW (%)	32.3	31.4	27.7	26	29.6	27.3	26.0	32.3	28.7	24.9	24.1	23.9	23.5	24.9	24.7	23.5	24.9	24.4	24.3	25.3	23.5	23.6	23.4	23.4	23.1	23.1	25.3	23.6
Leukocytes (x10 ⁹ /L)	HDW (g/dL)	3.6	3.3	3.1	3.4	3.2	3.5	3.1	3.6	3.3	3.0	2.5	2.6	2.6	2.7	2.5	2.5	3.0	2.6	3.1	2.9	2.7	3.0	3.8	2.7	2.7	3.8	3.0	
	Reticulocyte count (x10 ⁹ /L)	10.8	106.3	20.4	3.8	33.4	12.2	3.8	106.3	16.3	46.2	28.6	9.5	25.06	19.8	15.3	9.5	46.2	22.4	66.3	42.5	10.4	63.4	53.2	28.9	10.4	66.3	47.9	
Leukocytes (x10 ⁹ /L)	Poikilocytosis (%)	10.4	11.2	13.9	10.1	12.3	8.1	8.1	13.9	10.8	12.7	13.3	11.2	12.6	15.5	13.3	11.2	15.5	13.0	16.5	18.5	11.1	15.5	15.4	19.7	11.1	19.7	16.0	
	WBC	9.63	11.23	12.81	12.68	9.34	8.45	8.45	12.81	10.43	30.13	18.27	20.08	25.06	23.43	24.23	18.27	30.13	23.83	27.45	24.77	19.91	27.86	20.16	23.91	19.91	27.86	24.34	
	Segmented neutrophils	4.13	7.41	8.97	4.56	4.91	4.06	4.06	8.97	4.74	7.53	4.20	3.21	5.01	9.37	5.82	3.21	9.37	5.42	7.41	11.15	5.97	9.19	7.06	7.17	5.97	11.15	7.29	
	Band neutrophils	0.14	0.34	0.26	0.00	0.00	0.08	0.00	0.34	0.11	0.30	0.00	0.20	0.00	0.47	0.24	0.00	0.47	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Lymphocytes	3.85	3.37	3.33	6.97	3.85	4.14	3.33	6.97	3.85	18.98	12.79	15.06	17.79	12.89	16.96	12.79	18.98	16.01	19.49	12.88	12.54	16.99	11.89	15.54	11.89	19.49	14.21	
	Monocytes	0.96	0.11	0.26	1.14	0.47	0.17	0.11	1.14	0.37	3.31	1.28	1.61	2.26	0.70	1.21	0.70	3.31	1.45	0.55	0.50	1.00	0.84	0.60	0.72	0.50	1.00	0.66	
	Eosinophils	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.40	0.84	0.60	0.48	0.00	0.84	0.44	
	Basophils	0.14	0.00	0.00	0.00	0.12	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Platelets (x10 ⁹ /L)	857	284	916	806	718	834	284	916	820	939	1044	973	985	1238	914	914	1238	979	693	880	1231	352	1032	922	352	1231	901	
	Platelets	MPV (fl)	6.4	10.4	6.6	6.7	6.5	6.7	6.4	10.4	6.7	7.2	6.8	6.4	6.4	6.9	6.3	6.3	7.2	6.6	8.7	6.3	6.4	11.7	7	6.7	6.3	11.7	6.9
PCT (L/L)		0.55	0.30	0.60	0.54	0.47	0.56	0.30	0.60	0.55	0.67	0.70	0.62	0.63	0.85	0.58	0.58	0.85	0.65	0.61	0.55	0.79	0.41	0.72	0.62	0.41	0.79	0.62	

Supplementary Table III: Haematological variables of South African Angora goat yearlings

Cell type	Variable	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	Y21	Y22	Y24	Y25	Y26	Y27	Y28	Minimum	Maximum	Median	
Erythrocytes	HGB (g/L)	100	95	89	91	89	85	80	88	88	84	84	94	85	78	97	91	94	92	94	84	88	90	90	82	90	88	86	91	78	100	89
	Cell HGB (g/L)	103	99	92	94	94	89	81	91	92	88	88	97	89	80	98	95	96	97	98	86	89	92	94	81	92	92	88	88	80	103	92
	RBC ($\times 10^{12}/L$)	17.1	13.8	16.5	17.3	15.3	14.6	11.4	16.1	16.0	15.3	17.6	15.2	13.0	13.0	16.4	16.6	17.2	16.2	16.1	14.8	15.2	15.9	16.7	13.5	17.3	17.1	14.7	16.6	11.4	17.6	16.1
	HCT (L/L)	0.29	0.27	0.25	0.26	0.25	0.24	0.22	0.25	0.25	0.23	0.26	0.26	0.25	0.21	0.26	0.26	0.26	0.26	0.26	0.22	0.24	0.24	0.26	0.21	0.24	0.25	0.24	0.24	0.21	0.29	0.25
	MCV (fl)	16.7	19.2	15.0	14.8	16.7	16.3	19.7	15.3	15.5	15.3	14.8	16.1	16.5	16.5	15.9	15.4	15.0	15.9	16.2	15.2	15.6	15.2	15.4	15.8	14.1	14.6	16.0	14.3	14.1	19.7	15.5
	MCH (pg)	5.8	6.8	5.4	5.2	5.8	5.8	7.0	5.4	5.5	5.5	5.3	5.6	6.0	6.0	5.9	5.5	5.5	5.7	5.9	5.7	5.8	5.7	5.4	6.0	5.2	5.1	5.8	5.5	5.1	7.0	5.7
	MCHC (g/dL)	34.7	35.6	35.7	35.6	35.1	35.7	35.6	35.5	35.8	36.2	35.9	34.8	36.4	36.4	37.0	35.7	36.4	35.9	36.2	37.5	37.2	37.0	34.9	38.3	36.8	35.1	36.3	38.4	34.7	38.4	35.9
	CHCM (g/dL)	35.8	37.3	37.2	36.9	36.8	37.3	36.3	37.1	37.4	37.7	37.2	36.4	37.5	37.5	37.5	35.7	37.3	37.8	37.6	38.2	37.5	37.8	36.5	37.9	37.6	37.0	37.2	37.2	35.7	38.2	37.3
	CH (pg)	6.0	7.1	5.6	5.5	6.1	6.1	7.1	5.7	5.8	5.8	5.6	5.6	6.2	6.0	6.0	5.7	5.6	6.1	6.1	5.9	5.9	5.9	5.6	6.0	5.4	5.4	6.0	5.4	5.4	7.1	5.9
	RCDW (%)	20.7	26.7	22.1	21.1	24.7	24.7	21.1	22.5	24.7	23.5	23.7	21.0	24.3	23.1	26.2	26.2	22.6	23.0	22.4	22.3	25.6	22.1	22.6	24.4	24.5	25.9	22.8	25.4	20.7	26.7	23.1
Leukocytes ($\times 10^9/L$)	HDW (g/dL)	2.5	3.1	2.8	2.9	3.2	3.5	2.9	2.8	2.9	2.9	3.3	2.6	3.1	2.6	2.9	3.0	2.8	2.7	2.7	2.7	3.6	2.9	2.7	3.1	3.2	2.9	3.4	3.4	2.5	3.6	2.9
	Reticulocyte count ($\times 10^9/L$)	40.3	56.7	41.2	78.2	58.7	60.8	9.0	44.1	29.4	40.6	60.9	26.9	37.0	44.0	60.4	60.4	35.7	22.9	51.3	17.4	61.3	65.3	43.4	30.5	54.3	27.2	62.4	47.1	9.0	78.2	44.0
	Poikilocytosis (%)	11.3	17.9	15.7	16.4	18.4	17.4	16.4	16.4	13.9	17.1	18.6	10.7	13.4	15.0	14.5	12.8	16.3	18.5	18.8	18.8	24.9	17.5	12.2	19.6	18.3	12.7	16.4	20.7	10.7	24.9	16.4
	WBC	18.19	13.22	17.53	22.33	17.85	17.35	16.00	20.16	17.34	20.84	15.22	20.27	15.95	26.34	13.01	22.05	13.69	23.21	26.41	14.40	17.91	12.53	15.65	15.50	16.05	17.74	20.20	12.53	26.41	17.53	
	Segmented neutrophils	6.19	5.42	5.61	14.29	6.96	10.93	4.80	6.85	4.51	5.21	8.98	9.73	7.82	18.44	6.11	12.35	6.30	9.75	14.26	4.90	7.70	4.89	7.70	4.89	7.20	6.98	10.82	10.10	4.51	18.44	7.20
	Band neutrophils	0.00	0.00	0.18	0.67	0.00	0.00	0.16	0.00	0.35	0.42	0.00	0.00	0.48	0.00	0.00	0.00	0.22	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.67	0.00
	Lymphocytes	9.82	6.48	11.39	7.15	9.10	5.73	10.40	12.50	11.96	12.09	6.24	9.53	7.18	7.64	6.77	7.50	6.71	10.91	7.92	7.78	8.06	6.77	5.79	8.22	5.94	4.97	8.00	4.97	12.50	7.78	
	Monocytes	1.64	0.79	0.35	0.22	0.18	0.35	0.32	0.20	0.17	1.50	0.00	0.61	0.16	0.26	0.13	0.88	0.55	1.62	0.79	0.86	1.25	0.63	1.88	1.88	0.16	0.96	1.42	1.20	0.00	1.88	0.61
	Eosinophils	0.00	0.00	0.00	0.00	0.71	0.35	0.32	0.60	0.35	1.50	0.00	0.41	0.32	0.00	0.00	1.10	0.14	0.46	1.85	0.72	0.90	0.25	0.78	0.16	0.32	0.53	0.40	0.00	1.85	0.35	
	Basophils	0.55	0.00	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	1.06	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	0.00	
Platelets	Platelets ($\times 10^9/L$)	91	477	474	340	896	558	27	442	704	684	753	620	475	370	303	538	1101	317	874	649	252	454	789	488	525	275	654	27	1101	488	
	MPV (fl)	13.9	11.8	9	12.4	8.6	11.1	13.8	11	7.7	10.1	6.9	8.2	10.8	11.8	12.6	9.6	6.6	12.4	7.3	9.7	11.3	10.2	8	10.1	8.6	11.8	8.1	6.6	13.9	10.1	
	PCT (L/L)	0.13	0.57	0.42	0.42	0.78	0.62	0.04	0.49	0.54	0.69	0.52	0.51	0.51	0.51	0.44	0.38	0.52	0.73	0.39	0.64	0.63	0.29	0.47	0.63	0.49	0.45	0.32	0.53	0.04	0.78	0.51

Supplementary Table IV: Correlation matrix of red cell variables of Angora goat yearlings

	HGB	Cell HGB	RCC	HCT	MCV	MCH	MCHC	CHCM	CH	RCDW	HDW	Reticulocyte count
Cell HGB (g/L)	0.919***											
RBC ($\times 10^{12}/L$)	0.664***	0.592**										
HCT (L/L)	0.867***	0.944***	0.597**									
MCV (fL)	-0.128	0.038	-0.672***	0.042								
MCH (pg)	-0.152	-0.132	-0.773***	-0.207	0.846***							
MCHC (g/dL)	-0.098	-0.344	-0.155	-0.497**	-0.310	0.195						
CHCM (g/dL)	-0.140	-0.194	-0.262	-0.398*	-0.144	0.219	0.765***					
CH (pg)	-0.169	-0.037	-0.763***	-0.107	0.926***	0.919***	-0.043	0.169				
RCDW (%)	0.005	-0.010	-0.075	-0.074	-0.065	0.010	0.219	0.125	-0.049			
HDW (%)	-0.196	-0.327	-0.166	-0.386*	-0.139	0.031	0.369	0.143	-0.053	0.597**		
Reticulocyte count ($\times 10^9/L$)	0.324	0.237	0.186	0.177	-0.137	-0.108	0.101	-0.078	-0.127	0.222	0.510**	
Poikilocytosis (%)	-0.085	-0.240	-0.255	-0.393*	-0.114	0.218	0.599***	0.491**	0.103	0.307	0.578**	0.385*

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Supplementary Table V: Haematology variables of Angora goat yearlings showing a significant correlation

Pair group	Variable 1	Variable 2	Spearman r	p
Equivalent variables	HGB	Cell HGB	0.919	1.28E-11
	MCH	CH	0.919	1.29E-11
	MCHC	CHCM	0.765	3.29E-06
Composite variables	Cell HGB	RBC	0.592	1.13E-03
	Cell HGB	HCT	0.944	1.61E-13
	RBC	HCT	0.597	1.01E-03
	RBC	MCH	-0.773	2.26E-06
	HCT	MCHC	-0.497	8.42E-03
	MCV	CH	0.926	4.73E-12
HGB steady state	HGB	RBC	0.664	1.57E-04
	HGB	HCT	0.867	4.63E-09
	MCV	MCH	0.846	2.67E-08
	RBC	CH	-0.763	3.65E-06
	RBC	MCV	-0.672	1.23E-04
	HDW	RCDW	0.597	1.01E-03
	HCT	CHCM	-0.398	4.00E-02
Other	Poikilocytosis	HCT	-0.393	4.28E-02
	Poikilocytosis	MCHC	0.599	9.58E-04
	Poikilocytosis	CHCM	0.491	9.24E-03
	Poikilocytosis	HDW	0.578	1.60E-03
	Poikilocytosis	Reticulocyte count	0.385	4.72E-02
	HDW	Reticulocyte count	0.51	6.52E-03
	HDW	HCT	-0.386	4.70E-02