

Table III.—Goat 8082. Normal.

Date.	R.C.	R.P.	White Count.	Differential Count.					Absolute.			
				L.	N.	M.	E.	B.	Lymphoc.	Neutroph.	Monocytes.	
30.4.24	17.2	27	13,400	45	48	3	3	—	6,000	6,000	400	Anisocytosis. 7 a.m., single dose of wireworm remedy. Anisocytosis. " " "
5.5.24	—	—	—	—	—	—	—	—	—	—	—	
6.5.24	15.9	31	10,900	51	40	4	4	1	6,000	4,000	400	
14.5.24	23.2	38	20,200	58	38	2	1	1	12,000	8,000	400	
21.5.24	16.8	35	10,800	52	39	3	5	1	6,000	4,000	300	
26.5.24	15.5	30	14,100	54	39	4	2	1	8,000	5,000	600	
26.5.24	Killed	for the collection of normal material.										

Table III.—Goat 8100. Normal, treated with Lithioncarmine immediately before exitus.

Date.	R.C.	R.P.	White Count.	Differential Count.					Absolute.			
				L.	N.	M.	E.	B.	Lymphoc.	Neutroph.	Monocytes.	
2.5.24	24.4	26	15,000	47	41	6	5	1	7,000	6,000	900	Anisocytosis. 7 a.m., single dose of wireworm remedy. Anisocytosis. " " " " " " " " " " " Exitus immediately after intrav. inj. of 20 c.c., 5 per cent. lithioncarmine.
5.5.24	—	—	—	—	—	—	—	—	—	—	—	
7.5.24	19.8	39	12,200	45	46	6	2	1	5,000	6,000	700	
15.5.24	19.7	39	15,500	45	50	2	2	1	7,000	8,000	300	
22.5.24	19.8	35	12,200	57	34	3	6	—	7,000	4,000	400	
27.5.24	18.2	34	12,100	56	33	3	7	—	7,000	4,000	400	
2.6.24	20.6	34	11,600	56	33	4	7	—	6,000	4,000	500	
3.6.24	21.3	34	15,300	53	37	3	6	1	7,000	5,000	400	
4.6.24	18.0	32	11,400	62	29	3	5	1	7,000	3,000	300	
4.6.24	—	—	—	—	—	—	—	—	—	—	—	

Table IV.—Goat 8315. Normal, treated with Lithioncarmine intravenously.

Date.	R.C.	R.P.	White Count.	Differential Count.					Absolute.			
				L.	N.	M.	E.	B.	Lymphoc.	Neutroph.	Monocytes.	
6.6.24	15.9	25	24,500	40	54	3	2	1	10,000	13,000	700	Anisocytosis, one Jolly body.
15.8.24	17.4	36	14,000	64	26	6	3	1	9,000	4,000	800	"
18.8.24	10.5	35	18,600	57	34	2	7	—	11,000	6,000	400	"
19.8.24	22.6	40	19,200	64	25	4	6	1	12,000	5,000	800	" 4 c.c. Li. C.
20.8.24	16.6	39	15,200	66	23	4	6	1	10,000	3,000	600	" one Jolly body, 4 c.c. Li. C.
21.8.24	20.6	37	17,300	64	24	3	8	1	11,000	4,000	200	" 6 c.c. Li. C.
22.8.24	17.9	30	15,800	65	21	5	8	1	10,000	3,000	800	" 7 c.c. "
25.8.24	—	—	—	—	—	—	—	—	—	—	—	" 10 c.c. "
25.8.24	15.3	32	14,000	75	12	4	3	1	10,000	2,000	600	" 10 c.c. "
26.8.24	—	—	—	—	—	—	—	—	—	—	—	" 15 c.c. "
27.8.24	17.9	31	22,700	45	36	7	12	—	10,000	8,000	1,500	" 15 c.c. "
28.8.24	—	—	—	—	—	—	—	—	—	—	—	" 20 c.c. "
29.8.24	19.3	35	29,200	47	40	3	9	1	14,000	12,000	900	" 20 c.c. "
30.8.24	—	—	—	—	—	—	—	—	—	—	—	" 20 c.c. "
1.9.24	17.3	34	28,400	51	33	10	5	1	14,000	9,000	2,800	" 20 c.c. "
2.9.24	—	—	—	—	—	—	—	—	—	—	—	" 20 c.c. "
3.9.24	17.6	31	21,700	48	40	5	6	1	10,000	9,000	1,100	" punctate basophilia, 20 c.c. Li. C.
4.9.24	—	—	—	—	—	—	—	—	—	—	—	" 20 c.c. Li. C.
5.9.24	18.0	35	25,100	44	42	10	4	—	11,000	11,000	2,500	" punctate basophilia polychromasia.
5.9.24	—	—	—	—	—	—	—	—	—	—	—	"

Table V.—Goat 8252. Normal, injected intravenously with Lithioncarmine.

Date.	R.C.	R.P.	White Count.	Differential Count.					Absolute.			
				L.	N.	M.	E.	B.	Lymphoc.	Neutroph.	Monocytes.	
11. 9. 24	20.5	45	8,200	49	42	4	4	1	4,000	3,000	300	4 c.c. Li. C., 2. 10 c.c. 15 c.c.
12. 9. 24	—	—	—	—	—	—	—	—	—	—	—	
15. 9. 24	21.0	47	16,900	11	81	6	1	1	2,000	14,000	1,000	
16. 9. 24	—	—	—	—	—	—	—	—	—	—	—	
17. 9. 24	24.4	52	30,000	10	73	16	1	—	3,000	22,000	4,800	
18. 9. 24	Exitus.	—	—	—	—	—	—	—	—	—	—	

Table V (continued).—Goat 9661. Normal, injected intravenously with Lithioncarmine.

Date.	R.C.	R.P.	White Count.	Differential Count.					Absolute.			
				L.	N.	M.	E.	B.	Lymphoc.	Neutroph.	Monocytes.	
1. 10. 24	16.9	29	12,300	56	37	4	1	2	7,000	5,000	500	2 c.c. Li. C.
2. 10. 24	—	—	—	—	—	—	—	—	—	—	—	2 c.c. "
3. 10. 24	17.3	28	12,500	59	36	3	1	1	7,000	5,000	400	4 c.c. "
4. 10. 24	—	—	—	—	—	—	—	—	—	—	—	4 c.c. "
7. 10. 24	12.0	25	11,600	57	33	5	3	2	7,000	4,000	600	6 c.c. "
8. 10. 24	—	—	—	—	—	—	—	—	—	—	—	7 c.c. "
9. 10. 24	17.9	29	13,800	58	34	6	1	1	8,000	5,000	800	10 c.c. "
10. 10. 24	—	—	—	—	—	—	—	—	—	—	—	10 c.c. "
11. 10. 24	—	—	—	—	—	—	—	—	—	—	—	15 c.c. "
12. 10. 24	—	—	—	—	—	—	—	—	—	—	—	15 c.c. "
13. 10. 24	17.2	25	13,100	55	34	6	3	2	7,000	4,000	800	15 c.c. "
14. 10. 24	—	—	—	—	—	—	—	—	—	—	—	15 c.c. "
15. 10. 24	15.5	25	16,800	—	—	—	—	—	—	—	—	20 c.c. "
30. 10. 24	—	—	—	—	—	—	—	—	—	—	—	20 c.c. "
4. 11. 24	14.2	23	9,000	58	32	3	6	1	5,000	3,000	300	
5. 11. 24	—	—	—	—	—	—	—	—	—	—	—	Dies on receiving 20 c.c. Li. C.

Table VI.—Goat 9651. Heartwater, injected intravenously with Lithioncarmine.

Date.	R.C.	R.P.	White Count.	Differential Count.					Absolute.			
				L.	N.	M.	E.	B.	Lymphoc.	Neutroph.	Monocytes.	
1.10.24	19.2	32	21,800	54	41	2	2	1	12,000	9,000	400	2 c.c. Li. C.
2.10.24	—	—	—	—	—	—	—	—	—	—	—	2 c.c. "
3.10.24	20.7	26	23,600	49	45	2	3	1	12,000	11,000	500	4 c.c. "
4.10.24	—	—	—	—	—	—	—	—	—	—	—	4 c.c. "
7.10.24	19.6	31	36,500	38	55	2	4	1	14,000	20,090	700	6 c.c. "
8.10.24	—	—	—	—	—	—	—	—	—	—	—	7 c.c. "
9.10.24	19.4	29	29,900	55	37	2	5	1	16,000	11,000	600	10 c.c. "
10.10.24	—	—	—	—	—	—	—	—	—	—	—	10 c.c. "
11.10.24	—	—	—	—	—	—	—	—	—	—	—	15 c.c. "
12.10.24	—	—	—	—	—	—	—	—	—	—	—	15 c.c. "
13.10.24	19.7	29	27,700	42	49	5	2	2	12,000	14,000	1,400	15 c.c. "
14.10.24	—	—	—	—	—	—	—	—	—	—	—	15 c.c. "
15.10.24	15.3	25	29,800	49	40	4	5	2	15,000	12,000	1,200	20 c.c. "
20.10.24	—	—	—	—	—	—	—	—	—	—	—	20 c.c. "
3.11.24	15.4	21	14,100	54	34	5	7	—	8,000	5,000	700	20 c.c. "
5.11.24	—	—	—	—	—	—	—	—	—	—	—	—
6.11.24	13.4	16	30,200	40	56	1	2	1	12,000	17,000	300	—
7.11.24	—	—	—	—	—	—	—	—	—	—	—	5 c.c. "
8.11.24	13.6	19	28,100	58	30	2	8	2	16,000	8,000	600	5 c.c. "
10.11.24	9.5	17	29,000	56	36	4	3	1	10,000	10,000	1,200	5 c.c. "
12.11.24	11.6	20	17,200	57	38	3	1	1	10,000	7,000	500	—
17.11.24	11.0	16	15,700	54	39	3	2	2	8,000	6,000	1,200	Polychromasia, Jolly bodies 5 c.c. Li. C.
19.11.24	12.2	20	23,200	45	48	5	1	1	10,000	11,000	1,200	Polychromasia, normoblasts, 5 c.c. Li. C.
21.11.24	11.3	17	20,000	41	52	3	2	2	8,000	10,000	600	5 c.c. Li. C.
22.11.24	13.3	17	19,900	48	48	2	1	1	10,000	10,000	400	—
24.11.24	Exitus.	—	—	—	—	—	—	—	—	—	—	—

Table VII.—Goat 8417. Heartwater, recovery.

Date.	R.C.	R.P.	White Count.	Differential Count.					Absolute.			
				L.	N.	M.	E.	B.	Lymphoc.	Neutroph.	Monocytes.	
22.11.24	—	—	—	—	—	—	—	—	—	—	—	Infested with infected ticks.
23.11.24	20·2	25	16,400	62	29	4	5	—	10,000	4,800	700	
2.12.24	18·0	25	17,100	—	—	—	—	—	—	—	—	
3.12.24	20·2	25	15,700	55	25	5	5	—	8,000	5,200	700	
5.12.24	17·9	25	16,200	59	34	5	2	—	10,000	5,500	800	
8.12.24	17·0	25	14,200	55	39	4	2	—	8,000	5,500	500	
10.12.24	16·4	24	15,000	45	45	8	1	1	7,000	7,000	1,200	
13.12.24	15·0	24	14,000	54	37	8	1	—	8,000	5,000	1,100	
17.12.24	14·3	26	13,800	—	—	—	—	—	—	—	—	
19.12.24	15·0	25	13,700	67	23	9	1	—	9,000	3,000	1,200	
22.12.24	13·8	21	14,800	66	26	7	1	—	10,000	4,000	1,000	
24.12.24	12·7	20	11,700	72	21	6	1	—	8,000	2,000	700	
27.12.24	15·3	24	12,500	58	33	6	2	1	7,000	4,000	700	

Table VIII.—Goat 9662. Heartwater.

Date.	R.C.	R.P.	White Count.	Differential Count.					Absolute.			
				L.	N.	M.	E.	B.	Lymphoc.	Neutroph.	Monocytes.	
7.11.24	14·1	25	10,900	55	39	2	3	1	6,000	4,000	200	Infested with infected ticks.
11.11.24	12·2	21	9,500	56	38	2	3	1	5,000	4,000	200	
14.11.24	14·2	20	11,900	58	30	4	7	1	7,000	4,000	500	
20.11.24	14·5	24	10,300	56	31	5	9	1	6,000	3,000	300	
22.11.24	—	—	—	—	—	—	—	—	—	—	—	
25.11.24	14·4	24	11,900	47	42	3	6	2	6,000	5,000	400	
27.11.24	13·6	25	11,700	55	30	3	10	2	6,000	4,000	400	
1.12.24	13·5	21	12,100	—	—	—	—	—	—	—	—	
3.12.24	12·7	25	8,800	52	40	3	4	1	5,000	4,000	300	
4.12.24	13·1	19	10,000	—	—	—	—	—	—	—	—	
8.12.24	9·5	15	7,500	46	40	13	1	—	3,000	3,000	1,000	
10.12.24	9·3	19	8,700	42	45	13	—	—	4,000	4,000	1,100	
18.12.24	10·3	19	24,000	39	48	13	—	—	9,000	12,000	3,000	
18.12.24	Exitus.	—	—	—	—	—	—	—	—	—	—	

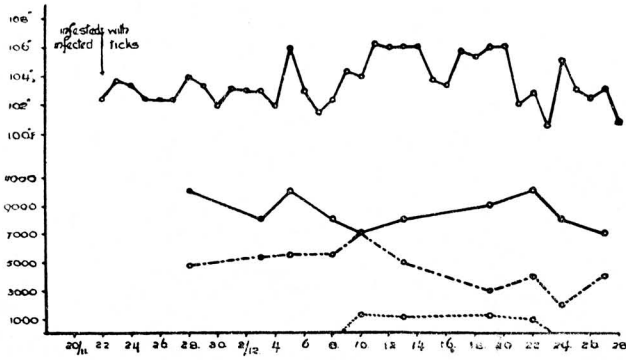
Table IX.—Goat 9665. Heartwater.

Date.	R.C.	R.P.	White Count.	Differential Count.					Absolute.		
				L.	N.	M.	E.	B.	Lymphoc.	Neutroph.	Monocytes.
2.10.24	20.4	33	30,000	67	22	2	8	1	20,000	7,000	600
4.10.24	18.9	35	26,200	72	20	3	5	—	19,000	5,000	800
8.10.24	19.9	30	29,700	65	24	4	7	—	20,000	7,000	1,200
10.10.24	21.5	40	31,500	68	23	2	7	—	21,000	7,000	600
14.10.24	21.5	33	25,900	71	20	2	7	—	18,000	5,000	500
23.10.24	19.0	36	22,500	69	25	3	3	—	16,000	6,000	700
5.11.24	22.6	32	20,300	65	25	1	8	1	13,000	5,000	200
6.11.24	20.3	26	20,000	59	29	3	9	—	12,000	6,000	600
8.11.24	18.5	33	24,300	67	24	3	6	—	16,000	6,000	700
10.11.24	19.3	31	22,200	64	28	3	5	—	14,000	6,000	600
12.11.24	18.0	29	23,400	61	27	2	10	—	14,000	6,000	500
14.11.24	19.3	30	23,000	60	28	2	9	1	14,000	6,000	500
15.11.24	17.4	30	20,000	65	22	4	9	—	13,000	4,000	800
17.11.24	18.6	34	22,000	57	28	4	10	1	13,000	6,000	900
19.11.24	16.9	26	21,500	62	23	2	12	1	13,000	5,000	400
21.11.24	20.7	29	24,700	51	31	2	15	1	13,000	8,000	500
22.11.24	22.0	34	30,200	58	29	2	11	—	18,000	9,000	600
24.11.24	18.8	30	21,400	65	25	7	3	—	14,000	5,000	1,500
25.11.24	In extreme mis; killed.										

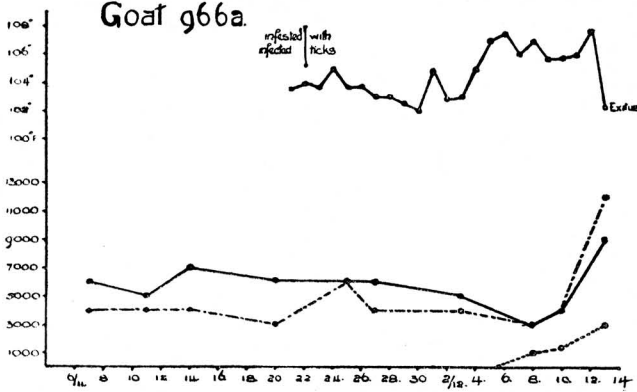
Infested with infected ticks.



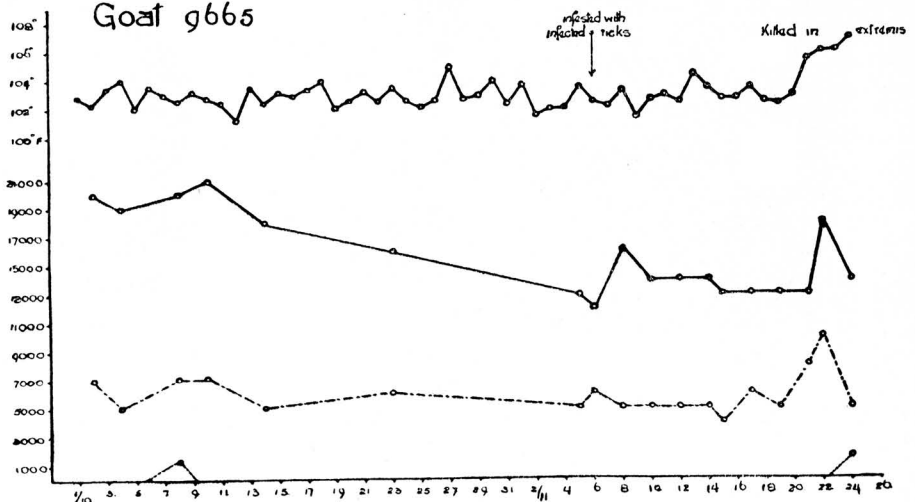
Goat 8417



Goat 966a



Goat 9665



Temperature Charts of Goats 8417, 9662 and 9665, also showing number of lymphocytes, neutrophiles and monocytes present per cubic millimetre blood.

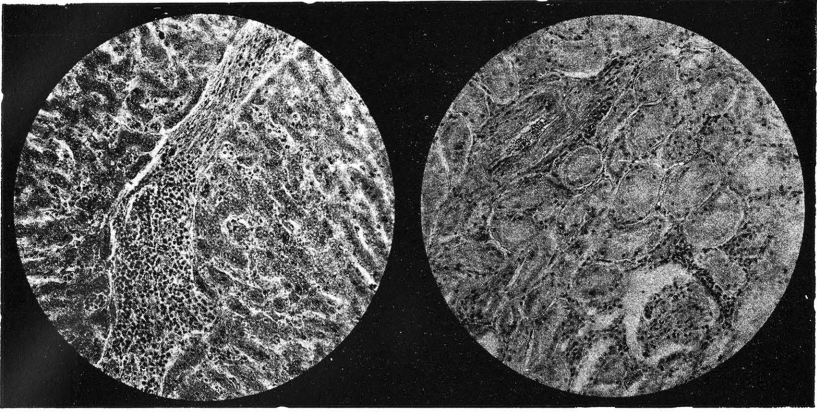


FIG. 1.

FIG. 2.

FIGURE 1.—Goat, liver. Heartwater. (*Haemalum-Eosin.*) Interstitial cellularity and marked leucostasis in intralobular capillary vessels.

FIGURE 2.—Sheep, kidney. Heartwater. (*Giemsa.*) Perivascular and periglomerular cellularity.

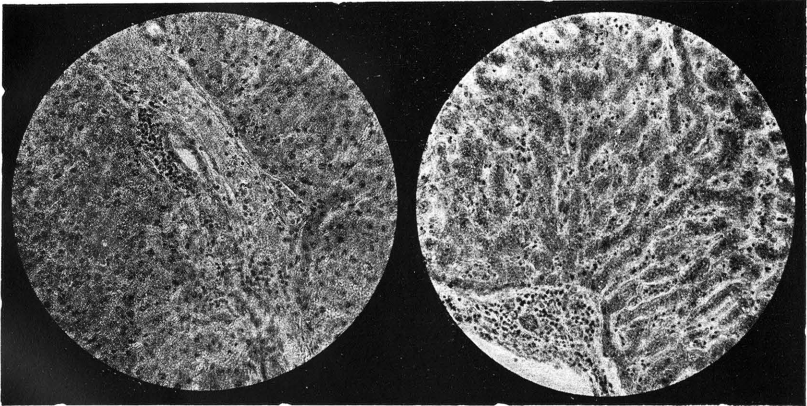


FIG. 3.

FIG. 4.

FIGURE 3.—Goat, liver. Heartwater. (*Haemalum-Eosin.*) Interstitial cellularity near a bile duct.

FIGURE 4.—Bovine, liver. Heartwater. (*Haemalum-Eosin.*) Interstitial cellularity and leucostasis.

Heartwater.]

[*W. Steck.*

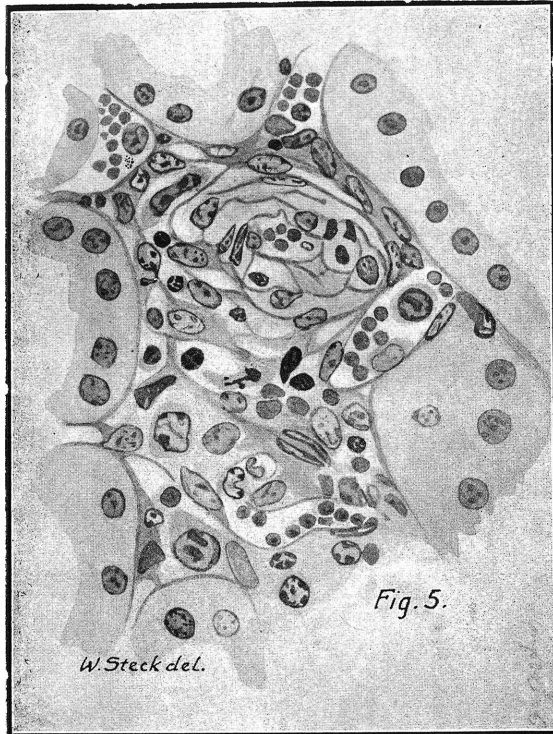


FIG. 5.

Kidney, heartwater (reproduced from coloured drawing).
Periarteriolar cellulation with comparatively frequent
numbers of large basophile cells; moderate leucostasis.
Heartwater. [W. Steck.]