

Table 1: Details of primers and PCR conditions of the targeted genes of hemoprotozoan parasites

Parasite	Primers' sequence (5'-3')	Region amplified	Cycle conditions	Product size (bp)	Reference
<i>Theileria</i> genus	F-5' AGTTTCTGACCTATCA G3' R-5' TTGCCTTAAACTTCCT TG3' (Primer set 989/990)	Small Subunit rRNA gene	94°C - 20 sec; 47°C - 30 sec; 72°C - 1 min; 35 cycles	1098	(Allsopp et al., 1993)
<i>Theileria luwenshuni</i>	F-5' GGTAGGGTATTGGCCT ACTGA3' R-5' TCATCCGGATAATACA AGT3'	18S rRNA gene	94°C - 20 sec; 52°C - 30 sec; 72°C - 1 min; 35 cycles	389	(Yin et al., 2008)

Table 2: Prevalence of ectoparasites among migratory Gaddi sheep and goats from Kangra district of Himachal Pradesh, India

Animal species		Ticks	Chewing lice	Sucking lice	Concurrent infection (Sucking and chewing lice)	Concurrent infestation (Ticks and lice)	No Ectoparasites (Healthy)	Total Animals screened	
Goats	<i>Infested</i>	19		13	6	3	15	1	57
	<i>Prevalence (%)</i>	33.33		22.80	10.53	5.26	26.31	1.75	100
Sheep	<i>Infested</i>	1		5	0	1	1	8	16
	<i>Prevalence (%)</i>	6.25		31.25	0	6.25	6.25	50.00	100
Total	<i>Infested</i>	20		18	6	4	16	9	73
	<i>Prevalence (%)</i>	27.39		24.65	8.22	5.47	21.92	12.33	100

Table 3: Relationship between ectoparasitism and theileriosis in migratory Gaddi sheep and goats

Ectoparasite Infestation	Number of infested animals	No Theileria infection	<i>Theileria</i> genus		<i>Theileria luwenshuni</i>		
		Negative	Prevalence (%)	Positive	Prevalence (%)	Positive	Prevalence (%)
Ticks	20	4	20.00	16	80.00	9	45.00

Chewing Lice	18	4	22.22	14	77.78	11	61.11
Sucking lice	6	2	33.33	4	66.67	3	50.00
Sucking lice & Chewing lice	4	0	0.00	4	100.00	2	50.00
Ticks & lice	16	2	12.50	14	87.50	9	56.25
No infestations	9	5	55.56	4	44.44	4	44.44
Total	73	17	23.29	56	76.71	38	52.05