

Molecular identification of *Coxiella burnetii* in raw milk samples collected from farm animals in districts Kasur and Lahore of Punjab, Pakistan

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SUPPLEMENTARY TABLES

Supplementary Table S1 Univariable analysis of *Coxiella burnetii* (Q Fever) prevalence in 11 villages, districts Kasur and Lahore in Punjab province, Pakistan, 2019. P-values determined by Fisher exact tests of association.

Variable	Category	Q Fever		P value
		Pos. / Tested	Prevalence (%)	
District	Lahore	7/136	5.1	0.635
	Kasur	12/168	7.1	
Village	Mustafabad, Kasur	0/2	0.0	0.434
	Daftu, Kasur	0/16	0.0	
	Dheng Shah, Kasur	0/23	0.0	
	Fateh Pur, Kasur	2/16	12.5	
	Harbanspura, Lahore	2/67	3.0	
	Korian, Lahore	1/23	4.3	
	Man, Kasur	3/24	12.5	
	Mustafabad lalyani, Kasur	2/28	7.1	
	Rohewal, Kasur	2/36	5.6	
	Soyan, Lahore	4/46	8.7	
	Wadana, Kasur	3/23	13.0	
Ruminant	Small	6/65	9.2	0.559
	Large	8/138	5.8	
	Both	5/101	5.0	
Species	Cattle	5/90	5.6	0.337
	Buffalo	3/88	3.4	
	Goat	4/60	6.7	
	Sheep	7/66	10.6	
Breed	Exotic	2/16	12.5	0.263
	Indigenous	17/288	5.9	
Farming System	Commercial	5/123	4.1	0.233
	Household	14/181	7.7	

Feed pattern	Stallfed	9/159	5.7	0.547
	Grazing	9/108	8.3	
	Both	1/34	2.9	
Milking Method	Hand	19/282	6.7	0.378
	Machine and Hand	0/22	0.0	
Breeding Method	Artificial insemination	0/11	0.0	0.482
	Other	6/68	8.8	
	Both	13/225	5.8	
Farm Disinfection	Yes	18/248	7.3	0.485
	No	1/38	2.6	
Deworming Performed	Yes	19/300	6.3	1.000
	No	0/4	0.0	
Mastitis	Yes	1/37	2.7	0.487
	No	18/267	6.7	
Abortion	Yes	1/5	20.0	0.277
	No	18/299	6.0	
Body Condition	Good	0/5	0.0	1.000
	Average	19/297	6.4	
	Weak	0/2	0.0	

Supplementary Table S2 Controlling species variable for univariate analyses for *Coxiella burnetii* prevalence in districts Kasur and Lahore in Punjab province, Pakistan, 2019. P-values determined by Fisher exact tests of association.

Breed	Cattle	Buffalo	Goat	Sheep
Exotic				
Infected	12.5% (2/16)	0% (0/0)	0% (0/0)	0% (0/0)
Non Infected	87.5%(14/16)	0% (0/0)	0% (0/0)	0% (0/0)
Indigenous				
Infected	4.1% (3/74)	3.4% (3/88)	6.7% (4/60)	10.6% (7/66)
Non Infected	95.9%(71/74)	83.5%(71/85)	93.3%(56/60)	89.4%(59/66)
P value	0.22	-	-	-

Supplementary Table S3 Controlling body condition variable for univariate analyses for *Coxiella burnetii* prevalence in districts Kasur and Lahore in Punjab province, Pakistan, 2019. P-values determined by Fisher exact tests of association.

Body Condition	Infection	Cattle Frequency		Buffalo Frequency		Goat Frequency		Sheep Frequency		Overall Frequency	
Weak	Positive	0	0%	0	0%	0	0	0	0	0	0%
	Negative	1	100%	1	100%	0	0	0	0	2	100%
	Total	1		1		0		0		2	
Average	Positive	5	7%	3	4%	4	7%	7	11%	19	6%
	Negative	81	93%	82	96%	56	93%	59	89%	278	94%
	Total	86		85		60		66		297	297
Good	Positive	0	0%	0	0%	0	0	0	0	0	0%
	Negative	3	100%	2	100%	0	0	0	0	5	100%
	Total	3		2		0		0		5	
P value		1.00		1.00		-		-		1.00	

Supplementary Table S4 Controlling mastitis variable for univariate analyses for *Coxiella burnetii* prevalence in districts Kasur and Lahore in Punjab province, Pakistan, 2019. P-values determined by Fisher exact tests of association.

Mastitis	Infection	Cattle Frequency		Buffalo Frequency		Goat Frequency		Sheep Frequency		Overall Frequency	
Yes	Positive	0	0%	1	7%	0	0%	0	0	1	3%
	Negative	14	100%	14	93%	8	100%	0	0	36	97%
	Total	14		15		8		0		37	
No	Positive	5	7%	2	3%	4	8%	7	12%	18	7%
	Negative	71	93%	71	97%	48	92%	59	88%	249	93%
	Total	76		73		52		66		267	
P value		1.00		0.43		1.00		-		0.49	