

## Appendix 3

### 3.1.2 Seroprevalence of Brucellosis in the localities of Khartoum state

	Localities					Total
	Nile East	Bahry	Khartoum	Omdurman	Ombada	
RBPT	85	53	26	23	36	223
Negative	85/122X100 69.7%	53/66X100 80.3%	26/37X100 70.3%	23/28X100 82.1%	36/47X100 76.6%	74.3%
Positive	37	13	11	5	11	77
	37/122X100 30.3%	13/66X100 19.7%	11/37X100 29.7%	5/28X100 17.9%	11/47X100 23.4%	25.7%
Total	122 100.0%	66 100.0%	37 100.0%	28 100.0%	47 100.0%	300 100.0%

**Table 3.2.2: Seroprevalence of Brucellosis in cattle in relation to age:**

	Age			Total
	<3 years	3_6 Years	>6 Years	
RBPT	10	119	94	223
Negative	10/11X100 90.9%	119/161X100 73.9%	94/128X100 73.4%	74.3%
Positive	1	42	34	77
	1/11X100 9.1%	42/161X100 26.1%	34/128X100 26.6%	25.7%
Total	11 100.0%	161 100.0%	128 100.0%	300 100.0%

**Table 3.3.2: Seroprevalence of Brucellosis in cattle in relation to sex:**

	Sex		Total
	Male	Female	
RBPT	2	221	223
Negative	2/2X100 100.0%	221/298X100 74.2%	74.3%
Positive	0 0/2X100 .0%	77 77/298x100 25.8%	77 25.7%
Total	2 100.0%	298 100.0%	300 100.0%

**Table 3.4.2: Seroprevalence of Brucellosis in cattle in relation to body condition:**

	Body Condition		Total
	Good	Poor	
RBPT	207	16	223
Negative	207/280X100 73.9%	16/20X100 80.0%	74.3%
Positive	73 73/280X100 26.1%	4 4/20X100 20.0%	77 25.7%
Total	280 100.0%	20 100.0%	300 100.0%

**Table 3.5.2: Seroprevalence of Brucellosis in cattle in relation to breed:**

	Breed			Total
	Local	Cross	Exotic	
RBPT	9	212	2	223
Negative	9/11X100	212/287X100	2/2X100	74.3%
	81.8%	73.9%	100.0%	
Positive	2	75	0	77
	2/11X100	75/287X100	0/2X100	25.7%
	18.2%	26.1%	.0%	
Total	11	287	2	300
	100.0%	100.0%	100.0%	100.0%

**Table 3.6.2: Seroprevalence of Brucellosis in cattle in relation to number of parity:**

	Number of Parity				Total
	Null	<4 Parity	4_7 Parity	>7 Parity	
RBPT	5	132	77	7	221
Negative	5/6X100	132/178X100	77/103X100	7/11X100	74.2%
	83.3%	74.2%	74.8%	63.6%	
Positive	1	46	26	4	77
	1/6X100	46/178X100	26/103X100	4/11X100	25.8%
	16.7%	25.8%	25.2%	36.4%	
Total	6	178	103	11	298
	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 3.7.2: Seroprevalence of Brucellosis in cattle in relation to presence of dogs:**

	Presence of Dogs In Farm		Total
	No	Yes	
RBPT	83	140	223
Negative	83/114X100 72.8%	140/186X100 75.3%	74.3%
Positive	31 31/114X100 27.2%	46 46/186X100 24.7%	77 25.7%
Total	114 100.0%	186 100.0%	300 100.0%

**Table 3.8.2: Seroprevalence of Brucellosis in cattle in relation to disposal of placenta:**

	Placenta Disposal		Total
	Yes	No	
RBPT	82	141	223
Negative	82/115 X 100 71.3%	141/185 X 100 76.2%	223/300 X 100 74.3%
Positive	33 33/115 X 100 28.7%	44 44/185 X 100 23.8%	77 77/300 X 100 25.7%

Total (%)	115	185	300
	100.0%	100.0%	100.0%

**Table 3.9.2: Seroprevalence of Brucellosis in cattle in relation to herd size:**

	Herd Size		Total
	Small( $\leq 30$ )	Large( $> 30$ )	
RBPT Negative	111	112	223
	111/151X100 73.5%	112/149X100 75.2%	74.3%
Positive	40	37	77
	40/151X100 26.5%	37/149X100 24.8%	25.7%
Total	151 100.0%	149 100.0%	300 100.0%

**Table 3.10.2: Seroprevalence of Brucellosis in cattle in relation to production type:**

	Production type		Total
	Mixed	Dairy	

RBPT	Negative	7 7/7X100 100.0%	216 261/293X100 73.7%	223 74.3%
	Positive	0 0/7X100 .0%	77 77/293X100 26.3%	77 25.7%
	Total	7 100.0%	293 100.0%	300 100.0%

**Table 3.11.2: Seroprevalence of Brucellosis in cattle in relation to breeding method:**

	Breeding Type			Total
	Both	Natural	Artificial	
RBPT	47	163	13	223
Negative	47/56X100 83.9%	163/222X100 73.4%	13/22X100 59.1%	74.3%
Positive	9/56X100 16.1%	59/222X100 26.6%	9/22X100 40.9%	25.7%
Total	56 100.0%	222 100.0%	22 100.0%	300 100.0%

**Table 3.12.2: Seroprevalence of Brucellosis in cattle in relation to milking method:**

	Milking Methods	Total

		Manual	Machine	
RBPT	Negative	181	42	223
		181/251X100	42/49X100	74.3%
		72.1%	85.7%	
	Positive	70	7	77
		70/251X100	7/49X100	25.7%
		27.9%	14.3%	
Total	251	49	300	
	100.0%	100.0%	100.0%	

**Table 3.13.2: Seroprevalence of Brucellosis in cattle in relation to Water source:**

		Water Source		Total
		Tap Water	Underground water	
RBPT	Negative	143	80	223
		143/191X100	80/109X100	74.3%
		74.9%	73.4%	
	Positive	48	29	77
		48/191X100	29/109X100	25.7%
		25.1%	26.6%	
Total	191	109	300	
	100.0%	100.0%	100.0%	

**Table 3.14.2: Seroprevalence of Brucellosis in cattle in relation to Veterinary Service:**

	Veterinary Services		Total
	Present	Abscent	
RBPT	150	73	223
Negative	150/193X100 77.7%	73/107X100 68.2%	74.3%
Positive	43 43/193X100 22.3%	34 34/107X100 31.8%	77 25.7%
Total	193 100.0%	107 100.0%	300 100.0%

**Table 3.15.2: Seroprevalence of Brucellosis in cattle in relation to Waste Disposal:**

	Waste Disposal		Total
	Yes	No	
RBPT	168	55	223
Negative	168/223X100 75.3%	55/77X100 71.4%	74.3%
Positive	55 55/223X100 24.7%	22 22/77X100 28.6%	77 25.7%
Total	223 100.0%	77 100.0%	300 100.0%



**Table 3.16.2: Seroprevalence of Brucellosis in cattle in relation to presence and absence of Separate Pen for Calving:**

	Presence of separate Calving pens		Total
	Yes	No	
RBPT	6	217	223
Negative	6/8X100 75.0%	217/292X100 74.3%	74.3%
Positive	2 2/8X100 25.0%	75 75/292X100 25.7%	77 25.7%
Total	8 100.0%	292 100.0%	300 100.0%

**Table 3.17.2: Seroprevalence of Brucellosis in cattle in relation to Using Shared Male for Breeding:**

	Share Male for Breeding		Total
	No	Yes	

RBPT	Negative	133 133/172X100 77.3%	90 90/128X100 70.3%	223 74.3%
	Positive	39 39/172X100 22.7%	38 38/128X100 29.7%	77 25.7%
	Total	172 100.0%	128 100.0%	300 100.0%

**Table 3.18.2: Seroprevalence of Brucellosis in cattle in relation to History of Abortion:**

	History of abortion		Total	
	No	Yes		
RBPT	Negative	133 133/177X100 75.1%	90 90/123X100 73.2%	223 74.3%
	Positive	44 44/177X100 24.9%	33 33/123X100 26.8%	77 25.7%
	Total	177 100.0%	123 100.0%	300 100.0%

**Table 3.19.2: Seroprevalence of Brucellosis in cattle in relation to History of Retain placenta:**

	History of Retain Placenta	Total
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		No	Yes	
RBPT	Negative	107 107/138x100 77.5%	116 116/162X100 71.6%	223 74.3%
	Positive	31 31/138X100 22.5%	46 46/162X100 28.4%	77 25.7%
	Total	138 100.0%	162 100.0%	300 100.0%