

Supporting information

S1 Table: Reference strains and Zimbabwean *Brucella* spp. isolates identified by Bruce-ladder and repeat copy number of the indicated loci

Strain number	Alternative number	Species	Host	Country [‡]	Bruce-ladder [†]	Genotype		Variable number of tandem repeat (VNTR) loci: Bruce															
						MLVA		Panel 1					Panel 2A			Panel 2B							
						8	11	6	8	11	12	42	43	45	55	18	19	21	4	7	9	16	30
ZW011 [*]	11	<i>B. suis</i>	Pig	Shamwa, ZW	<i>B. suis</i> bv. 1	6		2	3	6	10	4	1	5	2	4	40	9	6	6	5	5	3
ZW040	40	<i>Brucella</i>	Testis	Bindura, ZW	<i>B. suis</i> bv. 1	6	33	2	3	6	10	4	1	5	2	4	38	9	6	6	5	4	3
ZW043	43	<i>Brucella</i>	Cattle	Chiredzi, ZW	<i>B. suis</i> bv. 1	6		2	3	6	10	4	1	5	2	4	40	9	6	6	5	5	3
ZW045	45	<i>Brucella</i>	Bull testis	Bindura, ZW	<i>B. suis</i> bv. 1	6		2	3	6	10	4	1	5	2	4	40	9	6	6	5	4	3
ZW046	46	<i>Brucella</i>	Cattle	Norton, ZW	<i>B. suis</i> bv. 1	6		2	3	6	10	4	1	5	2	4	40	9	6	6	5	4	3
ZW047	47	<i>Brucella</i>	Milk	Zimbabwe	<i>B. suis</i> bv. 1	6		2	3	6	10	4	1	5	2	4	40	9	6	6	5	5	3
ZW048	48	<i>Brucella</i>	unknown	Zimbabwe	<i>B. suis</i> bv. 1	6		2	3	6	10	4	1	5	2	4	40	9	6	6	5	5	3
ZW201 [*]	201	<i>Brucella</i>	Pig	Norton, ZW	<i>B. suis</i> bv. 1	6		2	3	6	10	3	1	5	2	4	40	9	6	6	5	5	3
ZW053	53	<i>Brucella</i>	Cattle	Mataberland, ZW	<i>B. abortus</i>	28	82	4	5	4	12	2	2	3	3	6	42	8	6	5	3	2	6
ZW323 [*]	323	<i>B. abortus</i>	Cattle	Harare, ZW	<i>B. abortus</i>	28	82	4	5	4	12	2	2	3	3	6	42	8	3	5	3	4	5
ZW100 [*]	100	<i>B. canis</i>	Dog	Harare, Highlands, ZW	<i>B. canis</i>	3	26	2	3	9	11	3	1	5	2	5	40	9	8	6	10	8	3
ZW377 [*]	377	<i>B. canis</i>	Dog	Harare, ZW	<i>B. canis</i>	3	26	2	3	9	11	3	1	5	2	5	42	9	8	6	10	7	3
BCCN R7 [#]	REF292	<i>B. abortus</i> bv 4	cattle	England	<i>B. abortus</i>	30	78	4	5	4	12	2	2	3	2	6	42	8	3	4	3	3	5
BCCN R6 [#]	REFTulya	<i>B. abortus</i> bv 3	human	Uganda		34	64	3	5	4	11	2	2	3	3	8	40	8	6	5	3	11	5
BCCN R5 [#]	REF86/8/59	<i>B. abortus</i> bv 2	cattle	England	<i>B. abortus</i>	29	80	4	5	4	12	2	1	3	3	6	42	8	3	4	3	3	5
BCCN R4 [#]	REF544	<i>B. abortus</i> bv 1	cattle	England	<i>B. abortus</i>	30	78	4	5	4	12	2	2	3	3	5	42	8	3	5	3	4	5
BCCN R3 [#]	REFEther	<i>B. melitensis</i> bv 3	goat	Italy		51	96	3	5	3	13	1	1	3	3	7	42	8	7	5	12	9	3
BCCN R22 [#]	Reo 198	<i>B. ovis</i>	sheep	USA		1	25	3	5	3	10	1	1	5	2	3	7	9	9	9	9	15	2
BCCN R21 [#]	REF513	<i>B. suis</i> bv 5	wild rodent	Former USSR		21	2	1	2	9	14	1	2	5	5	7	44	9	9	5	3	9	5
BCCN R2 [#]	REF63/9	<i>B. melitensis</i> bv 2	goat	Turkey		45	115	1	5	3	12	2	2	3	2	4	40	8	7	4	3	5	4
BCCN R18 [#]	REFRM 6/66	<i>B. canis</i>	dog	USA	<i>B. canis</i>	3	26	2	3	9	11	3	1	5	2	5	40	9	8	6	7	5	3
BCCN R17 [#]	REFBOW 63/290	<i>B. ovis</i>	sheep	Australia		1	25	3	5	2	10	1	1	5	2	3	8	9	6	7	7	6	2
BCCN R15 [#]	REF40	<i>B. suis</i> bv 4	reindeer	Former USSR		3	27	2	3	9	11	3	1	5	2	5	36	9	4	4	9	6	3

BCCN R14 [#]	REF686	<i>B. suis</i> bv 3	swine	USA		4	31	2	3	4	11	3	1	5	2	4	38	9	7	7	10	4	5		
BCCN R13 [#]	REFThomsen	<i>B. suis</i> bv 2	swine	Denmark		9	51	2	4	8	15	6	1	5	2	6	44	9	9	9	18	2	4		
BCCN R12 [#]	REF1330	<i>B. suis</i> bv 1	swine	USA	<i>B. suis</i> bv 1	6	33	2	3	6	10	4	1	5	2	4	38	9	6	6	5	5	3		
BCCN R11 [#]	REFC68	<i>B. abortus</i> bv 9	cattle	England		39	67	3	5	3	12	2	2	2	3	7	42	8	6	6	3	3	3		
BCCN R1 [#]	ATTC 23456	<i>B. melitensis</i>	goat	USA		47	136	3	4	2	13	4	2	3	3	5	36	6	2	5	8	3	6		
BCCN R9 [#]	REF870	<i>B. abortus</i> bv6	cattle	Africa		40	66	3	5	3	12	2	2	3	3	7	42	8	3	6	3	3	3		
BCCN R8 [#]	REFB3196	<i>B. abortus</i> bv5	cattle	England		39	67	3	5	3	12	2	2	2	3	7	42	8	6	7	3	3	3		
BCCN R16 [#]	REF5K33	<i>B. neotomae</i>	desert rat	USA		26	6	4	5	4	13	4	3	5	1	6	42	9	3	3	3	6	3		
ZW002	2	<i>Brucella</i>	Sheep	Gwanda, ZW	<i>B. ovis</i>																			ND	
ZW005 [*]	5	<i>B. ovis</i>	Sheep	Insiza, ZW	<i>B. ovis</i>																				ND
ZW248	248	<i>Brucella</i>	Cow	Mazowe, ZW	<i>B. abortus</i>																				ND
ZW283 [*]	283	<i>B. abortus</i>	Cow	Gwanda, ZW	<i>B. abortus</i>																				ND

*Identified using growth characteristics and biochemical profiles excluding the phages lysis which was confirmed by PCR assays in this study.

‡ ZW indicate strains isolated from Zimbabwe and REF indicate reference DNA obtained from BCCN: Brucella culture collection Nouzilly.

† Isolates identified to species level using Bruce-ladder PCR assay and *B. canis* and *B. suis* further characterized using Suis-ladder PCR assay.

#MLVA data obtained from Maquart et al. (26).

ND Not determines due to low quantity of DNA.

MLVA8 = Panel 1; **MLVA 11** = Panels 1 & 2A; **MLVA16** = Panels 1, 2A & 2.

