

Serotype: SAT1		Report date: 11/11/2004					
WRL Ref No: ZIM/20/2003							
Date collected: not known		Topotype: Western Zimbabwe (WZ)					
Date received: 06/07/2004		Genotype/strain: none					
Species: not known		Sequence filename: ZIM03-20.SEQ					
Material used: PK1 RS1 BTy1		Date sequence last updated: 19/08/2004					
Region sequenced: VP1		Total no. of comparisons: 209					
RT-PCR primers: SAT1-P1-1228F/SAT-2B208R		Min. no. of nt for comparison: 300					
No. of Nt determined: 663							
No. of ambiguities: 0							
Gene length: 663							
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/ZIM/4/2003	ZIM03-04	663	663	0	100	0
2	SAT1/ZIM/13/2003	ZIM03-13	663	663	0	100	0
3	SAT1/ZIM/21/2003	ZIM03-21	663	663	0	100	0
4	SAT1/ZIM/2/2003**	ZIM03-02	663	663	0	100	0
5	SAT1/ZIM/5/2003**	ZIM03-05	660	658	3	99.7	0.3
6	SAT1/ZIM/P1/2004 (E45)***	ZIM04-BK	663	651	0	98.19	1.81
7	SAT1/ZIM/P1/2004 (D19)***	ZIM04-BD	661	649	2	98.18	1.82
8	SAT1/ZIM/P1/2004 (C10)***	ZIM04-AN	660	648	3	98.18	1.82
9	SAT1/ BOT/P3/98 (buffalo 25)	BOW98-14	376	329	5	87.5	12.5
10	SAT1/ZIM/P45/91 (buffalo MT6)	ZIM91B72	392	342	5	87.24	12.76
** these samples also contained FMDV-SAT2							
*** from carrier cattle							
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/SA/13/61 AY593842	SAR61-13	663	581	0	87.63	12.37
2	SAT1/SA/2/58 AY593841	SAR58-02	663	580	0	87.48	12.52
3	SAT1/SWA/1/49 AY593840	SWA49-01	663	577	0	87.03	12.97
4	SAT1/SWA/40/61 AY593843	SWA61-40	663	566	0	85.37	14.63
5	SAT1/BOT/1/68 Z98203	BOT68-B1	663	566	0	85.37	14.63
6	SAT1/BEC/1/48 AY593838	BEC48-01	663	562	0	84.77	15.23
7	SAT1/RHO/5/66 AY593846	RHO66-05	663	500	0	75.41	24.59
8	SAT1/SAR/9/81	SAR81-09	629	469	11	74.56	25.44
9	SAT1/RV/11/37 AY593839	RHO37-11	663	491	0	74.06	25.94
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	447	0	67.42	32.58
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT1	Report date: 11/11/2004
WRL Ref No: ZIM/21/2003	
Date collected: not known	
Date received: 06/07/2004	Topotype: WZ
Species: not known	Genotype/strain: none
Material used: PK1 BTy1	Sequence filename: ZIM03-21.SEQ
Region sequenced: VP1	Date sequence last updated: 19/08/2004
RT-PCR primers: SAT1-P1-1228F/SAT-2B208R	Total no. of comparisons: 209
No. of Nt determined: 663	Min. no. of nt for comparison: 300
No. of ambiguities: 0	
Gene length: 663	

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/ZIM/4/2003	ZIM03-04	663	663	0	100	0
2	SAT1/ZIM/13/2003	ZIM03-13	663	663	0	100	0
3	SAT1/ZIM/20/2003	ZIM03-20	663	663	0	100	0
4	SAT1/ZIM/2/2003**	ZIM03-02	663	663	0	100	0
5	SAT1/ZIM/5/2003**	ZIM03-05	660	658	3	99.7	0.3
6	SAT1/ZIM/P1/2004 (E45)***	ZIM04-BK	663	651	0	98.19	1.81
7	SAT1/ZIM/P1/2004 (D19)***	ZIM04-BD	661	649	2	98.18	1.82
8	SAT1/ZIM/P1/2004 (C10)***	ZIM04-AN	660	648	3	98.18	1.82
9	SAT1/ BOT/P3/98 (buffalo 25)	BOW98-14	376	329	5	87.5	12.5
10	SAT1/ZIM/P45/91 (buffalo MT6)	ZIM91B72	392	342	5	87.24	12.76

** these samples also contained FMDV-SAT2
 *** from carrier cattle

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/SA/13/61 AY593842	SAR61-13	663	581	0	87.63	12.37
2	SAT1/SA/2/58 AY593841	SAR58-02	663	580	0	87.48	12.52
3	SAT1/SWA/1/49 AY593840	SWA49-01	663	577	0	87.03	12.97
4	SAT1/SWA/40/61 AY593843	SWA61-40	663	566	0	85.37	14.63
5	SAT1/BOT/1/68 Z98203	BOT68-B1	663	566	0	85.37	14.63
6	SAT1/BEC/1/48 AY593838	BEC48-01	663	562	0	84.77	15.23
7	SAT1/RHO/5/66 AY593846	RHO66-05	663	500	0	75.41	24.59
8	SAT1/SAR/9/81	SAR81-09	629	469	11	74.56	25.44
9	SAT1/RV/11/37 AY593839	RHO37-11	663	491	0	74.06	25.94
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	447	0	67.42	32.58

nt, nucleotides
 *, not a WRLFMD reference number

Serotype: SAT1	Report date: 11/11/2004
WRL Ref No: ZIM/23/2003	
Date collected: not known	
Date received: 06/07/2004	Topotype: North-western Zimbabwe (NWZ)
Species: not known	Genotype/strain: none
Material used: PK1 BTy2	Sequence filename: ZIM03-23.SEQ
Region sequenced: VP1	Date sequence last updated: 23/09/2004
RT-PCR primers: SAT1-P1-1228F/SAT-2B208R	Total no. of comparisons: 209
No. of Nt determined: 663	Min. no. of nt for comparison: 300
No. of ambiguities: 0	
Gene length: 663	

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/ZIM/P43/91 (buffalo MAT9)	ZIM91B65	407	353	5	86.73	13.27
2	SAT1/ZIM/P1/96 (buffalo K17)	ZIM96B03	408	351	21	86.03	13.97
3	SAT1/ZIM/P1/96 (buffalo K13)	ZIM96B02	421	360	9	85.51	14.49
4	SAT1/ZIM/P1/98 (buffalo K5)	ZIW97-08	413	351	5	84.99	15.01
5	SAT1/TAN/8/99	TAN99-08	337	280	9	83.09	16.91
6	SAT1/ZAM/P2/96 (buffalo LOC-25)	ZAW96-08	417	346	6	82.97	17.03
7	SAT1/ZAM/5/2004	ZAM04-05	661	548	2	82.9	17.1
8	SAT1/ZAM/16/2004	ZAM04-16	663	549	0	82.81	17.19
9	SAT1/ZAM/11/2004	ZAM04-11	662	548	1	82.78	17.22
10	SAT1/ZAM/13/2004	ZAM04-13	662	548	1	82.78	17.22

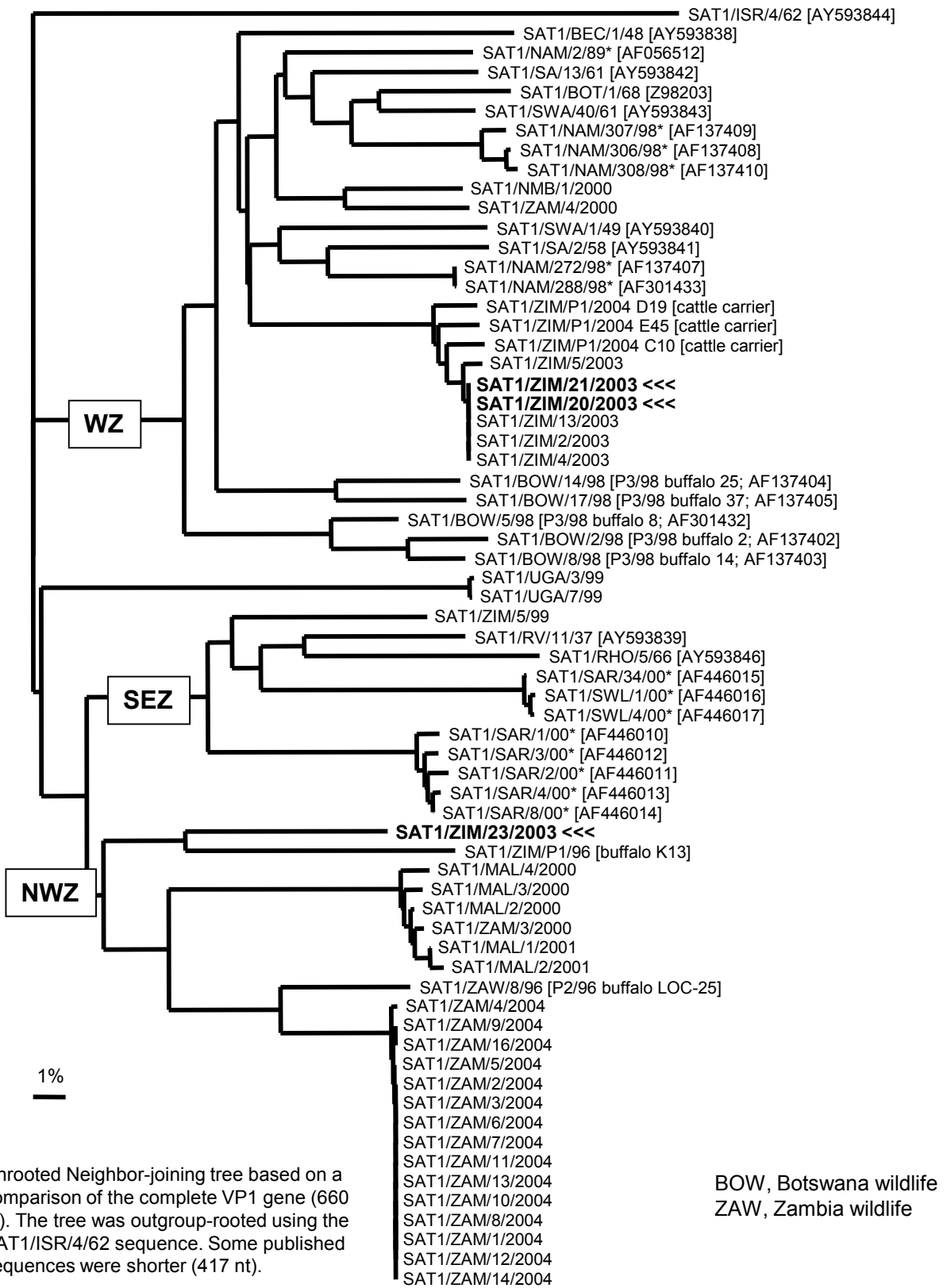
Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/RV/11/37 AY593839	RHO37-11	663	522	0	78.73	21.27
2	SAT1/RHO/5/66 AY593846	RHO66-05	663	513	0	77.38	22.62
3	SAT1/SAR/9/81	SAR81-09	629	476	11	75.68	24.32
4	SAT1/SA/13/61 AY593842	SAR61-13	663	489	0	73.76	26.24
5	SAT1/SA/2/58 AY593841	SAR58-02	663	489	0	73.76	26.24
6	SAT1/SWA/40/61 AY593843	SWA61-40	663	489	0	73.76	26.24
7	SAT1/SWA/1/49 AY593840	SWA49-01	663	487	0	73.45	26.55
8	SAT1/BOT/1/68 Z98203	BOT68-B1	663	485	0	73.15	26.85
9	SAT1/BEC/1/48 AY593838	BEC48-01	663	480	0	72.4	27.6
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	470	0	70.89	29.11

nt, nucleotides

*, not a WRLFMD reference number

Report on FMDV SAT 1 isolates from Zimbabwe in 2003 (received from the OVI)



* , not a WRLFMD Ref. No.