

Table S1: Information on specimens, including location, collection date, and geo-coordinates for the period 2022-2022

Sample	Collected date	District	Village	Latitude	Longitude
LSD_Leso_Tsakholo	12/3/2021	Mafeteng	Tsakholo	-29.6498	27.1552844
LSD_Leso_585	5/1/2022	Berea	Mokhethoaneng	-29.23466	27.564492
LSD_Leso_584	5/2/2022	Maseru	mantsebo	-29.4655	27.5055461
LSD_Leso_88	6/2/2022	Maseru	Ha Malelu	-29.56243	27.394117
LSD_Leso_506	11/2/2022	Berea	Foso	-29.26961	27.592152
LSD_Leso_Sefikeng	16/01/2021	Berea	Sefikeng	-29.28248	27.810202
LSD_Leso_484	16/01/2022	Maseru	Ha Motemekoane	-29.50097	27.543678
LSD_Leso_490	16/01/2022	Leribe	Liphakoeng	-28.93504	27.825098
LSD_Leso_LAC1	16/01/2022	Maseru	LAC	-29.29119	27.502982
LSD_Leso_LAC2	16/01/2022	Maseru	LAC	-29.29119	27.502982
LSD_Leso_485	17/01/2022	Maseru	Ha Mmajane	-29.54516	27.453774
LSD_Leso_604	17/01/2022	Maseru	Ha Mokhele	-29.55582	27.466205
LSD_Leso_601	17/03/2022	Mafeteng	Matelile	-29.81553	27.4986183
LSD_Leso_480	19/01/2021	Leribe	Liphakoeng	-28.93504	27.825098
LSD_Leso_605	20/01/2022	Leribe	Liphakoeng	-28.95184	27.854111
LSD_Leso_Ntlama	20/02/2021	Berea	Ntlama	-29.1722	27.8731863
LSD_Leso_87.2	23/02/2022	Mohales' Hoek	Lengopeng la-ntja	-29.31089	27.495247
LSD_Leso_489	26/01/2022	Maseru		-29.44725	27.505546

Table S2: Sequence information including location, isolate name, accession numbers for Whole genome, RPO30, and GPCR gene sequences

Item No.	Location	Name of Isolate	Accession No.	Gene sequence
1	Leribe	LSDV_Leso_490	PP065788	Whole genome
2	Maseru	LSDV_Leso_Lac1	PP065789	Whole genome
3	Mohales Hoek	LSDV_Leso_87.2	PP065790	RPO30
4	Maseru	LSDV_Leso_484	PP065791	RPO30
5	Maseru	LSDV_Leso_485	PP065792	RPO30
6	Maseru	LSDV_Leso_489	PP065793	RPO30
7	Maseru	LSDV_Leso_584	PP065794	RPO30
8	Maseru	LSDV_Leso_Lac2	PP065795	RPO30
9	Berea	LSDV_Leso_Sefikeng	PP065796	RPO30
10	Berea	LSDV_Leso_NTLA	PP065797	RPO30
12	Mafeteng	LSDV_Leso_Tsa2	PP065798	RPO30
13	Mohales' Hoek	LSDV_Leso_87.2	PP065799	GPCR
14	Maseru	LSDV_Leso_484	PP065800	GPCR
15	Maseru	LSDV_Leso_485	PP065801	GPCR
16	Maseru	LSDV_Leso_489	PP065802	GPCR
17	Maseru	LSDV_Leso_584	PP065803	GPCR
18	Maseru	LSDV_Leso_Lac2	PP065804	GPCR
19	Berea	LSDV_Leso_Sefikeng	PP065805	GPCR
20	Berea	LSDV_Leso_NTLA	PP065806	GPCR
21	Mafeteng	LSDV_Leso_Tsa2	PP065807	GPCR

Table S3: Sequence information including location, isolate name, accession numbers for EEV glycoprotein and B22R gene sequence

Item No.	Location	Name of Isolate	Accession No.	Gene sequence
1	Mohales' Hoek	LSDV_Leso_87.2	PP065808	EEV glycoprotein
2	Maseru	LSDV_Leso_484	PP065809	EEV glycoprotein
3	Maseru	LSDV_Leso_485	PP065810	EEV glycoprotein
4	Maseru	LSDV_Leso_489	PP065811	EEV glycoprotein
5	Maseru	LSDV_Leso_584	PP065812	EEV glycoprotein
6	Maseru	LSDV_Leso_Lac2	PP065813	EEV glycoprotein
7	Berea	LSDV_Leso_Sefikeng	PP065814	EEV glycoprotein
8	Berea	LSDV_Leso_NTLA	PP065815	EEV glycoprotein
9	Mafeteng	LSDV_Leso_Tsa2	PP065816	EEV glycoprotein
10	Maseru	LSDV_Leso_484	PP065817	B22R
11	Maseru	LSDV_Leso_Lac2	PP065818	B22R
12	Berea	LSDV_Leso_Sefikeng	PP065819	B22R
13	Mafeteng	LSDV_Leso_Tsa2	PP065820	B22R