

# FAO World Reference Laboratory for Foot-and-Mouth Disease (WRLFMD)

## Genotyping Report

Date: 16 March 2010

FMDV type O

Country: Ethiopia

Period: 2009

No. of isolates: 2

BATCH: WRLFMD/2010/00008



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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

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Serotype: O	Report date: 15/03/2010
WRLFMD Ref No: ETH/59/2009	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00008	Checked by: J.M. Hammond
Sender Ref: ETH 03/10	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 12/11/2009	Genotype/strain: unnamed
Date received by WRLFMD: 20/02/2010	Sequence filename: ETH09-59.SEQ
Date received for sequencing: 11/03/2010	Date sequence last updated: 15/03/2010
Species: Cattle	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 2293
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 300
	Total turn-around time: 23 days
	Sequencing time: 4 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/ETH/60/2009	ETH09-60	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/47/2009	ETH09-47	639	636	0	99.53	0.47	EA-3	unnamed
3	O/ETH/11/2009	ETH09-11	639	635	0	99.37	0.63	EA-3	unnamed
4	O/ETH/44/2009	ETH09-44	639	635	0	99.37	0.63	EA-3	unnamed
5	O/ETH/1/2009	ETH09-01	639	634	0	99.22	0.78	EA-3	unnamed
6	O/ETH/6/2009	ETH09-06	639	634	0	99.22	0.78	EA-3	unnamed
7	O/ETH/7/2009	ETH09-07	639	634	0	99.22	0.78	EA-3	unnamed
8	O/ETH/8/2009	ETH09-08	639	634	0	99.22	0.78	EA-3	unnamed
9	O/ETH/10/2009	ETH09-10	639	633	0	99.06	0.94	EA-3	unnamed
10	O/ETH/3/2009	ETH09-03	639	633	0	99.06	0.94	EA-3	unnamed
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/ETH/3/2004 (FJ798109)	ETH04-03	639	605	0	94.68	5.32	EA-3	unnamed
2	O/ETH/1/2007 (FJ798137)	ETH07-01	639	577	0	90.30	9.70	EA-3	unnamed
3	O/SUD/2/86 (DQ165075)	SUD86-02	639	554	0	86.70	13.30	EA-3	unnamed
4	O/K83/79* (AJ303511)	KEN79B83	638	549	1	86.05	13.95	EA-1	unnamed
5	O/K40/84*	KEN84-40	639	548	0	85.76	14.24	EA-1	unnamed
6	O/KEN/5/2002 (DQ165073)	KEN02-05	639	548	0	85.76	14.24	EA-2	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	545	0	85.29	14.71	ME-SA	unnamed
8	O/ETH/2/2006 (FJ798127)	ETH06-02	639	544	0	85.13	14.87	EA-3	unnamed
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	544	0	85.13	14.87	ME-SA	PanAsia
10	O/KUW/3/97 (DQ164904)	KUW97-03	639	543	0	84.98	15.02	ME-SA	Ind-2001a

nt, nucleotides

\*, not a WRLFMD reference number

Assembled with Report Generator v3.1

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Date received for sequencing: 11/03/2010	Date sequence last updated: 15/03/2010
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Assembled with Report Generator v3.1

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# Report on FMDV O in Ethiopia in 2009

Batch: WRLFMD/2010/00008

Software: MEGA 4.0

No. of Taxa : 257

Data File : n:\evd\meg\db\fmv\o\ETH2009c.meg

Data Title : O Ethiopia 2009

Data Type : Nucleotide (Coding)

Analysis : Phylogeny reconstruction

Tree Inference : =====

->Method : Neighbor-Joining

->Phylogeny Test and options : Bootstrap (1000 replicates; seed=21180)

Include Sites : =====

->Gaps/Missing Data : Pairwise Deletion

->Codon Positions : 1st+2nd+3rd+Noncoding

Substitution Model : =====

->Model : Nucleotide: Kimura 2-parameter

->Substitutions to Include : d: Transitions + Transversions

->Pattern among Lineages : Same (Homogeneous)

->Rates among sites : Uniform rates

No. of Sites : 642

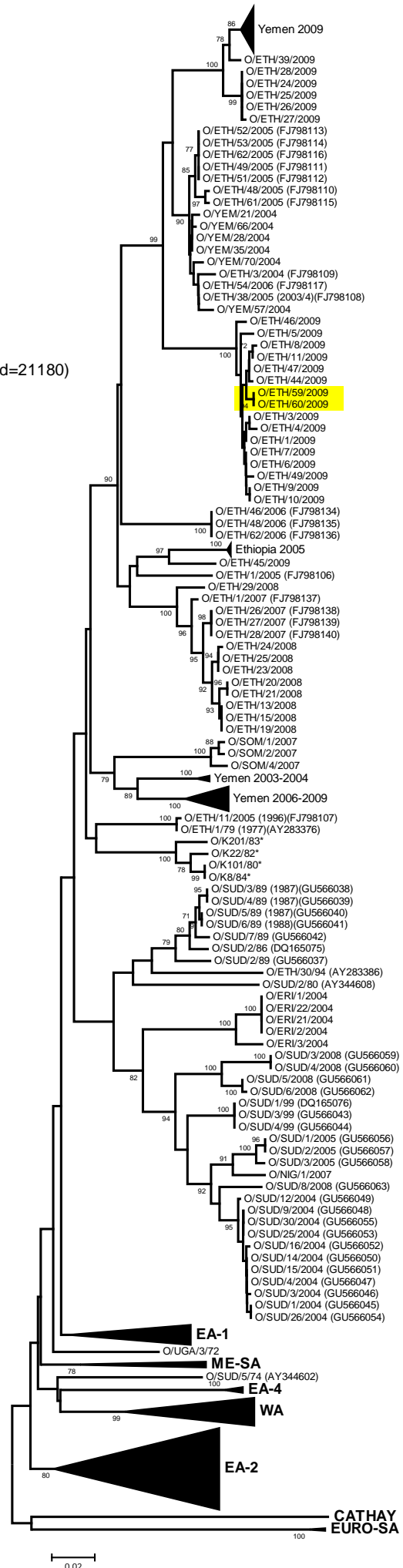
No Of Bootstrap Reps = 1000

Only bootstrap values of 70% and above are shown

\* , not a WRLFMD Ref. No.

N.J. Knowles & J. Wadsworth, 16 March 2010

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