

Suppl. Table S9. Detailed nucleotide pairwise identity of ORF sequences of NA N3 gene segment of full-length H14 viruses from Guatemala (n=40), North America (n=12), and Eurasia (n=4) during 1982-2019.

# virus	Strain	Reference ID	1	2	4	5	6	7	9	11	12	14	16	22	17	23	18	24	25	26	27	28	29	30	31	32	33	38	39	48	53	55
1	Abiue_winged_islat/Guatemala/CP049H106_15/2011	KJ169276																														
2	Abiue_winged_islat/Guatemala/CP049H106_31/2011	KY644481	94.5																													
4	Abiue_winged_islat/Guatemala/CP049H108_02/2012	KY644425	95.4	95																												
5	Abiue_winged_islat/Guatemala/CP049H108_04/2012	KX360401	95.5	95.1	99.9																											
6	Abiue_winged_islat/Guatemala/CP049H108_11/2012	KX360439	95.5	95	99.8	99.9																										
7	Abiue_winged_islat/Guatemala/CP049H109_49/2012	KY644327	95.5	95.1	99.9	100	99.9																									
9	Abiue_winged_islat/Guatemala/CP049H109_76/2012	KX360432	95.5	95.1	99.9	100	99.9	100																								
11	Abiue_winged_islat/Guatemala/CP049H110_31/2012	KY644476	95.6	95.2	99.5	99.6	99.6	99.6	99.6																							
12	Abiue_winged_islat/Guatemala/CP049H113_07/2013	KY644194	95.4	95	99.9	99.8	99.9	99.9	99.9	99.9																						
14	Abiue_winged_islat/Guatemala/CP049H113_74/2013	KY373158	95.3	94.9	99.8	99.8	99.7	99.8	99.8	99.4	99.8																					
16	Abiue_winged_islat/Guatemala/CP049H116_12/2013	MK327720	95	94.5	99.4	99.6	98.5	98.6	98.6	98.7	98.4	98.4																				
22	Abiue_winged_islat/Guatemala/CP049H117_13/2013	MK327688	95.1	94.5	98.4	98.6	98.5	98.6	98.6	98.7	98.4	98.4	99.9																			
17	Abiue_winged_islat/Guatemala/CP049H117_34/2013	MK327696	94.8	94.4	98.3	98.4	98.4	98.4	98.4	98.5	98.3	98.2	99.7	99.7																		
23	Abiue_winged_islat/Guatemala/CP049H117_123/2013	MK327728	95	94.6	98.5	98.7	98.6	98.7	98.7	98.7	98.5	98.4	99.9	99.9	99.8																	
18	Abiue_winged_islat/Guatemala/CP049H117_143/2013	MK327760	95	94.6	98.5	98.7	98.6	98.7	98.7	98.7	98.5	98.4	99.9	99.9	99.8	100																
24	Abiue_winged_islat/Guatemala/CP049H123_13/2014	OP144070	94.7	94.2	98.4	98.5	98.4	98.5	98.5	98.6	98.4	98.3	97.5	97.5	97.6	97.6	97.6															
25	Abiue_winged_islat/Guatemala/CP049H123_16/2014	OP144078	94.7	94.1	98.3	98.4	98.4	98.4	98.4	98.5	98.3	98.2	97.4	97.4	97.3	97.5	97.5	99.6														
26	Abiue_winged_islat/Guatemala/CP049H123_23/2014	OP144086	94.7	94.2	98.4	98.5	98.4	98.5	98.5	98.6	98.4	98.3	97.5	97.5	97.4	97.6	97.6	100	99.6													
27	Abiue_winged_islat/Guatemala/CP049H123_27/2014	OP144084	94.7	94.2	98.4	98.5	98.4	98.5	98.5	98.6	98.4	98.3	97.5	97.5	97.4	97.6	97.6	100	99.6	100												
28	Abiue_winged_islat/Guatemala/CP049H123_58/2014	OP144102	94.7	94.2	98.4	98.5	98.4	98.5	98.5	98.6	98.4	98.3	97.5	97.5	97.4	97.6	97.6	100	99.6	100	100											
29	Abiue_winged_islat/Guatemala/CP049H123_28/2014	OP144110	94.7	94.2	98.4	98.5	98.4	98.5	98.5	98.6	98.4	98.3	97.5	97.5	97.4	97.6	97.6	100	99.6	100	100	100										
30	Abiue_winged_islat/Guatemala/CP049H123_61/2014	OP144118	94.7	94.2	98.4	98.5	98.4	98.5	98.5	98.6	98.4	98.3	97.5	97.5	97.4	97.6	97.6	100	99.6	100	100	100	100									
31	Abiue_winged_islat/Guatemala/CP049H123_65/2014	OP144126	94.7	94.1	98.3	98.4	98.4	98.4	98.4	98.5	98.3	98.2	97.4	97.4	97.3	97.5	97.5	99.9	99.5	99.9	99.9	99.9	99.9	99.9								
32	Abiue_winged_islat/Guatemala/CP049H123_75/2014	OP144135	94.7	94.1	98.3	98.4	98.4	98.4	98.4	98.5	98.3	98.2	97.4	97.4	97.3	97.5	97.5	99.9	99.5	99.9	99.9	99.9	99.9	99.9	99.9							
33	Abiue_winged_islat/Guatemala/CP049H123_78/2014	OP144144	94.7	94.2	98.4	98.5	98.4	98.5	98.5	98.6	98.4	98.3	97.5	97.5	97.4	97.6	97.6	100	99.6	100	100	100	100	100	100	100	100	100	100	100	100	100
38	Abiue_winged_islat/Guatemala/CP049H158_26/2019	OP144184	93.9	93.9	97.1	97.2	97.2	97.2	97.2	97.4	97.1	97	96.8	96.8	96.7	96.9	96.9	97	96.8	97	97	97	97	97	97	97	97	97	97	97	97	97
39	Abiue_winged_islat/Guatemala/CP049H189_08/2019	OP144193	94.8	94.3	97.7	97.8	97.7	97.8	97.8	97.7	97.6	96.9	96.9	96.8	97	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
40	Abiue_winged_islat/Guatemala/CP049H189_08/2019	MP359230	95.3	95.4	93.5	93.7	93.6	93.7	93.7	93.8	93.5	93.3	93.4	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
53	ACommon_Tsai/Chany_Lake/28/2019	EP1_58_400267	84.9	86.2	84.8	84.9	84.8	84.9	84.9	84.9	84.8	84.8	84.9	84.8	84.7	84.9	84.9	84.8	84.7	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8
55	Agoset/Karachi/NARC_13N_869/2014	K0560270	85.2	85.6	84.9	85	85	85	85	85	85	85	85.2	85.1	85.2	85.2	85.2	85.3	85.2	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.4	85.4	93.3