

A *. The number of SNPs / transversion (tv) SNPs for VARV-TATV-CMLV cSNPs of selected isolates (representative of each sub-clades).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 SFA65_102	-															
2 SOM77_ali	54 / 2	-														
3 SUD47_jub	23 / 3	41 / 3	-													
4 CNG70_46	36 / 2	60 / 2	29 / 3	-												
5 ETH72_16	43 / 2	43 / 2	30 / 3	49 / 2	-											
6 BSH75_banu	52 / 4	76 / 4	45 / 5	58 / 4	65 / 4	-										
7 IND53_mad	40 / 4	64 / 4	33 / 5	46 / 4	53 / 4	42 / 6	-									
8 SUM72_222	56 / 6	78 / 6	49 / 7	62 / 6	69 / 6	58 / 8	38 / 4	-								
9 IRN72_tbrz	60 / 5	82 / 5	53 / 6	66 / 5	73 / 5	62 / 7	42 / 3	52 / 3	-							
10 JAP46_yam	60 / 6	84 / 6	53 / 7	64 / 6	73 / 6	62 / 8	42 / 4	52 / 4	56 / 3	-						
11 CHN48_horn	67 / 8	91 / 8	60 / 9	73 / 8	80 / 8	69 / 10	49 / 6	59 / 6	63 / 5	49 / 6	-					
12 BEN68_59	255 / 31	279 / 31	248 / 32	261 / 31	268 / 31	255 / 33	237 / 29	245 / 29	251 / 28	237 / 29	242 / 31	-				
13 NIG69_001	259 / 28	281 / 28	252 / 29	265 / 28	272 / 28	259 / 30	241 / 26	247 / 26	255 / 25	241 / 26	246 / 28	42 / 3	-			
14 BRZ66_39	257 / 31	281 / 31	250 / 32	263 / 31	270 / 31	257 / 33	239 / 29	247 / 29	253 / 28	239 / 29	244 / 31	140 / 22	142 / 19	-		
15 CML70_cms	1548 / 348	1566 / 348	1539 / 249	1549 / 348	1557 / 348	1546 / 350	1528 / 346	1533 / 346	1542 / 345	1524 / 346	1532 / 346	1554 / 355	1560 / 352	1556 / 355	-	
16 TAT68_dah	1286 / 243	1309 / 243	1279 / 244	1291 / 243	1297 / 243	1286 / 245	1268 / 241	1275 / 241	1282 / 240	1266 / 241	1275 / 243	1299 / 248	1301 / 245	1296 / 248	840 / 317	-

*The numbers of SNPs / tv SNPs were generated from VARV-TATV-CMLV cSNPs (SIFig. 9) using PAUP program(8).

B†. The number of SNPs / transversion (tv) SNPs for VARV cSNPs of selected isolates (representative of each sub-clades).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 BOT72_143	-																	
2 SFA65_102	23 / 3	-																
3 SOM77_ali	112 / 12	99 / 9	-															
4 TAN65_kem	75 / 8	60 / 5	105 / 10	-														
5 SUD47_jub	54 / 8	39 / 5	74 / 8	47 / 6	-													
6 CNG70_46	89 / 7	74 / 4	117 / 9	30 / 1	61 / 5	-												
7 ETH72_16	85 / 10	72 / 7	79 / 8	78 / 8	47 / 6	92 / 7	-											
8 BSH75_banu	103 / 12	88 / 9	135 / 14	96 / 10	75 / 10	108 / 9	108 / 12	-										
9 IND53_mad	75 / 10	60 / 7	107 / 12	68 / 8	47 / 8	80 / 7	80 / 10	70 / 10	-									
10 SUM72_222	113 / 12	98 / 9	143 / 14	106 / 10	85 / 10	118 / 9	118 / 12	108 / 12	68 / 6	-								
11 KUW67_1629	114 / 13	99 / 10	144 / 15	107 / 11	85 / 11	117 / 10	119 / 13	109 / 13	71 / 7	99 / 7	-							
12 JAP46_yam	118 / 13	103 / 10	150 / 15	111 / 11	90 / 11	121 / 10	123 / 13	113 / 13	75 / 7	103 / 7	102 / 8	-						
13 KOR47_lee	112 / 15	107 / 12	154 / 17	113 / 13	94 / 13	125 / 12	127 / 15	117 / 15	79 / 9	107 / 9	106 / 10	78 / 8	-					
14 CHN48_horn	132 / 21	117 / 18	164 / 23	125 / 19	104 / 19	137 / 18	137 / 21	127 / 21	89 / 15	117 / 15	116 / 16	90 / 14	94 / 16	-				
15 SLN68_258	460 / 66	447 / 63	490 / 68	455 / 64	434 / 64	467 / 63	465 / 66	457 / 66	421 / 60	449 / 60	448 / 61	418 / 59	423 / 61	434 / 67	-			
16 NIG69_001	466 / 63	453 / 60	496 / 65	461 / 61	440 / 61	473 / 60	471 / 63	463 / 63	427 / 57	453 / 57	452 / 58	426 / 56	433 / 58	442 / 64	78 / 9	-		
17 UNK52_but	445 / 63	432 / 60	479 / 65	440 / 61	419 / 61	452 / 60	450 / 63	442 / 63	406 / 57	432 / 57	433 / 58	403 / 56	408 / 58	419 / 64	231 / 37	241 / 34	-	
18 BRZ66_39	462 / 64	449 / 61	496 / 66	457 / 62	436 / 62	469 / 61	467 / 64	459 / 64	423 / 58	449 / 58	450 / 59	420 / 57	423 / 59	436 / 65	246 / 38	256 / 35	25 / 1	-

†The number of SNPs / tv SNPs were generated from VARV cSNPs (SI Fig. 8) using PAUP program.