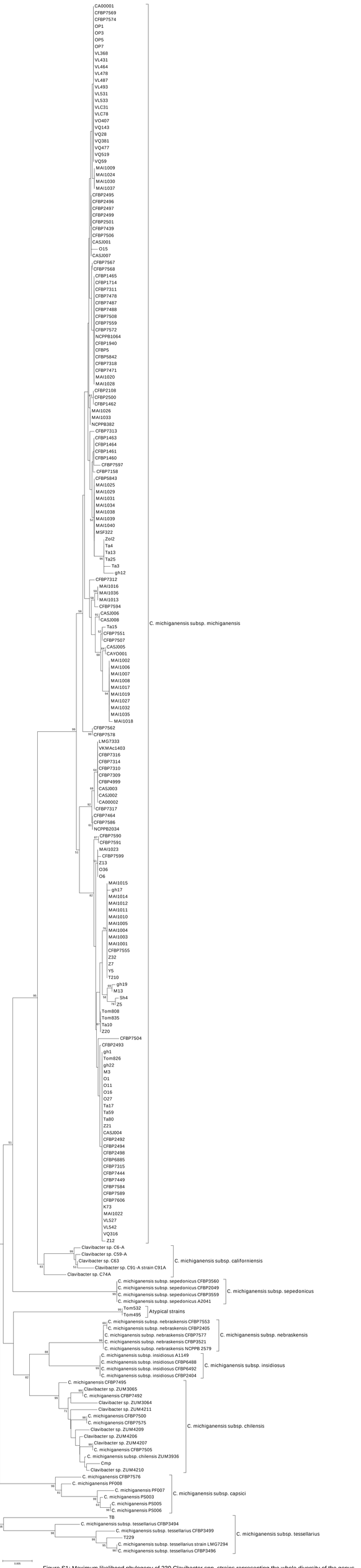


Figure S1: Maximum likelihood phylogeny of 230 Clavibacter spp. strains representing the whole diversity of the genus based on the concatenated sequences of four housekeeping genes (i.e. atpD, gyrB, ppk, and recA). Clavibacter michiganensis subsp. michiganensis strains were clustered as a monophyletic clade close to the non-pathogenic subspecies C. michiganensis subsp. californiensis.

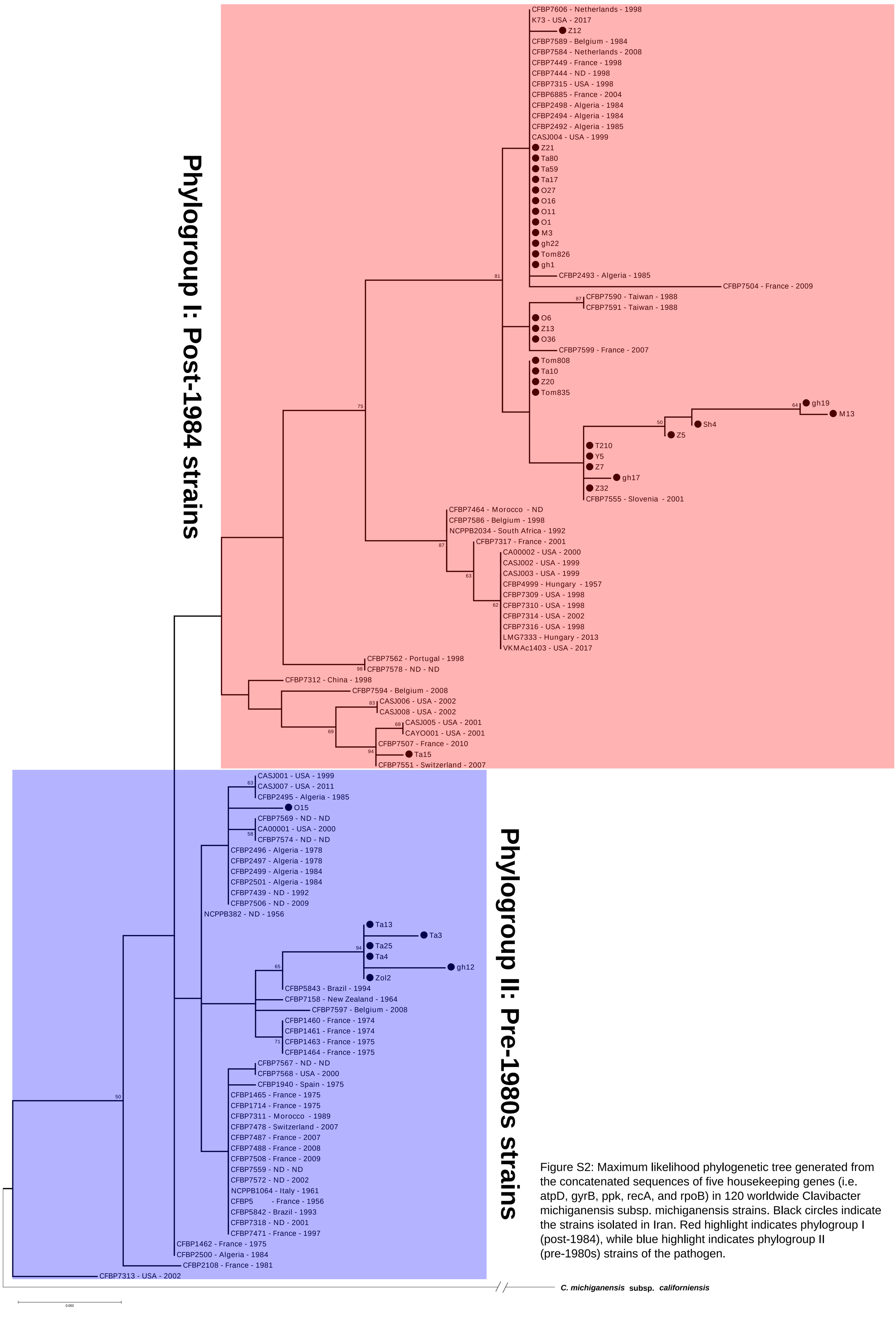
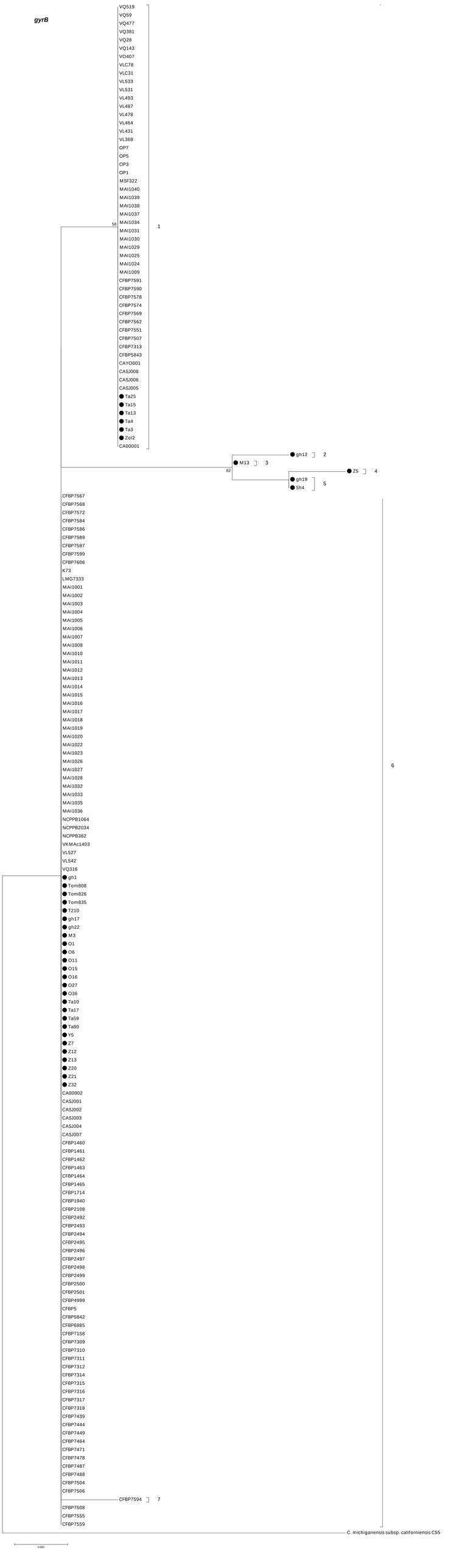


Figure S2: Maximum likelihood phylogenetic tree generated from the concatenated sequences of five housekeeping genes (i.e. atpD, gyrB, ppk, recA, and rpoB) in 120 worldwide Clavibacter michiganensis subsp. michiganensis strains. Black circles indicate the strains isolated in Iran. Red highlight indicates phylogroup I (post-1984), while blue highlight indicates phylogroup II (pre-1980s) strains of the pathogen.

Figure S3: Maximum likelihood phylogeny of Clavibacter michiganensis subsp. michiganensis strains using the sequences of five individual housekeeping genes (i.e. atpD, gyrB, ppk, recA, and rpoB). Allele's numbers (in the front of the strains) were assigned to the strains based on haplotype analyses in POPArt software as shown in Figure 4, and Table S1. Black circles indicate the strains isolated in Iran.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VL478
VL464
VL431
VL368
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OP5
OP3
OP1
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MAI1039
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MAI1037
MAI1034
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O15
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Z21
Z32
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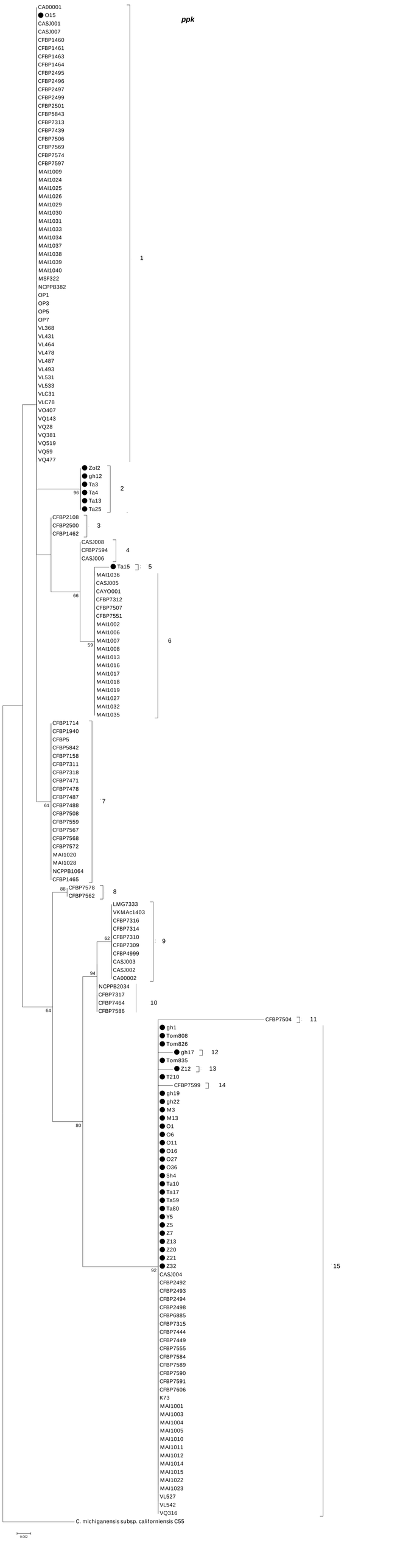
C. michiganensis subsp. californiensis C55
0.002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MAI1012
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C. michiganensis subsp. californiensis C55
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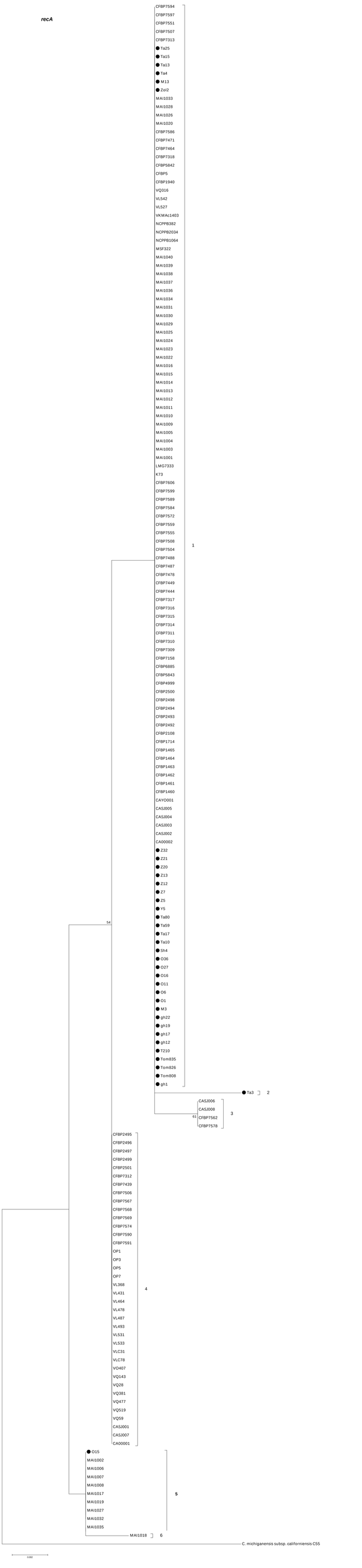
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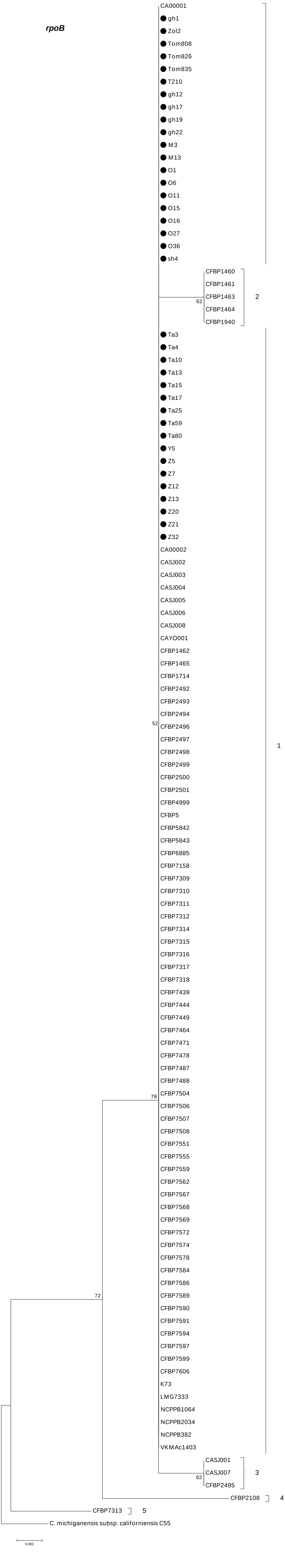
C. michiganensis subsp. californiensis C55
0.002

rpoB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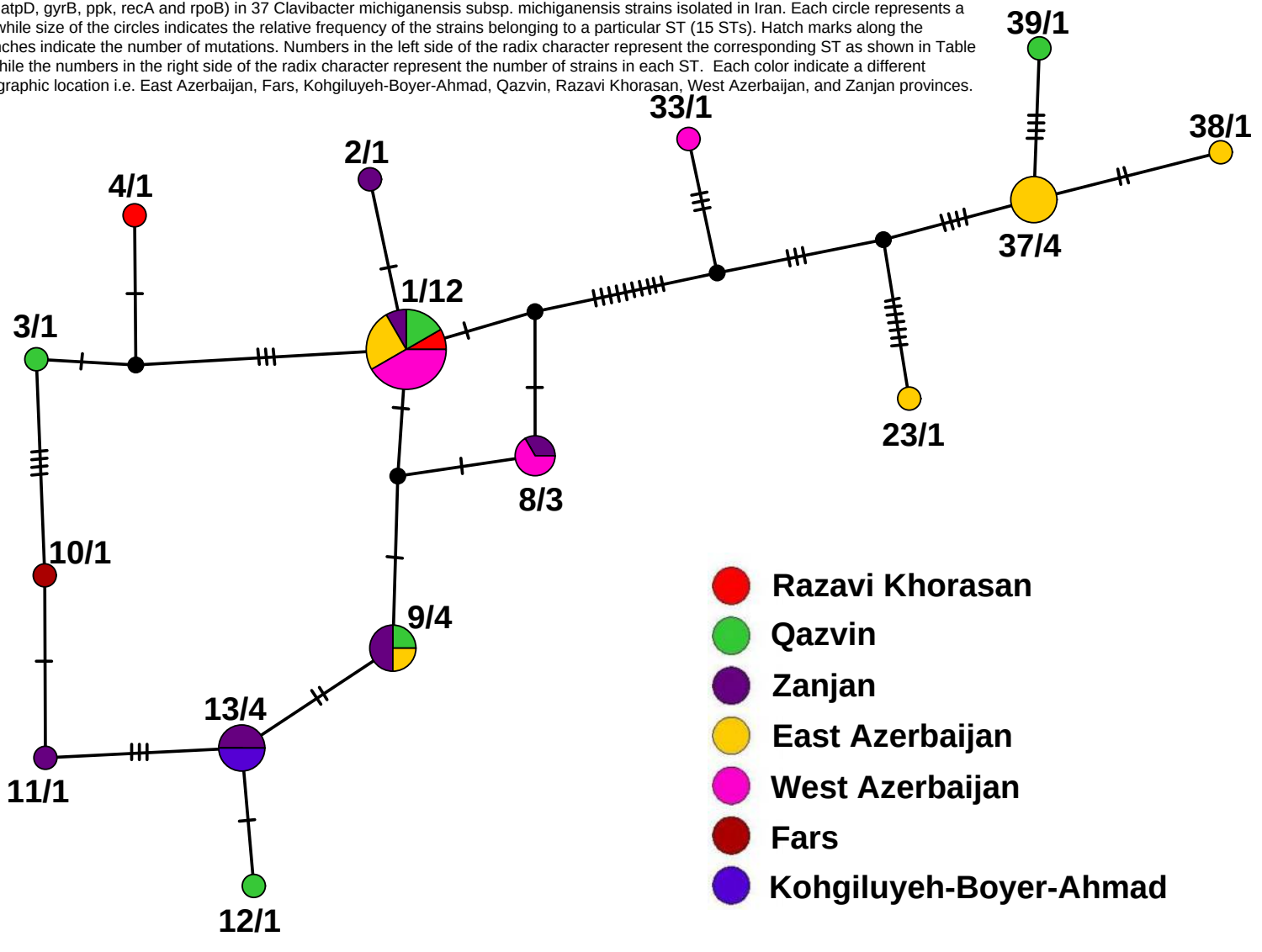
C. michiganensis subsp. californiensis C55
0.002

Figure S4: TCS sequence type (ST) network generated using POPArt program from the concatenated sequences of five housekeeping genes (i.e. atpD, gyrB, ppk, recA and rpoB) in 37 Clavibacter michiganensis subsp. michiganensis strains isolated in Iran. Each circle represents a ST while size of the circles indicates the relative frequency of the strains belonging to a particular ST (15 STs). Hatch marks along the branches indicate the number of mutations. Numbers in the left side of the radix character represent the corresponding ST as shown in Table 1, while the numbers in the right side of the radix character represent the number of strains in each ST. Each color indicate a different geographic location i.e. East Azerbaijan, Fars, Kohgiluyeh-Boyer-Ahmad, Qazvin, Razavi Khorasan, West Azerbaijan, and Zanjan provinces.



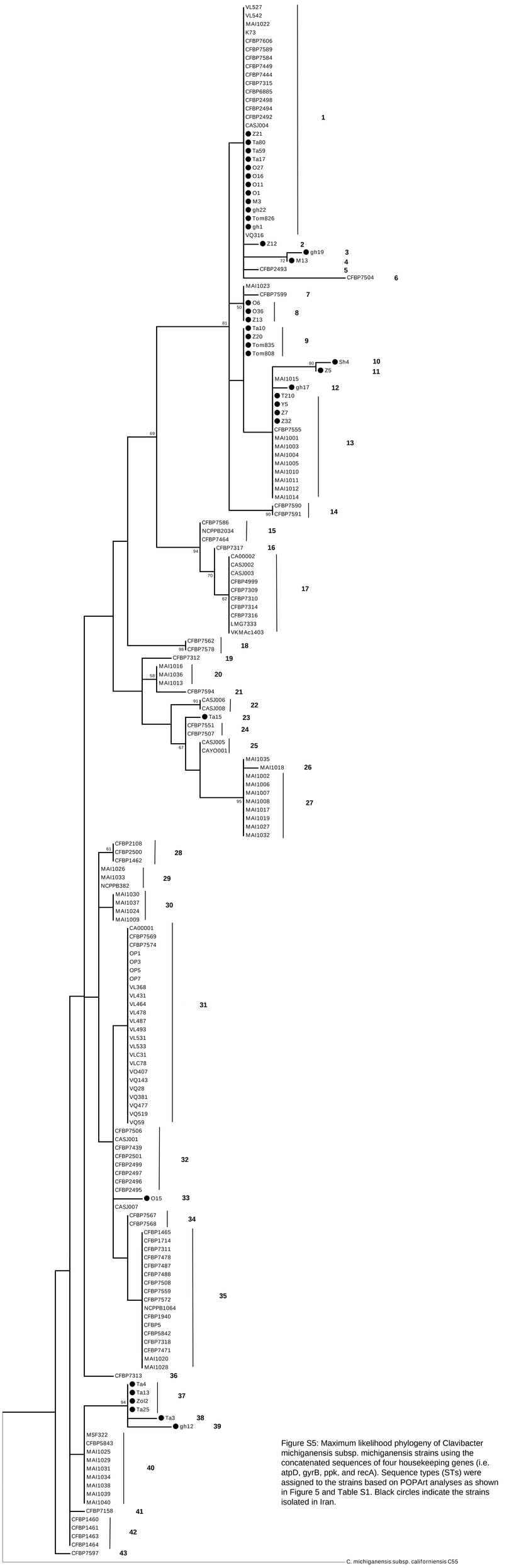


Figure S5: Maximum likelihood phylogeny of Clavibacter michiganensis subsp. michiganensis strains using the concatenated sequences of four housekeeping genes (i.e. atpD, gyrB, ppk, and recA). Sequence types (STs) were assigned to the strains based on POPArt analyses as shown in Figure 5 and Table S1. Black circles indicate the strains isolated in Iran.

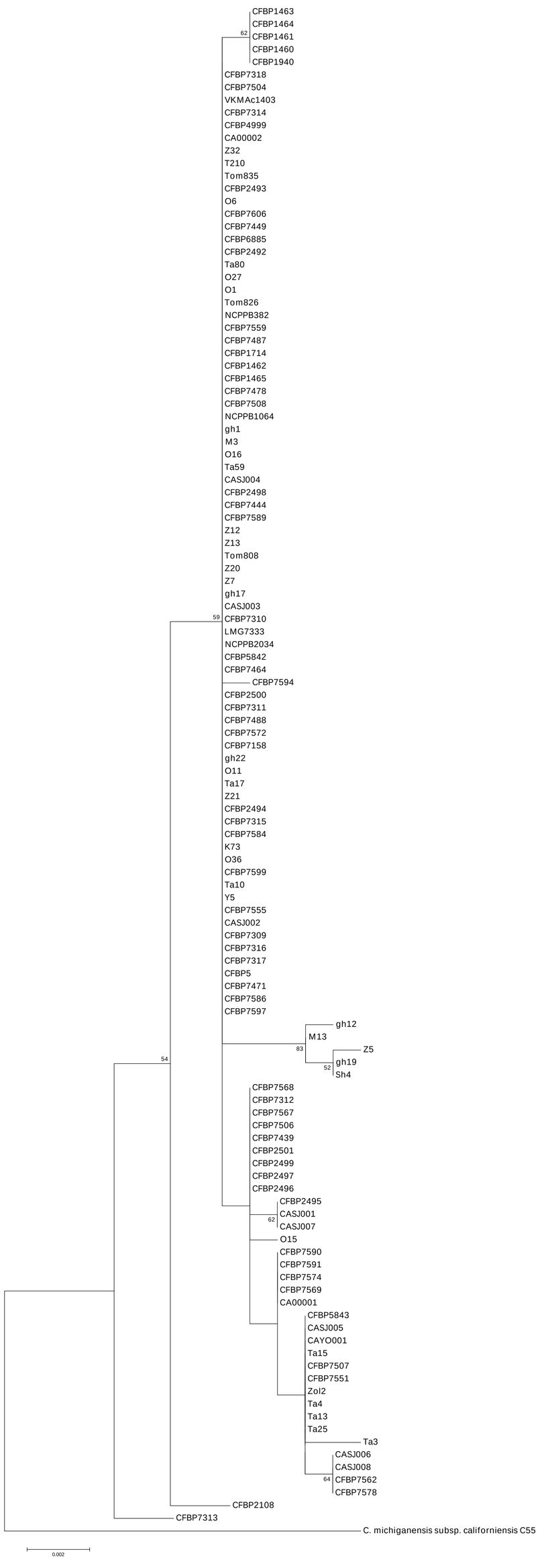


Figure S6: Maximum likelihood phylogeny of Clavibacter michiganensis subsp. michiganensis strains using the concatenated sequences of three recombination-free genes i.e. gyrB, recA, and rpoB. Results of three-gene phylogeny were in congruence with those obtained from the five-gene phylogeny, indicating that the worldwide Cmm strains clustered in a monophyletic clade apart from the remaining subspecies/species of Clavibacter spp.

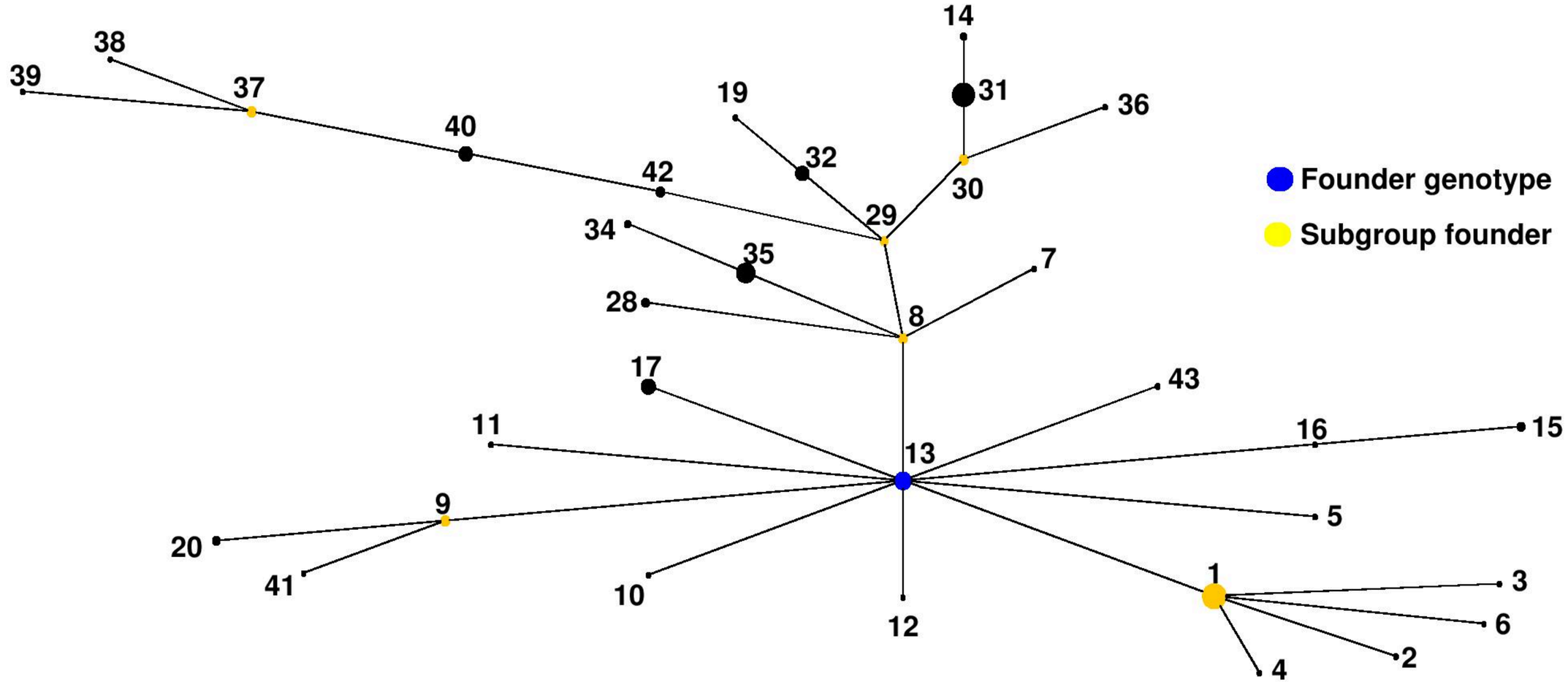


Figure S7: Analysis of worldwide Clavibacter michiganensis subsp. michiganensis strains using eBURST software with the stringent (default) group definition in which, strains are included within the same clonal complex only if they share identical alleles at three or four of the four MLST loci with at least one other alleles in the population. The predicted primary founder sequence type (ST13) is shown as a blue circle while the descendent subgroup founders are shown as yellow circles. Numbers in the eBURST diagram correspond to STs as shown in Table S1. Diameter of each circle corresponds to the abundance of the strains of a given ST in the input data.

Table S1: Worldwide strains of *Clavibacter michiganensis* subsp*. michiganensis* used in this study, their host, geographic area and date of isolation, as well as their allelic profile and sequence types based on the sequences of five housekeeping genes (*i.e. atpD, gyrB, ppk, recA,* and *rpoB*).

Sequence type (ST)	**Strain**	**Country**	**Year**	**Host**	**Allelic profile**				
					atpD	***gyrB***	***ppk***	***recA***	***rpoB***
1	gh1	Iran	2017	Tomato	3	6	15	1	1
39	gh12	Iran	2017	Tomato	7	2	2	1	1
12	gh17	Iran	2017	Tomato	9	6	12	1	1
3	gh19	Iran	2017	Tomato	3	5	15	1	1
1	gh22	Iran	2017	Tomato	3	6	15	1	1
4	M13	Iran	2017	Tomato	3	3	15	1	1
1	M3	Iran	2017	Tomato	3	6	15	1	1
1	O1	Iran	2017	Tomato	3	6	15	1	1
1	O11	Iran	2017	Tomato	3	6	15	1	1
33	O15	Iran	2017	Tomato	2	6	1	5	1
1	O16	Iran	2017	Tomato	3	6	15	1	1
1	O27	Iran	2017	Tomato	3	6	15	1	1
8	O36	Iran	2017	Tomato	1	6	15	1	1
8	O6	Iran	2017	Tomato	1	6	15	1	1
10	Sh4	Iran	2017	Tomato	9	5	15	1	1
13	T210	Iran	2016	Tomato	9	6	15	1	1
9	Ta10	Iran	2017	Tomato	7	6	15	1	1
37	Ta13	Iran	2017	Tomato	7	1	2	1	1
23	Ta15	Iran	2017	Tomato	5	1	5	1	1
1	Ta17	Iran	2017	Tomato	3	6	15	1	1
37	Ta25	Iran	2017	Tomato	7	1	2	1	1
38	Ta3	Iran	2017	Tomato	7	1	2	2	1

37	Ta4	Iran	2017	Tomato	7	1	2	1	1
1	Ta59	Iran	2017	Tomato	3	6	15	1	1
1	Ta80	Iran	2017	Tomato	3	6	15	1	1
9	Tom808	Iran	2015	Tomato	7	6	15	1	1
1	Tom826	Iran	2015	Tomato	3	6	15	1	1
9	Tom835	Iran	2015	Tomato	7	6	15	1	1
13	Y5	Iran	2017	Tomato	9	6	15	1	1
2	Z12	Iran	2017	Tomato	3	6	13	1	1
8	Z13	Iran	2017	Tomato	1	6	15	1	1
9	Z20	Iran	2017	Tomato	7	6	15	1	1
1	Z21	Iran	2017	Tomato	3	6	15	1	1
13	Z32	Iran	2017	Tomato	9	6	15	1	1
11	Z5	Iran	2017	Tomato	9	4	15	1	1
13	Z7	Iran	2017	Tomato	9	6	15	1	1
37	Zol2	Iran	2015	Tomato	7	1	2	1	1
31	CA00001	USA	2000	Tomato	1	1	1	4	1
17	CA00002	USA	2000	Tomato	9	6	9	1	1
32	CASJ001	USA	1999	Tomato	1	6	1	4	3
17	CASJ002	USA	1999	Tomato	9	6	9	1	1
17	CASJ003	USA	1999	Tomato	9	6	9	1	1
1	CASJ004	USA	1999	Tomato	3	6	15	1	1
25	CASJ005	USA	2001	Tomato	6	1	6	1	1
22	CASJ006	USA	2002	Tomato	4	1	4	3	1
32	CASJ007	USA	2011	Tomato	1	6	1	4	3
22	CASJ008	USA	2002	Tomato	4	1	4	3	1
25	CAYO001	USA	2001	Tomato	6	1	6	1	1
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28	CFBP1462	France	1975	Tomato	1	6	3	1	1
42	CFBP1463	France	1975	Tomato	7	6	1	1	2
42	CFBP1464	France	1975	Tomato	7	6	1	1	2

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28	CFBP2108	France	1981	Tomato	1	6	3	1	4
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5	CFBP2493	Algeria	1985	Tomato	2	6	15	1	1
1	CFBP2494	Algeria	1984	Tomato	3	6	15	1	1
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32	CFBP2499	Algeria	1984	Black nightshade	1	6	1	4	1
28	CFBP2500	Algeria	1984	Black nightshade	1	6	3	1	1
32	CFBP2501	Algeria	1984	Peppers	1	6	1	4	1
17	CFBP4999	Hungary	1957	Tomato	9	6	9	1	1
35	CFBP5	France	1956	Tomato	1	6	7	1	1
35	CFBP5842	Brazil	1993	Peppers	1	6	7	1	1
40	CFBP5843	Brazil	1994	Tomato	7	1	1	1	1
1	CFBP6885	France	2004	Tomato	3	6	15	1	1
41	CFBP7158	New Zealand	1964	Tomato	7	6	7	1	1
17	CFBP7309	USA	1998	Tomato	9	6	9	1	1
17	CFBP7310	USA	1998	Tomato	9	6	9	1	1
35	CFBP7311	Morocco	1989	Tomato	1	6	7	1	1
19	CFBP7312	China	1998	Tomato	1	6	6	4	1
36	CFBP7313	USA	2002	Tomato	4	1	1	1	5
17	CFBP7314	USA	2002	Tomato	9	6	9	1	1
1	CFBP7315	USA	1998	Tomato	3	6	15	1	1
17	CFBP7316	USA	1998	Tomato	9	6	9	1	1
16	CFBP7317	France	2001	ND	9	6	10	1	1

35	CFBP7318	ND	2001	ND	1	6	7	1	1
32	CFBP7439	ND	1992	ND	1	6	1	4	1
1	CFBP7444	ND	1998	Tomato	3	6	15	1	1
1	CFBP7449	France	1998	Tomato	3	6	15	1	1
15	CFBP7464	Morocco	ND	Tomato	8	6	10	1	1
35	CFBP7471	France	1997	Tomato	1	6	7	1	1
35	CFBP7478	Switzerland	2007	Tomato	1	6	7	1	1
35	CFBP7487	France	2007	Tomato	1	6	7	1	1
35	CFBP7488	France	2008	Tomato	1	6	7	1	1
6	CFBP7504	France	2009	Tomato	3	6	11	1	1
32	CFBP7506	ND	2009	ND	1	6	1	4	1
24	CFBP7507	France	2010	Tomato	5	1	6	1	1
35	CFBP7508	France	2009	Tomato	1	6	7	1	1
24	CFBP7551	Switzerland	2007	Tomato	5	1	6	1	1
13	CFBP7555	Slovenia	2001	Tomato	9	6	15	1	1
35	CFBP7559	ND	ND	ND	1	6	7	1	1
18	CFBP7562	Portugal	1998	Tomato	1	1	8	3	1
34	CFBP7567	ND	ND	Tomato	1	6	7	4	1
34	CFBP7568	USA	2000	Tomato	1	6	7	4	1
31	CFBP7569	ND	ND	Tomato	1	1	1	4	1
35	CFBP7572	ND	2002	Tomato	1	6	7	1	1
31	CFBP7574	ND	ND	Tomato	1	1	1	4	1
18	CFBP7578	ND	ND	Tomato	1	1	8	3	1
1	CFBP7584	The Netherlands	2008	Tomato	3	6	15	1	1
15	CFBP7586	Belgium	1998	Tomato	8	6	10	1	1
1	CFBP7589	Belgium	1984	Tomato	3	6	15	1	1
14	CFBP7590	Taiwan	1988	Tomato	1	1	15	4	1
14	CFBP7591	Taiwan	1988	Tomato	1	1	15	4	1
21	CFBP7594	Belgium	2008	Tomato	7	7	4	1	1
43	CFBP7597	Belgium	2008	Tomato	9	6	1	1	1
7	CFBP7599	France	2007	Tomato	1	6	14	1	1

1	CFBP7606	The Netherlands	1998	Tomato	3	6	15	1	1
1	K73	USA	2017	Tomato	3	6	15	1	1
17	LMG7333	Hungary	1956	Tomato	9	6	9	1	1
13	MAI1001	Uruguay	2012	Tomato	9	6	15	1	ND
27	MAI1002	Uruguay	2012	Tomato	6	6	6	5	ND
13	MAI1003	Uruguay	2012	Tomato	9	6	15	1	ND
13	MAI1004	Uruguay	2012	Tomato	9	6	15	1	ND
13	MAI1005	Uruguay	2012	Tomato	9	6	15	1	ND
27	MAI1006	Uruguay	2012	Tomato	6	6	6	5	ND
27	MAI1007	Uruguay	2012	Tomato	6	6	6	5	ND
27	MAI1008	Uruguay	2012	Tomato	6	6	6	5	ND
30	MAI1009	Uruguay	2012	Tomato	1	1	1	1	ND
13	MAI1010	Uruguay	2012	Tomato	9	6	15	1	ND
13	MAI1011	Uruguay	2012	Tomato	9	6	15	1	ND
13	MAI1012	Uruguay	2012	Tomato	9	6	15	1	ND
20	MAI1013	Uruguay	2012	Tomato	7	6	6	1	ND
13	MAI1014	Uruguay	2012	Tomato	9	6	15	1	ND
13	MAI1015	Uruguay	2012	Tomato	9	6	15	1	ND
20	MAI1016	Uruguay	2012	Tomato	7	6	6	1	ND
27	MAI1017	Uruguay	2012	Tomato	6	6	6	5	ND
26	MAI1018	Uruguay	2012	Tomato	6	6	6	6	ND
27	MAI1019	Uruguay	2012	Tomato	6	6	6	5	ND
35	MAI1020	Uruguay	2012	Tomato	1	6	7	1	ND
1	MAI1022	Uruguay	1997	Tomato	3	6	15	1	ND
8	MAI1023	Uruguay	1997	Tomato	1	6	15	1	ND
30	MAI1024	Uruguay	1997	Tomato	1	1	1	1	ND
40	MAI1025	Uruguay	2005	Tomato	7	1	1	1	ND
29	MAI1026	Uruguay	1999	Tomato	1	6	1	1	ND
27	MAI1027	Uruguay	2008	Tomato	6	6	6	5	ND
35	MAI1028	Uruguay	2011	Tomato	1	6	7	1	ND
40	MAI1029	Uruguay	2011	Tomato	7	1	1	1	ND

30	MAI1030	Uruguay	2010	Tomato	1	1	1	1	ND
40	MAI1031	Uruguay	2010	Tomato	7	1	1	1	ND
27	MAI1032	Uruguay	2010	Tomato	6	6	6	5	ND
29	MAI1033	Uruguay	2010	Tomato	1	6	1	1	ND
40	MAI1034	Uruguay	2010	Tomato	7	1	1	1	ND
27	MAI1035	Uruguay	2010	Tomato	6	6	6	5	ND
20	MAI1036	Uruguay	2010	Tomato	7	6	6	1	ND
30	MAI1037	Uruguay	2010	Tomato	1	1	1	1	ND
40	MAI1038	Uruguay	2010	Tomato	7	1	1	1	ND
40	MAI1039	Uruguay	2010	Tomato	7	1	1	1	ND
40	MAI1040	Uruguay	2010	Tomato	7	1	1	1	ND
40	MSF322	Uruguay	2005	Tomato	7	1	1	1	ND
35	NCPPB1064	Italy	1961	Tomato	1	6	7	1	1
15	NCPPB2034	South Africa	1992	Tomato	8	6	10	1	1
29	NCPPB382	ND	1956	Tomato	1	6	1	1	1
31	OP1	Chile	2015	Tomato	1	1	1	4	ND
31	OP3	Chile	2015	Tomato	1	1	1	4	ND
31	OP5	Chile	2015	Tomato	1	1	1	4	ND
31	OP7	Chile	2015	Tomato	1	1	1	4	ND
17	VKMAc1403	USA	2017	Tomato	9	6	9	1	1
31	VL368	Chile	2007	Tomato	1	1	1	4	ND
31	VL431	Chile	2009	Tomato	1	1	1	4	ND
31	VL464	Chile	2010	Tomato	1	1	1	4	ND
31	VL478	Chile	2010	Tomato	1	1	1	4	ND
31	VL487	Chile	2011	Tomato	1	1	1	4	ND
31	VL493	Chile	2011	Tomato	1	1	1	4	ND
1	VL527	Chile	2012	Tomato	3	6	15	1	ND
31	VL531	Chile	2012	Tomato	1	1	1	4	ND
31	VL533	Chile	2012	Tomato	1	1	1	4	ND
1	VL542	Chile	2013	Tomato	3	6	15	1	ND
31	VLC31	Chile	1997	Tomato	1	1	1	4	ND

31	VLC78	Chile	1999	Tomato	1	1	1	4	ND
31	VO407	Chile	2009	Tomato	1	1	1	4	ND
31	VQ143	Chile	2000	Tomato	1	1	1	4	ND
31	VQ28	Chile	1996	Tomato	1	1	1	4	ND
1	VQ316	Chile	2004	Tomato	3	6	15	1	ND
31	VQ381	Chile	2008	Tomato	1	1	1	4	ND
31	VQ477	Chile	2010	Tomato	1	1	1	4	ND
31	VQ519	Chile	2011	Tomato	1	1	1	4	ND
31	VQ59	Chile	1998	Tomato	1	1	1	4	ND

ND: Not determined