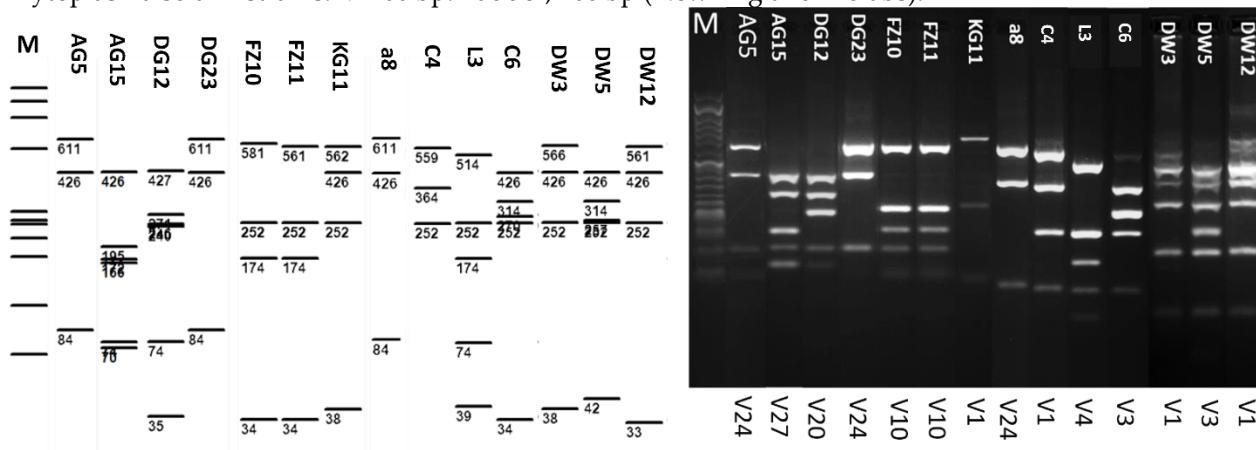


Supplementary Figure S1. Actual (right) and virtual (left) restriction fragment length polymorphism patterns of the representative vmp1 gene sequences amplified with the primer pair TYPH10F/R from the representative '*Candidatus Phytoplasma solani*' strains. M 100 bp: Ladder, 100 bp (New England Biolabs).



Supplementary Table S1. List of primers used for amplification of 16S rDNA, *tuf*, *vmp1* and *stamp* genes

Primer	Sequence	Reference
P1	AAGAGTTGATCCTGGCTCAGGATT	Maixner et al., 1995
P7	GGATGGATCACCTCCCTT	Maixner et al., 1995
<i>fstol</i>	GCCATCATTAAGTTGGGGA	Maixner et al., 1995
<i>rstol</i>	AGATGTGACCTATTTGGTGG	Maixner et al., 1995
STOLTUFR0	GCACGTTGATCACCGCAAAAC	Balakishiyeva et al., 2018
F0		
STOLTUFR0	CTGTTTTCCACCTTCACGG	Balakishiyeva et al., 2018
<i>fTufAY</i>	GCTAAAAGTAGAGCTTATGA	Schneider et al., 1997
<i>rTufAY</i>	CGTTGTCACCTGGCATTACC	Schneider et al., 1997
<i>StolH10F1</i>	AGGTTGTAAAATCTTTATGT	Cimerman et al., 2009
<i>StolH10R1</i>	GCGGATGGCTTTCATTATTTGAC	Cimerman et al., 2009
<i>StolH10F2</i>	GGATTGATAGATGCTGCC	Cimerman et al., 2009
<i>StolH10R2</i>	CCATCAAAACTTTGGTTAGGC	Cimerman et al., 2009
<i>TYPH1OF</i>	AACGTTCATCAACAATCAGTC	Fialova et al., 2009
<i>TYPH1OR</i>	CACTTCTTCAGGCAACTTC	Fialova et al., 2009
<i>StampF0</i>	GTAGGTTTGGATGTTTAAG	Fabre et al., 2011
<i>StampR0</i>	AAATAAAAAGAACAACTATAGACGA	Fabre et al., 2011
<i>StampF1</i>	TTCTTTAACACACCCAAGAC	Fabre et al., 2011
<i>StampR1</i>	AAGCCAGAATTAAATCTAGC	Fabre et al., 2011

Supplementary Table S2. Detailed information about grapevine and weeds infected by '*Candidatus Phytoplasma solani*' in Iranian vineyards.

Isolate	Host	variety	province	Molecular characterization		
				Tuf type	vmp1 profile	stamp
AG1	<i>Vitis vinifera</i>	Qezel uzum	Azharbijan	b1	V24	
			Gharbi			
AG2	<i>Vitis vinifera</i>	Qezel uzum	Azharbijan	b1	V24	
			Gharbi			
AG4	<i>Vitis vinifera</i>	Qezel uzum	Azharbijan	b1	V24	
			Gharbi			
AG5	<i>Vitis vinifera</i>	Qezel uzum	Azharbijan	b1	V24	
			Gharbi			
AG6	<i>Vitis vinifera</i>	Qezel uzum	Azharbijan	b1	V24	
			Gharbi			
AG14	<i>Vitis vinifera</i>	Qezel uzum	Azharbijan	b1	V24	
			Gharbi			
AG15	<i>Vitis vinifera</i>	Qezel uzum	Azharbijan	b1	V27	Cluster III
			Gharbi			
a7	<i>Vitis vinifera</i>	Qermez	Azharbijan	b1	V1	
		Bidane	Gharbi			
		Keshmeshi				
a8	<i>Vitis vinifera</i>	Qermez	Azharbijan	b5	V24	Cluster III
		Bidane	Gharbi			
		Keshmeshi				
a11	<i>Vitis vinifera</i>	Qermez	Azharbijan	b1	V24	
		Bidane	Gharbi			
		Keshmeshi				
a13	<i>Vitis vinifera</i>	Qermez	Azharbijan	b1	V24	
		Bidane	Gharbi			
		Keshmeshi				
a20	<i>Vitis vinifera</i>	Qermez	Azharbijan	b1	V4	
		Bidane	Gharbi			
		Keshmeshi				
a22	<i>Vitis vinifera</i>	Qermez	Azharbijan	b1	V4	
		Bidane	Gharbi			
		Keshmeshi				
b1	<i>Vitis vinifera</i>	Khalili	Azharbijan	b1	V4	
			Sharghi			

BG2	<i>Vitis vinifera</i>	Khalili	Azerbaijan Sharghi	b1	V27	
b14	<i>Vitis vinifera</i>	Khalili	Azerbaijan Sharghi	b1	V4	
BG4	<i>Vitis vinifera</i>	Fakhri	Azerbaijan Sharghi	b1	V4	
BG9	<i>Vitis vinifera</i>	Fakhri	Azerbaijan Sharghi	b1	V1	
FG1	<i>Vitis vinifera</i>	Rish-baba	Fars	b1	V10	
FZ11	<i>Vitis vinifera</i>	Askari	Fars	b1	V10	
FZ10	<i>Vitis vinifera</i>	Askari	Fars	b1	V10	
KG10	<i>Vitis vinifera</i>	Peykami	Khorasan Razavi	b1	V1	
KG11	<i>Vitis vinifera</i>	Peykami	Khorasan Razavi	b1	V1	Cluster III
phG1	<i>Vitis vinifera</i>	Peykami	Khorasan Razavi	b1	V24	
phG2	<i>Vitis vinifera</i>	Peykami	Khorasan Razavi	b1	V24	
phG10	<i>Vitis vinifera</i>	Peykami	Khorasan Razavi	b1	V24	
L3	<i>Vitis vinifera</i>	Askari	Lorestan	b1	V4	Cluster III
LG17	<i>Vitis vinifera</i>	Sefide	Lorestan Bidane keshmeshi	b1	V27	
LG18	<i>Vitis vinifera</i>	Sefide	Lorestan Bidane keshmeshi	b1	V27	
LG19	<i>Vitis vinifera</i>	Sefide	Lorestan Bidane keshmeshi	b1	V27	
dG1	<i>Vitis vinifera</i>	Qermez	Zanjan Bidane Keshmeshi	b1	V24	

		Sefide				
		Bidane				
		keshmehsi				
dG5	<i>Vitis vinifera</i>	Sefide	Zanjan	b1	V3	
		Bidane				
		keshmehsi				
dG6	<i>Vitis vinifera</i>	Qermez	Zanjan	b1	V24	
		Bidane				
		Keshmehsi				
dG8	<i>Vitis vinifera</i>	Sefide	Zanjan	b1	V20	
		Bidane				
		keshmehsi				
dG9	<i>Vitis vinifera</i>	Qermez	Zanjan	b1	V24	
		Bidane				
		Keshmehsi				
C4	<i>Vitis vinifera</i>	Sefide	Zanjan	b1	V1	Cluster III
		Bidane				
		keshmehsi				
C6	<i>Vitis vinifera</i>	Qermez	Zanjan	b1	V3	Cluster IV
		Bidane				
		Keshmehsi				
dG10	<i>Vitis vinifera</i>	Qermez	Zanjan	b1	V24	
		Bidane				
		Keshmehsi				
dG11	<i>Vitis vinifera</i>	Sefide	Zanjan	b1	V24	
		Bidane				
		keshmehsi				
dG12	<i>Vitis vinifera</i>	Qermez	Zanjan	b1	V20	Cluster III
		Bidane				
		Keshmehsi				
DG19	<i>Vitis vinifera</i>	Qermez	Qazvin	b1	V24	
		Bidane				
		Keshmehsi				

DG20	<i>Vitis vinifera</i>	Qermez Bidane Keshmeshi	Qazvin	b1	V24	
DG21	<i>Vitis vinifera</i>	Qermez Bidane Keshmeshi	Qazvin	b1	V24	
DG22	<i>Vitis vinifera</i>	Qermez Bidane Keshmeshi	Qazvin	b1	V24	
DG23	<i>Vitis vinifera</i>	Qermez Bidane Keshmeshi	Qazvin	b6	V24	Cluster III
DW1	<i>C. arvensis</i>		Zanjan	b1	V24	
DW3	<i>C. arvensis</i>		Zanjan	b1	V1	Cluster III
DW5	<i>C. arvensis</i>		Zanjan	b1	V3	Cluster IV
DW7	<i>C. arvensis</i>		Qazvin	b1	V24	
DW11	<i>E. bonariensis</i>		Qazvin	b1	V3	
DW12	<i>E. bonariensis</i>		Qazvin	b1	V1	Cluster IV
AW2	<i>C. arvensis</i>		Azharbijan Gharbi	b1	V1	
LW19	<i>C. arvensis</i>		Lorestan	b1	V15	
CoK1	<i>C. arvensis</i>		Khorasan Razavi	b1	V15	