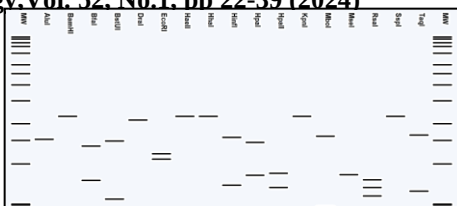




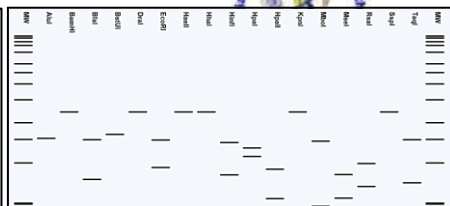
Figure S1: Detection of phytoplasma infecting different **plant species** by gel electrophoresis analysis of nested PCR products. M: 100bp marker ladder, L1: positive control, L2: Negative control, L3 and L4: symptomatic tomato samples, L5 and L6 symptomatic cowpea samples, L7 to L9: tested cabbage samples, L10 to L12: symptomatic sesame samples, L13: symptomatic cauliflower sample, L14 and L15: tested samples of chamomile and Chrysanthemum, L16 and L17 samples of faba bean, L18 and L19: samples of alfalfa. S= supplementary



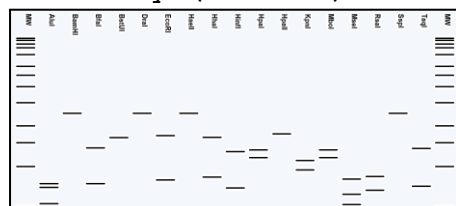
Cauliflower phyllody phytoplasma Fay-1 (MW514054.1)



Faba bean phyllody phytoplasma Fay-2 (MW510021.1)



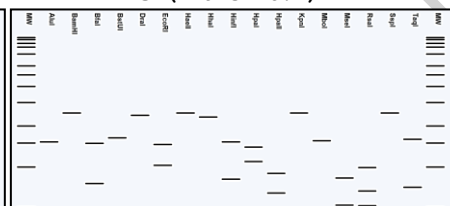
Sesame phyllody phytoplasma Fay-3 (MW945416.1)



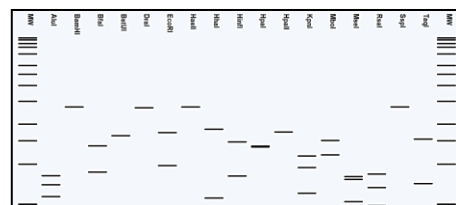
Matricaria chamomilla Phytoplasma Fay-6 (OP687045.1)



Tomato big bud phytoplasma Fay-7 (ON921682.1)



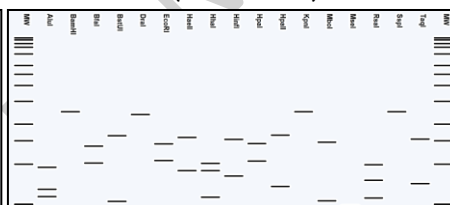
Cawpea phyllody phytoplasma Fay-8 (OP659008.1)



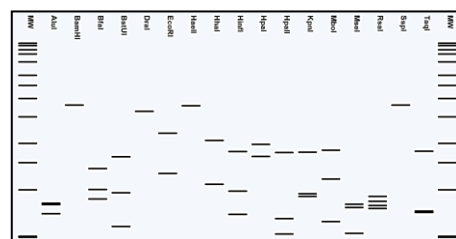
Chrysanthemum morifolium Phytoplasma Fay-4 (OP687044.1)



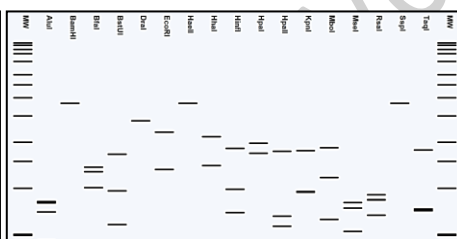
Cabbage witches'-broom phytoplasma Fay-9 (ON922997.1)



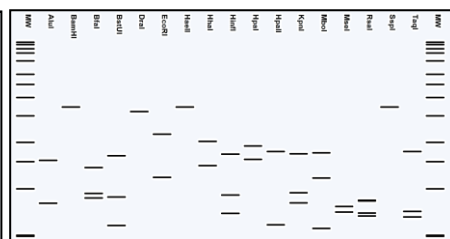
Alfalfa witches-broom phytoplasma Fay-5 (ON924755.1)



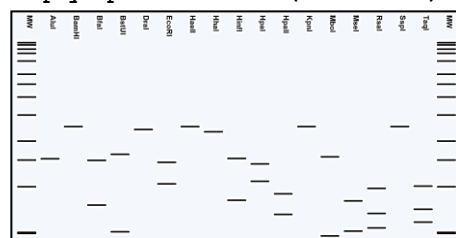
Russian potato purple top phytoplasma 16SrI-B (EU333396.1)



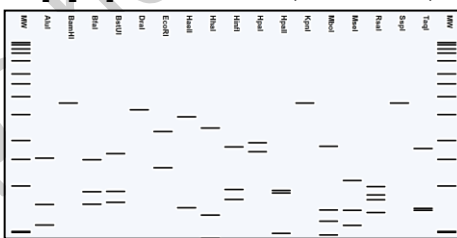
Aconitum proliferation phytoplasma 16SrI-A (AF510323.1)



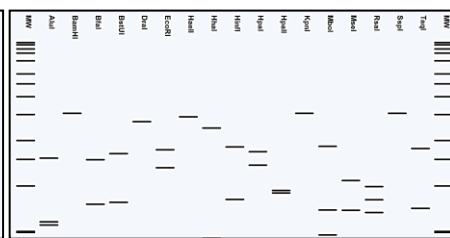
Rhododendron x hybridum' phytoplasma 16SrI-C (KC009838.1)



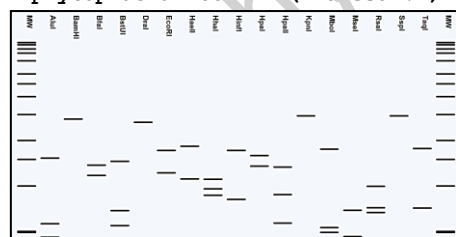
Sesamum indicum phyllody phytoplasma 16SrII-A (KF923391.1)



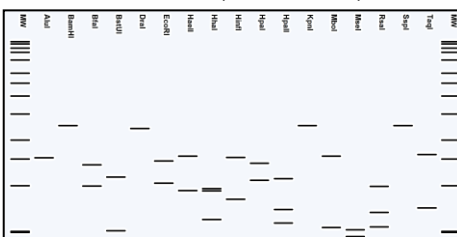
Cactus witches-broom phytoplasma 16SrII-C (JN582265.1)



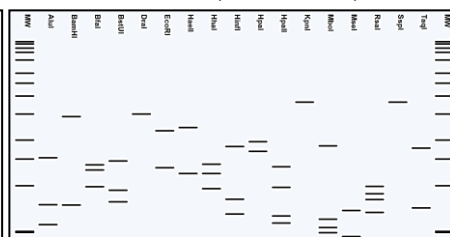
Crotalaria phyllody phytoplasma 16SrII-C (EF193355.1)



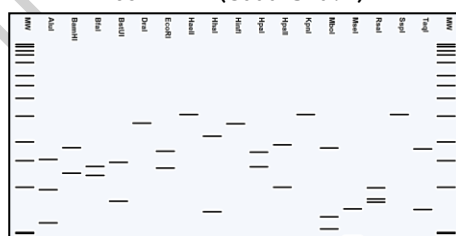
Potato purple top phytoplasma 16SrIII-F (GU004370.1)



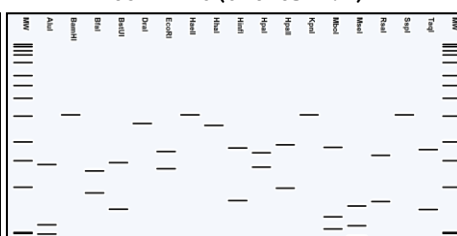
Broccoli stunt phytoplasma 16SrIII-J (JX626327.1)



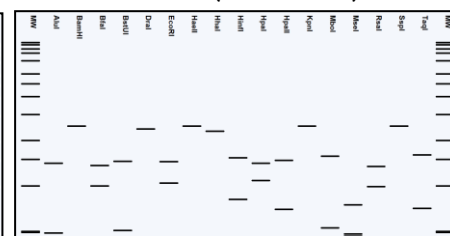
Chayote witches-broom phytoplasma 16SrIII-J (AF147707.1)



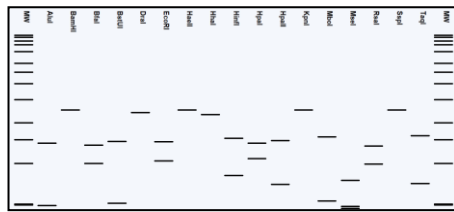
Phytoplasma sp. Lfy5 (PE65)-Oaxaca 16Sr-IV (AF500334.1)



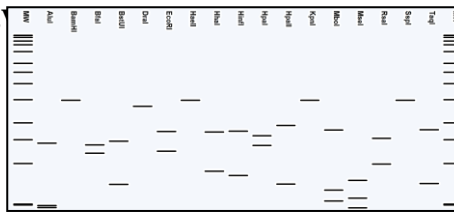
Alder yellows phytoplasma 16Sr-V (AY197642.1)



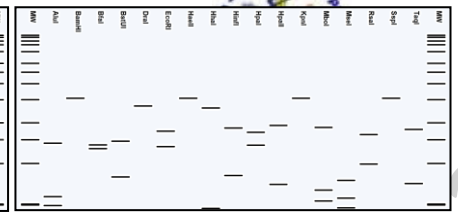
Alfalfa witches-broom phytoplasma 16Sr-V (JQ343221.1)



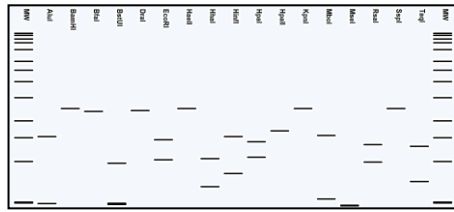
Persimmon fasciation phytoplasma
16Sr-V(KF995724.1)



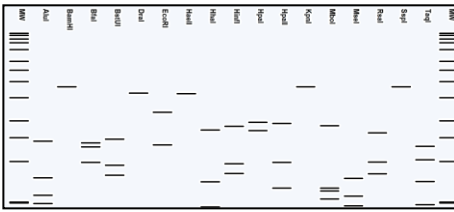
Potato purple top phytoplasma
16SrVI-A(GU004367.1)



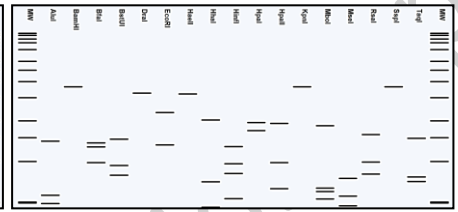
Brinjal little leaf phytoplasma
16Sr-VI(EF186820.1)



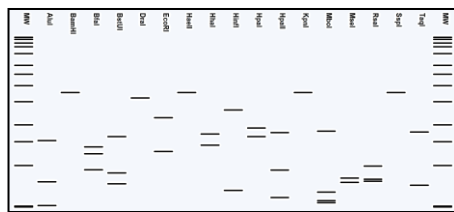
Candidatus Phytoplasma fraxini
16SrVII(DQ232752.1)



Erigeron witches-broom
phytoplasma 16Sr-VII(AY034608.1)



Argentinean strawberry phyllody
phytoplasma
16Sr-VIII(DQ368422.1)



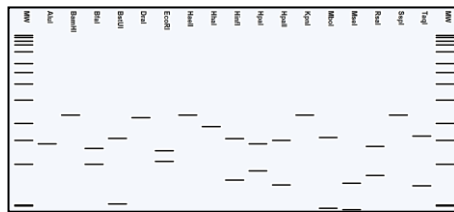
Candidatus Phytoplasma
phoenicium 16SrIX(AF515636.1)



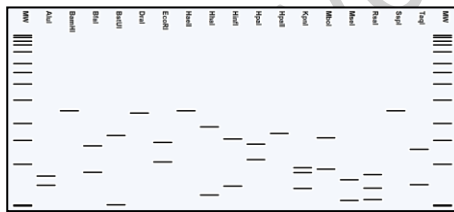
Eggplant big bud phytoplasma
16SrIX(JX464669.1)



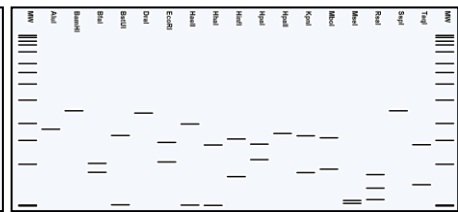
Candidatus Phytoplasma pyri
16SrX(AJ542543.1)



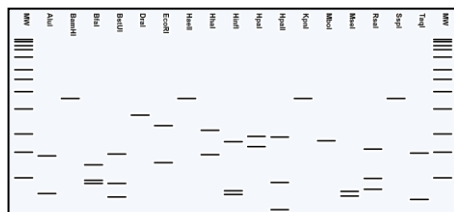
Sugarcane grassy shoot
phytoplasma 16SrXI(AM269747.2)



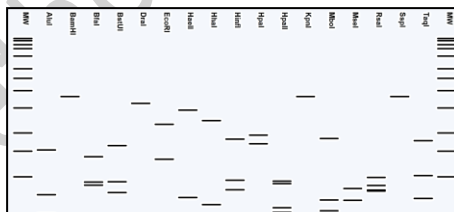
Phytoplasma sp.
16SrXII(EU836644.1)



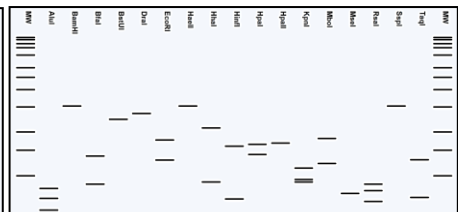
Broccoli stunt phytoplasma
16SrXIII(JX626328.1)



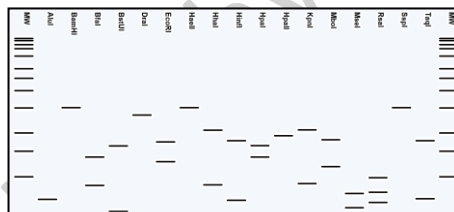
Bermuda grass white leaf
phytoplasma 16SrXIV(AJ550984.1)



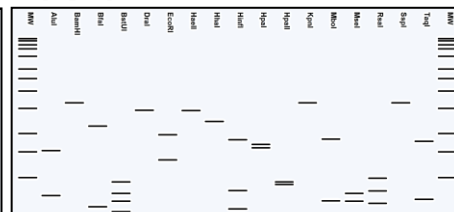
Hibiscus witches-broom
phytoplasma 16SrXV(AFI47708.1)



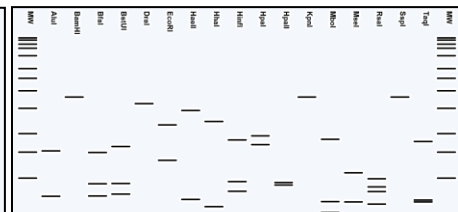
Sorghum phytoplasma 16SrXVI
(AY742330.1)



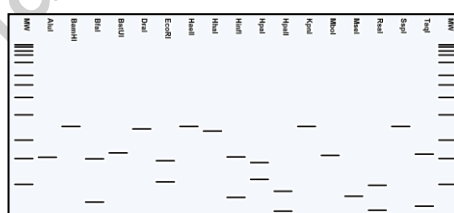
Candidatus Phytoplasma
americanum 16SrXVIII(DQ174118.1)



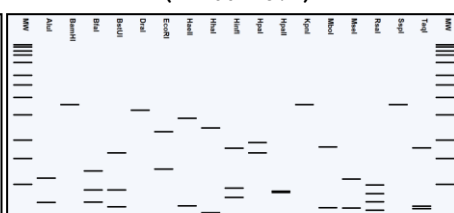
Cactus phytoplasma 16SrII-S
(AF200718.1)



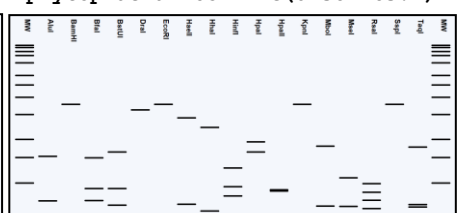
Cactus witches'-broom
phytoplasma 16SrII-C(JN582265.1)



Corchorus olitorius phytoplasma
16SrII-D(KM103728.1)



Cactus witches-broom phytoplasma
16SrII-L(EU099546.1)



Cactus witches-broom phytoplasma
16SrII-J(EU099552.1)

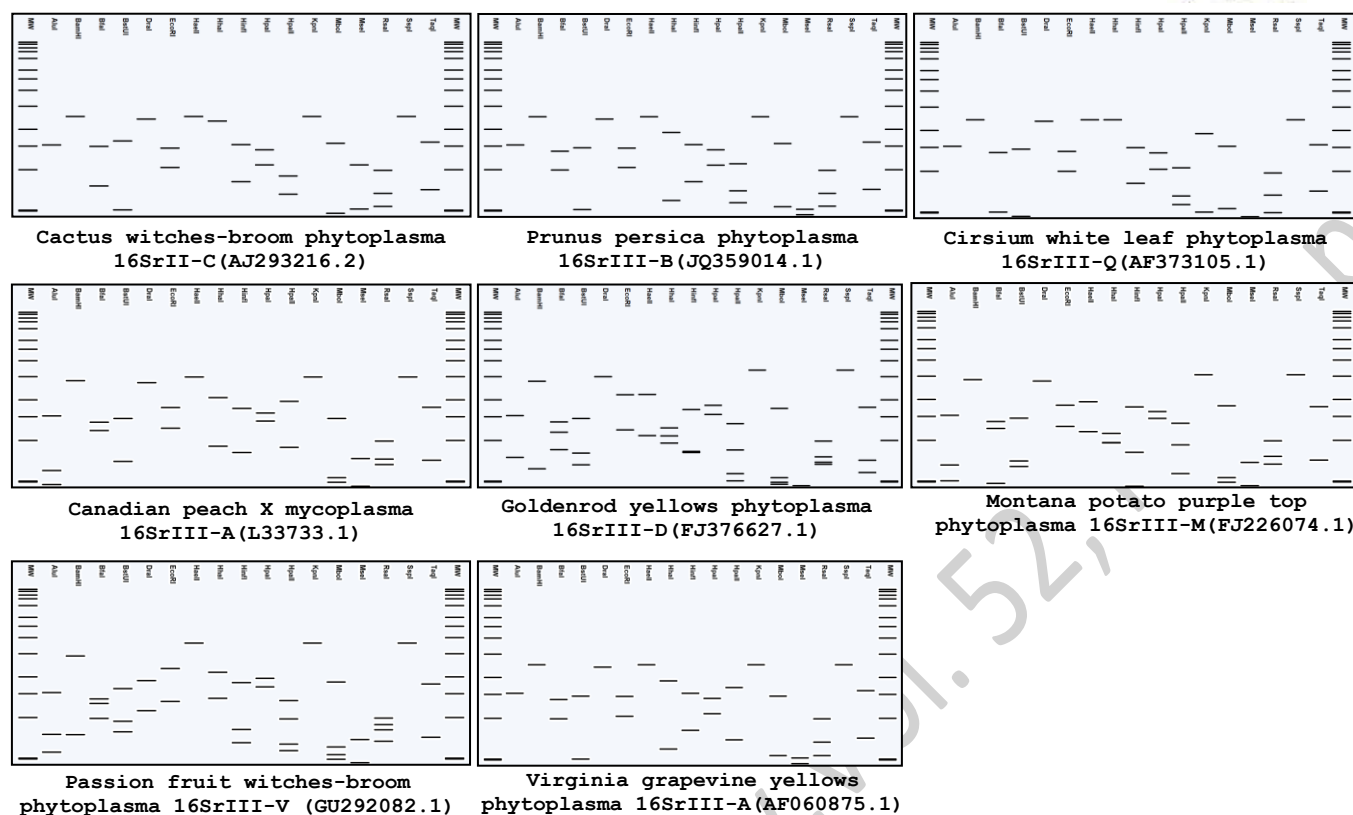


Figure S2: Virtual RFLP patterns from in silico digestions of 16S rRNA gene F2nR2 fragments from 50 phytoplasma strains representing 28 groups. Recognition sites for the following 17 restriction enzymes were used in the simulated digestions: AluI, BamHI, BfaI, BstUI, DraI, EcoRI, HaeIII, HhaI, HinfI, HpaI, HpaII, KpnI, MboI, MseI, RsaI, SspI, and TaqI. S= supplementary

Table S1: Comparison of the 16S rRNA gene sequences of the phytoplasmas in the present study with the corresponding sequences of phytoplasma isolates from different countries.

Phytoplasma/disease common name	16S rDNA group-subgroup	GenBank No.	Identity (%)									
Cauliflower_phyllody_phytoplasma	Fay-1	MW514054.1	100%									
Faba_bean_phyllody_phytoplasma	Fay-2	MW510021.1	98.80%	100%								
Sesame_phyllody_phytoplasma	Fay-3	MW945416.1	98.80%	100.00%	100.00%							
Martricarica_chamomilla'Phytoplasma	Fay-6	OP687045.1	88.90%	90.20%	90.20%	100%						
Tomato_big_bud_phytoplasma	Fay-7	ON921682.1	89.60%	90.90%	90.90%	91.00%	100%					
Cowpea_phyllody_phytoplasma	Fay-8	OP659008.1	98.70%	99.90%	99.90%	90.00%	90.80%	100%				
Chrysanthemum_morifolium'Phytoplasma	Fay-4	OP687044.1	88.70%	89.90%	89.90%	99.60%	90.60%	89.80%	100%			
Cabbage_witches'-broom_phytoplasma	Fay-9	ON922997.1	88.80%	90.00%	90.00%	99.70%	90.70%	89.90%	99.90%	100%		
Alfalfa_witches'-broom_phytoplasma	Fay-5	ON924755.1	89.30%	90.60%	90.60%	89.70%	92.60%	90.50%	89.50%	89.60%	100%	
Russian_potato_purple_top_phytoplasma	16SrI-B	EU333396.1	88.70%	89.90%	89.90%	99.60%	90.60%	89.80%	99.80%	99.90%	89.50%	
Aconitum_proliferation_phytoplasma	16SrI-A	AF510323.1	88.90%	90.20%	90.20%	100.00%	91.00%	90.00%	99.60%	99.70%	89.70%	
Rhododendron_x_hybridum' phytoplasma	16SrI-C	KC009838.1	89.30%	90.60%	90.60%	99.60%	91.20%	90.50%	99.40%	99.50%	90.20%	
Sesamum_indicum_phyllody_phytoplasma	16SrII-A	KF923391.1	98.20%	99.40%	99.40%	89.50%	90.70%	99.30%	89.30%	89.40%	89.90%	
Cactus_witches'-broom_phytoplasma	16SrII-C	JN582265.1	97.30%	98.60%	98.60%	89.90%	90.30%	98.50%	89.70%	89.80%	89.90%	
Crotalaria_phyllody_phytoplasma	16SrII-C	EF193355.1	97.40%	98.70%	98.70%	90.10%	90.40%	98.60%	89.80%	89.90%	90.10%	
Potato_purple_top phytoplasma	16SrIII-F	GU004370.1	91.50%	92.70%	92.70%	91.50%	94.90%	92.60%	91.30%	91.40%	97.40%	
Broccoli_stunt_phytoplasma	16SrIII-J	JX626327.1	91.10%	92.30%	92.30%	90.90%	94.10%	92.20%	90.70%	90.80%	96.60%	
Chayote_witches' broom phytoplasma	16SrIII-J	AF147707.1	91.00%	92.20%	92.20%	91.00%	94.40%	92.10%	90.80%	90.90%	96.90%	
Phytoplasma_sp. LFY5 PE65-Oaxaca	16Sr-IV	AF500334.1	90.20%	91.40%	91.40%	90.20%	95.90%	91.30%	89.90%	90.00%	92.30%	
Alder_yellows_phytoplasma	16Sr-V	AY197642.1	89.30%	90.60%	90.60%	91.00%	98.20%	90.50%	90.80%	90.90%	92.80%	
Alfalfa_witches'-broom_phytoplasma	16Sr-V	JQ343221.1	88.90%	90.20%	90.20%	90.70%	97.70%	90.00%	90.70%	90.80%	92.70%	
Persimmon_fasciation_phytoplasma	16Sr-V	KF995724.1	88.90%	90.20%	90.20%	90.70%	97.70%	90.00%	90.70%	90.80%	92.70%	
Potato_purple_top_phytoplasma	16SrVI-A	GU004367.1	89.80%	91.10%	91.10%	91.00%	99.80%	91.00%	90.60%	90.70%	92.80%	
Brinjal_little_leaf_phytoplasma	16SrVI	EF186820.1	89.70%	91.00%	91.00%	90.90%	99.70%	90.90%	90.50%	90.60%	92.70%	
Candidatus_Phytoplasma_fraxini	16SrVII	DQ232752.1	89.60%	90.70%	90.70%	89.90%	96.80%	90.60%	90.20%	90.20%	91.40%	
Erigeron_witches' broom_phytoplasma	16Sr-VII	AY034608.1	90.40%	91.40%	91.40%	90.80%	98.20%	91.30%	90.80%	90.90%	92.60%	
Strawberry_phyllody_phytoplasma	16SrVIII	JN368423.1	89.60%	90.90%	90.90%	90.40%	97.40%	90.80%	90.40%	90.50%	91.60%	
Candidatus_Phytoplasma_phoenicium	16SrIX	AF515636.1	90.10%	91.20%	91.20%	89.20%	94.30%	91.10%	89.00%	89.10%	92.60%	
Eggplant_big_bud_phytoplasma	16SrIX	JX464669.1	89.80%	90.80%	90.80%	89.00%	93.90%	90.70%	88.80%	88.90%	92.40%	
Candidatus_Phytoplasma_pyri	16SrX	AJ542543.1	89.40%	90.70%	90.70%	93.50%	92.30%	90.60%	93.70%	93.80%	90.40%	
Sugarcane_grassy_shoot_phytoplasma	16SrXI	AM269747.2	90.70%	91.90%	91.90%	91.20%	96.10%	91.80%	91.00%	91.10%	93.30%	
Phytoplasma_sp.	16SrXII	EU836644.1	88.90%	89.90%	89.90%	96.40%	89.80%	89.80%	96.40%	96.60%	88.90%	
Broccoli_stunt_phytoplasma	16SrXIII	JX626328.1	88.50%	89.70%	89.70%	95.90%	90.30%	89.70%	95.90%	96.00%	89.10%	
Bermuda_grass_white_leaf_phytoplasma	16SrXIV	AJ550984.1	90.40%	91.60%	91.60%	91.00%	96.00%	91.50%	90.80%	90.90%	93.10%	
Hibiscus_witches' broom_phytoplasma	16SrXV	AF147708.1	96.40%	97.60%	97.60%	89.90%	90.70%	97.50%	89.70%	89.80%	90.20%	
Sorghum_phytoplasma	16SrXVI	AY742330.1	87.90%	88.90%	88.90%	95.40%	88.60%	88.80%	95.40%	95.60%	87.70%	
Candidatus_Phytoplasma_americanum	16SrXVIII	DQ174118.1	89.20%	90.50%	90.50%	96.20%	90.60%	90.30%	96.20%	96.30%	89.60%	
Cactus_phytoplasma	16SrII-S	AF200718.1	97.10%	98.40%	98.40%	89.80%	90.20%	98.30%	89.60%	89.70%	89.80%	
Corchorus_olitorius_phytoplasma	16SrII-D	KM103728.1	98.70%	99.90%	99.90%	90.10%	90.80%	99.80%	89.80%	89.90%	90.50%	
Cactus_witches'-broom_phytoplasma	16SrII-L	EU099546.1	96.80%	98.10%	98.10%	89.40%	89.70%	97.90%	89.20%	89.30%	89.40%	
Cactus_witches'-broom_phytoplasma	16SrII-J	EU099552.1	96.90%	98.20%	98.20%	89.50%	89.80%	98.00%	89.30%	89.40%	89.50%	
Cactus_witches'-broom_phytoplasma	16SrII-C	AJ293216.2	97.40%	98.70%	98.70%	90.10%	90.40%	98.60%	89.80%	89.90%	90.10%	
Prunus_persica' phytoplasma	16SrIII-B	JQ359014.1	91.10%	92.30%	92.30%	91.30%	94.70%	92.20%	91.10%	91.20%	97.20%	
Cirsium_white_leaf_phytoplasma	16SrIII-Q	AF373105.1	90.70%	91.90%	91.90%	90.90%	94.30%	91.80%	90.70%	90.80%	96.90%	
Canadian_peach_X_mycoplasma	16SrIII-A	L33733.1	91.00%	92.30%	92.30%	91.20%	94.50%	92.20%	91.00%	91.10%	98.00%	
Goldenrod_yellows_phytoplasma	16SrIII-D	FJ376627.1	91.40%	92.60%	92.60%	91.40%	94.80%	92.50%	91.20%	91.30%	97.30%	
Montana_potato_purple_top_phytoplasma	16SrIII-M	FJ226074.1	91.20%	92.40%	92.40%	91.20%	94.60%	92.30%	91.00%	91.10%	97.10%	
Passion_fruit_witches'-broom_phytoplasma	16SrIII-V	GU292082.1	91.10%	92.30%	92.30%	91.30%	94.70%	92.20%	91.10%	91.20%	97.20%	
Virginia_grapevine_yellows_phytoplasma	16SrIII-A	AF060875.1	91.20%	92.40%	92.40%	91.40%	94.80%	92.30%	91.20%	91.30%	97.50%	