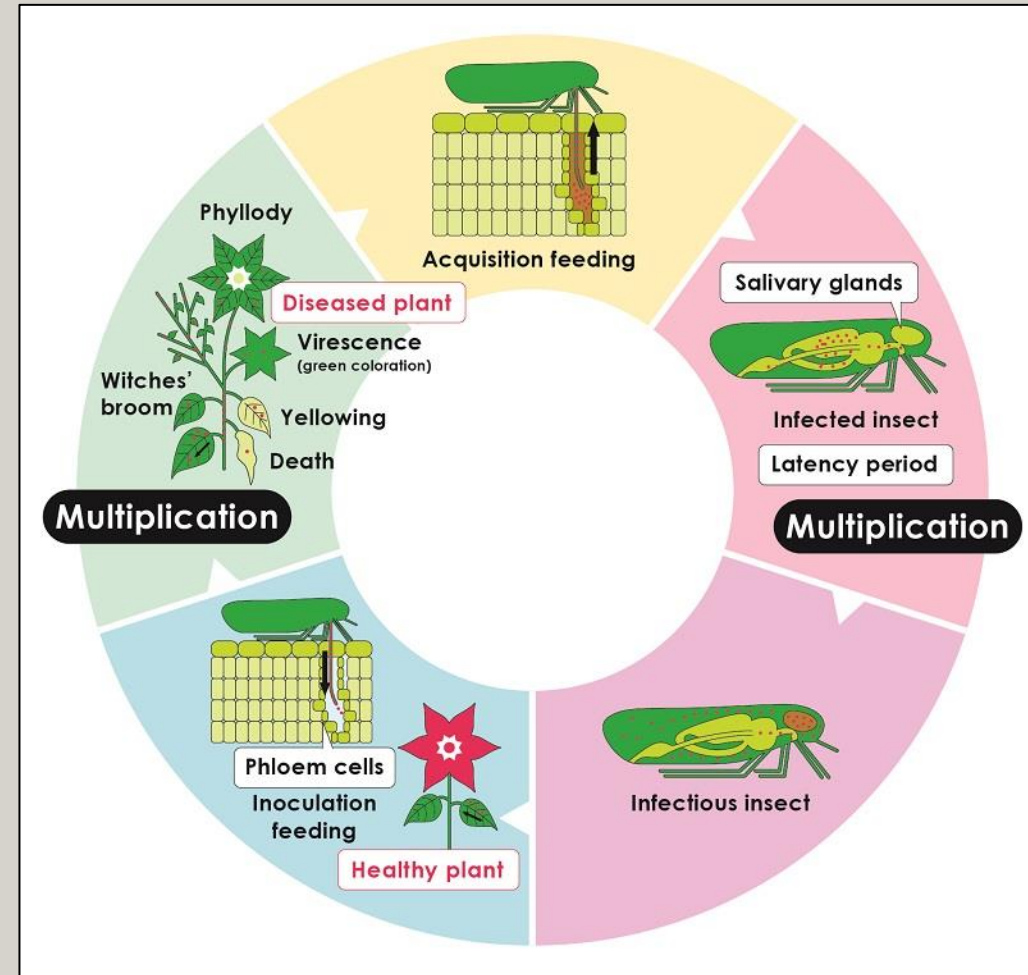


Phytoplasma Disease Database

Phytoplasmas

- Cell wall-less bacteria that infect phloem tissue
- Are carried by insect vectors
- Causes symptoms such as yellowing, shoot proliferation, and witches'-broom growth



Classification

- Phytoplasmas cannot be cultured in vitro, resulting in a lack of phenotypic markers
- Development of DNA sequencing technology helped in classification of many phytoplasmas
- Issue with many current classification systems and databases is their inconsistencies when including plant hosts, insect vectors, and host countries

Goals of Database

- Systematically construct a phytoplasma disease database
- Create a system which can isolate phytoplasmas based on host, symptom, and insect vectors
- Find connections between phytoplasma strains in different countries

Data Collection Process

12	JQ181547.1 Gi:379053893	Rumex bucephalophorus' dwarf' phytoplasma isolate MR1 16S ribosomal RNA gene, partial sequence	horned, red, or ruby dock	Rumex bucephalophorus L.
13	JQ181546.1 Gi:379053892	Picris echioides' yellows phytoplasma Cal 16S ribosomal RNA gene, partial sequence	bristly oxtongue	Picris echioides not used Helminthotheca echioides (L.) Holub.
14	JQ181545.1 Gi:379053891	Opuntia ficus-indica' phytoplasma isolate CT3 16S ribosomal RNA gene, partial sequence	prickly pear	Opuntia ficus-indica (L.) Mill.
15	JQ181544.1 Gi:379053890	Austrocylindropuntia exaltata' phytoplasma isolate CT2 16S ribosomal RNA gene, partial sequence	Eve's Needle, Cane Cholla	Austrocylindropuntia exaltata (synonym); Austrocylindropuntia subulata ssp. exaltata - accepted.
16	JQ181543.1 Gi:379053889	Opuntia subulata' phytoplasma isolate CT1 16S ribosomal RNA gene, partial sequence	Eve's Needle Cactus	Opuntia subulata - not accepted; Austrocylindropuntia subulata (Muehlenpf.) Backeb.
17	JQ181542.1 Gi:379053888	Linaria multicaulis' fasciation phytoplasma isolate TR 16S ribosomal RNA gene, partial sequence	toadflax	Linaria heterophylla Desf. (accepted Linaria multicaulis (L.) Mill.)
18	JQ181541.1 Gi:379053887	'Fedia cornucopiae' virescence phytoplasma isolate IS 16S ribosomal RNA gene, partial sequence	African valerian	Fedia cornucopiae
19	KY581664.1 Gi:1187424250	Candidatus Phytoplasma aurantifolia isolate 190-16S-C4.0.2 16S ribosomal RNA gene, partial sequence	goatnut, joboba	Simmondsia chinensis
20	KY581663.1 Gi:1187424249	Candidatus Phytoplasma aurantifolia isolate 189-16S.0.2 16S ribosomal RNA gene, partial sequence	goatnut, joboba	Simmondsia chinensis
21	KY704479.1 Gi:1179881330	Candidatus Phytoplasma aurantifolia isolate 192-cpn60-C10.1 chaperonin-60 (cpn60) gene, partial cds	goatnut, joboba	Simmondsia chinensis
22	KY704478.1 Gi:1179881322	Candidatus Phytoplasma aurantifolia isolate 189-C2-cpn60.0.1 chaperonin-60 (cpn60) gene, partial cds	goatnut, joboba	Simmondsia chinensis
23	KX670809.1 Gi:1109585067	Candidatus Phytoplasma brasiliense -related phytoplasma isolate PeruGY1-5 16S ribosomal RNA gene and 16S-23S ribosomal RNA intergenic spacer, partial sequence	grapevine	Vitis vinifera
24	KX670808.1 Gi:1109585066	Candidatus Phytoplasma brasiliense -related phytoplasma isolate PeruGY1-3 16S ribosomal RNA gene and 16S-23S ribosomal RNA intergenic spacer, partial sequence	grapevine	Vitis vinifera
25	KX670807.1 Gi:1109585065	Candidatus Phytoplasma brasiliense -related phytoplasma isolate PeruGY1-4 16S ribosomal RNA gene and 16S-23S ribosomal RNA intergenic spacer, partial sequence	grapevine	Vitis vinifera
26	KU850951.1 Gi:1028799895	Candidatus Phytoplasma meliae strain CHTYXIII-Ya4 SecA (secA) gene, partial cds	Chinaberry tree, chinaberry, Indian lilac, lelah, paraiso, pride of india, white cedar	Melia azedarach
		Candidatus Phytoplasma meliae strain CHTYXIII-BS2 SecA (secA)	Chinaberry tree, chinaberry,	

1. Find accession number of phytoplasma

2. Input accession number into NCBI Nucleotide database

An official website of the United States government [Here's how you know](#)

National Library of Medicine
National Center for Biotechnology Information

Log in

Nucleotide Search

Advanced Help

Nucleotide

The Nucleotide database is a collection of sequences from several sources, including GenBank, RefSeq, TPA and PDB. Genome, gene and transcript sequence data provide the foundation for biomedical research and discovery.

Using Nucleotide

- Quick Start Guide
- FAQ
- Help
- GenBank FTP
- RefSeq FTP

Nucleotide Tools

- Submit to GenBank
- LinkOut
- E-Utilities
- BLAST
- Batch Entrez

Other Resources

- GenBank Home
- RefSeq Home
- Gene Home
- SRA Home
- INSDC

You are here: NCBI > DNA & RNA > Nucleotide Database

FOLLOW NCBI

Support Center

'Fedia cornucopiae' virescence phytoplasma isolate IS 16S ribosomal RNA gene, partial sequence

GenBank: JQ181541.1

[FASTA](#) [GenBank](#)

[Go to:](#)

LOCUS JQ181541 1243 bp DNA linear BCT 07-MAR-2012

DEFINITION 'Fedia cornucopiae' virescence phytoplasma isolate IS 16S ribosomal RNA gene, partial sequence.

ACCESSION JQ181541

VERSION JQ181541.1

KEYWORDS

SOURCE 'Fedia cornucopiae' virescence phytoplasma

ORGANISM 'Fedia cornucopiae' virescence phytoplasma

Bacteria; Tenericutes; Mollicutes; Achaeplastales; Achaeplastataceae; Candidatus Phytoplasma asteris.

REFERENCE 1 (bases 1 to 1243)

AUTHORS Spallino, R.E., Marzachi, C. and Tessorio, M.

TITLE Plant teratologies and their association with phytoplasma infections

JOURNAL Unpublished

REFERENCE 2 (bases 1 to 1243)

AUTHORS Spallino, R.E., Marzachi, C. and Tessorio, M.

TITLE Direct Submission

JOURNAL Submitted (30-NOV-2011) Department of Agricultural and Food Science - Sect. Phytopathology and Plant Genetics, University of Catania, Via S. Sofia 100, Catania 95123, Italy.

FEATURES

Location/Qualifiers

1..1243

source

/organism="Fedia cornucopiae' virescence phytoplasma"

/mol_type="genomic DNA"

/isolate="IS"

/host="Fedia cornucopiae"

/db_xref="taxon:1157414"

/country="Italy; Ischia (80)"

/note="16S rI phytoplasma group;

PKC_primers=fwd: Universal R1672, rev: Universal R1672"

<1...1243

/product="16S ribosomal RNA"

rRNA

ORIGIN

1 acgactgcta agactggata ggagacaaga aggcattctt tggtttttaa aagactgac

Customize view

Analyze this sequence

Run BLAST

Pick Primers

Highlight Sequence Features

Find in this Sequence

Related information

Taxonomy

LinkOut to external resources

Ribosomal Database Project II [Ribosomal Database Project II]

SILVA SSU Database [SILVA]

Recent activity

Turn Off Clear

'Fedia cornucopiae' virescence phytoplasma isolate IS 16S ribosomal RNA gene, nucleotide

Foxtal yellow decline phytoplasma UPM-2 16S ribosomal RNA gene, partial seq Nucleotide

Bifidobacterium longum strain TM01-1 TM01-1.Sc44, whole genome shotg Nucleotide

Candidatus Phytoplasma trifolii strain Rus-361Fc1 16S ribosomal RNA gene, pa Nucleotide

Candidatus Phytoplasma pruni strain Rus-891c8 16S ribosomal RNA gene, pa Nucleotide

See more...

3. Use entry to obtain host and location information 16S rRNA sequence

Compiled Statistics

- 37 Groups and 48 named phytoplasma species
- Over 500 identified plant hosts and 100 insect vectors
- From 20+ countries