

PROJECT FULL TITLE:
**COORDINATION AND COLLABORATION BETWEEN REFERENCE COLLECTIONS OF
PLANT PESTS AND
DISEASES FOR EU PLANT HEALTH POLICY**

GRANT AGREEMENT NO.: (612712)



Workpackage: WP3. Quality standards
Deliverable: Deliverable D3.2 List of minimum quality assurance standards
Date: 27 Jul 2015
Partner responsible: Partner 2 (Defra)

Minimum quality standards for different aspects of collections have been discussed and agreed upon between all partners.

Inventory or catalogue

Information to be held	Viruses/viroids	Phytoplasmas	Bacteria	Fungi/oomycetes	Nematodes	Insects/mites	Invasive Plants
Specimen full scientific name	Required	Required	Required	Required	Required	Required	Required
Geographic source of specimen (at least to country of origin)	Required	Required	Required	Required	Required	Required	Required
Host plant or other source/substrate from which it was collected	Required	Required	Required	Required	Recommended	Recommended	Recommended
Date (at least year) of sampling (where available)	Required	Required	Required	Required	Required	Required	Required
Sampler/collector	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
Original specimen number or name given by collector (where available)	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
Unique accession number in the collection	Required	Required	Required	Required	Required	Required	Required
Date of deposit in collection	Required	Required	Required	Required	Optional	Optional	Optional
Preservation conditions and date preserved	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
Reference to accession numbers for duplicates in other collections (where available)	Optional	Optional	Optional	Optional	Not applicable	Not applicable	Not applicable
History from sampling to deposit in collection (if available)	Optional	Optional	Optional	Optional	Not applicable	Not applicable	Not applicable
Traceable history of persons making identification	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Depositor (where known)	Required	Required	Required	Required	Required	Required	Required
Current quarantine status in EU	Required	Required	Required	Required	Required	Required	Required
Species Type (reference strain) strain (yes or no)	Required	Required	Required	Required	Required	Required	Required
Authorities of scientific name	Not applicable	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
Links or references to sequence data from the accession	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Date of last viability test	Recommended	Not applicable	Recommended	Recommended	Not applicable	Not applicable	Not applicable
Date of last purity test	Recommended	Recommended	Recommended	Recommended	Not applicable	Not applicable	Not applicable
Date of last pathogenicity test	Not applicable	Not applicable	Optional	Optional	Not applicable	Not applicable	Not applicable
Traceable history of all quality control checks and persons involved	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
Images of the accession	Not required	Not required	Not required	Optional	Optional	Optional	Optional
Literature references to use of the accession as reference material	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Morphological/morphometric data	Optional	Not applicable	Optional	Optional	Optional	Optional	Optional
Expected reactions when used as reference material in specific diagnostic tests	Recommended	Recommended	Recommended	Recommended	Not applicable	Not applicable	Not applicable
Database maintenance procedures	Required	Required	Required	Required	Required	Required	Required
Data back-up process procedures	Required	Required	Required	Required	Required	Required	Required
Sharing procedures for selected data (e.g. via website or paper)	Required	Required	Required	Required	Required	Required	Required
Contact details for persons responsible for the collection	Required	Required	Required	Required	Required	Required	Required
Options:							
Required							
Recommended							
Optional							
Not required							
Not applicable							
Not available							

Identification methods

Issues	Operating procedures/ competences	Viruses/viroids	Phytoplasmas	Bacteria	Fungi/oomycetes	Nematodes	Insects/mites	Invasive Plants
Identification methods	Sources and use of identification keys (where used)	Not applicable	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Classical morphological descriptions (where)	Recommended	Not applicable	Recommended	Recommended	Recommended	Recommended	Recommended
	Morphometric analysis of specimens (where)	Recommended	Not applicable	Recommended	Recommended	Recommended	Recommended	Recommended
	Other phenotyping methods (examples)	Recommended (e.g. Differential host inoculations)	Not applicable	Recommended (e.g. nutritional profiling, Fatty-acid profiling)	Not applicable	Not applicable	Not applicable	Not applicable
	DNA/RNA sequencing/barcoding methods (where available)	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Other identification methods (examples)	Recommended (e.g. serological reactions /cross reactions, whole genome sequencing, DNA hybridisation)	Not applicable	Recommended (e.g. specific PCR, whole genome sequencing)	Not applicable	Recommended (e.g. specific PCR / Isoenzym analysis)	Not applicable	Not applicable
Updating taxonomy	Sources of approved taxa (examples)	Required (e.g. International Committee on Taxonomy of Viruses book and website)	Required (e.g. various taxonomic journals)	Required (e.g. International Journal of systematic and evolutionary microbiology; LPSN www.bacterio.net)	Required (e.g. www.mycobank.org)	Required (e.g. various taxonomic journals/books)	Required (e.g. www.faunaeur.org; various taxonomic journals/books)	Required (e.g. www.theplantist.org; Angiosperm Phylogeny Group classification (APG III))
Current quarantine status	Sources of current quarantine status (examples)	Required (e.g. EU Council Directive 2000/29/EG; EPPO)	Required (e.g. EU Council Directive 2000/29/EG; EPPO)	Required (e.g. EU Council Directive 2000/29/EG; EPPO)	Required (e.g. EU Council Directive 2000/29/EG; EPPO)	Required (e.g. EU Council Directive 2000/29/EG; EPPO)	Required (e.g. EU Council Directive 2000/29/EG; EPPO)	Not applicable
Options:								
Required								
Recommended								
Optional								
Not required								
Not applicable								
Not available								

Authenticity

Issues	Operating procedures/ competences	Viruses/viroids	Phytoplasmas	Bacteria	Fungi/oomycetes	Nematodes	Insects/mites	Invasive Plants
Labelling	Unique number assignment/barcode labelling	Required	Required	Required	Required	Required	Required	Required
Storage facilities	Containment/isolation measures	Required	Required	Required	Required	Required	Required	Not applicable
Purity	Measures to avoid cross-contamination or mixing	Required	Not applicable	Required	Required	Required	Required	Required
Chain of accession	Record keeping for movement of accessions in and out of the collection	Required	Required	Required	Required	Required	Required	Required
Comparison with original accession	Methods to check batch to batch variation	Required	Required	Required	Required	Not applicable	Not applicable	Not applicable
	Assessment of quality after storage/exchange	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Not applicable
Viability	Viability tests and frequency of assesment	Not applicable	Not applicable	Recommended	Recommended	Not applicable	Not applicable	Not applicable
Pathogenicity	Pathogenicity tests and frequency of assesment	Not applicable	Not applicable	Optional	Optional	Not applicable	Not applicable	Not applicable
Options:								
Required								
Recommended								
Optional								
Not required								
Not applicable								
Not available								

Storage and Conservation

Issues	Operating procedures/ competences	Viruses/viroids	Phytoplasmas	Bacteria	Fungi/oomycetes	Nematodes	Insects/mites	Invasive Plants
Storage facilities	Location and maintenance of stores	Required	Required	Required	Required	Required	Required	Required
Protection from	Duplication of collections	Optional	Required	Required	Required	Optional	Optional	Not applicable
Conservation	Validated conservation methods	Required	Required	Required	Required	Required	Required	Not applicable
	Determination of long term stability	Required	Required	Required	Required	Required	Required	Not applicable
	Determination of short term stability (e.g. for	Required	Required	Required	Required	Required	Required	Not applicable
Containment	Biosecurity for live quarantine organisms, see also OECD guidelines for Biological Research Centres; http://www.cabri.org/guidelines	Required	Required	Required	Required	Required	Required	Not applicable
Options:								
Required								
Recommended								
Optional								
Not required								
Not applicable								
Not available								

Preparations and Access

Issues	Operating procedures/ competences	Viruses/viroids	Phytoplasmas	Bacteria	Fungi/oomycetes	Nematodes	Insects/mites	Invasive Plants
Reference materials	Production methods	Required	Required	Required	Required	Required	Required	Required
	Analysis of uniformity	Required	Not applicable	Required	Required	Required	Required	Required
	Quality/quantity confidence limits	Not applicable	Not applicable	Required	Required	Not applicable	Not applicable	Not applicable
	Instructions for end users	Required	Required	Required	Required	Required	Required	Required
Access	Ordering procedures	Required	Required	Required	Required	Required	Required	Required
	Packing and transportation procedures	Required	Required	Required	Required	Required	Required	Required
	Customer communications and feedback	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
	Customer data	Required	Required	Required	Required	Required	Required	Required
	Non-conformance procedures	Required	Required	Required	Required	Required	Required	Required
Legal	Adherence to local plant health licensing requirements	Required	Required	Required	Required	Required	Required	Required
	Adherence to international quarantine regulations	Required	Required	Required	Required	Required	Required	Required
Options:								
Required								
Recommended								
Optional								
Not required								
Not applicable								
Not available								