



EURL
European Union Reference Laboratory for
FUNGI AND OOMYCETES



EURL for fungi and oomycetes 2019/20 Workplan

EPPO Workshop for Heads of Plant Pest Diagnostic Laboratories

ANSES, Maisons-Alfort
10th September 2019

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EURL Team

Anses LSV – Unité de Mycologie, Nancy



From left to right: Renaud Ioos, Véronique Wilson, Carole Saurat, Sylvie Noyé, Camille Renault, Cécile Guinet, Kevin Fontaine, Alexandra Puértolas, Jacqueline Hubert, Violaine Sella, Jaime Aguayo.

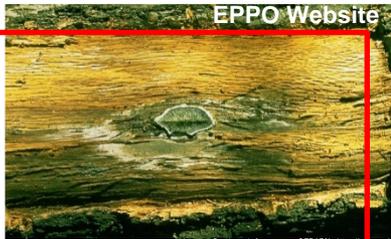
Top line, left to right: Nathalie Schenck, Isabelle Cerf-Wendling, Céline Jeandel.

EURL Missions for 2019/20

EURL activities for the current working period are classified in four missions:

- 1.** To ensure availability and use of high quality **methods** and to ensure high quality **performance** by NRLs
- 2.** To provide scientific and technical **assistance to NRLs**
- 3.** To provide scientific and technical **assistance to the European Commission (EC) and other organizations**
- 4.** To establish a **reference collection** of isolates and biological material and recommend reference **reagents**

10 Fungal pathogens listed by EU for 2019/20 working period



Bretziella fagacearum



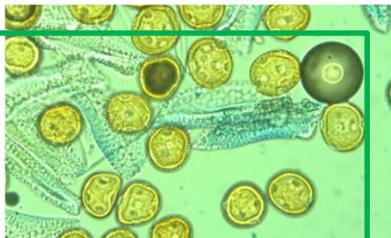
Elsinoe spp.
(*E. australis*, *E. citricola*, *E. fawcettii*)



Fusarium circinatum



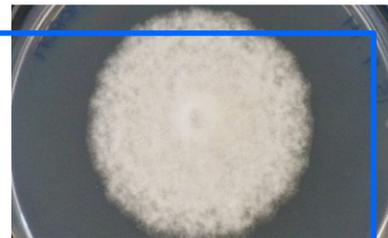
Geosmithia morbida



Gymnosporangium spp.



Phyllosticta citricarpa



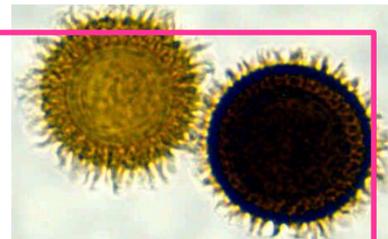
Phytophthora ramorum



Pseudocercospora angolensis



Synchytrium endobioticum



Tilletia indica

1. To ensure availability and use of high quality methods and to ensure high quality performance by NRLs

1.1

Guidance on the methods

Literature review of available diagnostic methods of EU quarantine pathogens

Phytophthora ramorum, *Tilletia indica*, *Geosmithia morbida*, *Gymnosporangium* spp., *Bretziella fagacearum*, *Elsinoë* spp., *Pseudocercospora angolensis*

Providing reference materials to NRLs

Reference isolates of EU quarantine pathogens curated in EURL reference collection

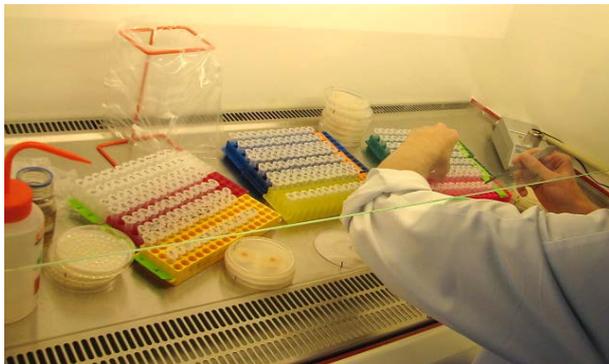
Phyllosticta citricarpa, *Phytophthora ramorum*, *Geosmithia morbida*, *Bretziella fagacearum*, *Pseudocercospora angolensis*, *Elsinoë* spp.

1.2

1.3

Organization of annual Proficiency Tests (PT)

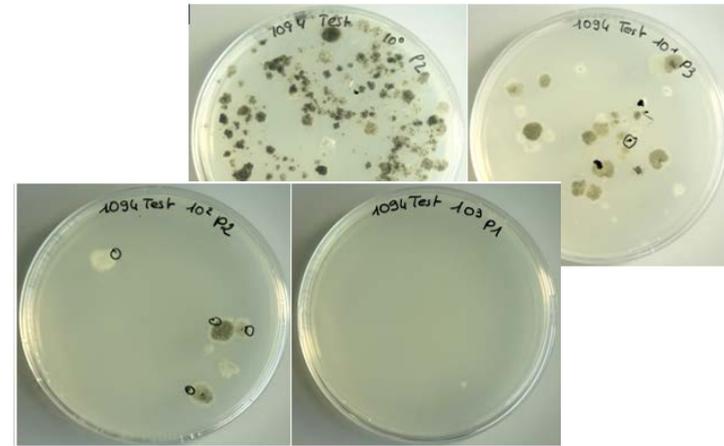
First EU NRL proficiency test about the identification of *Fusarium circinatum* by the end of 2019 (morphology & molecular identification)



NRL participation in Proficiency Tests for NRL are **highly recommended**

It is very important NRLs send us the **import license/LOA (letter of authorisation)** beforehand, to receive living quarantine fungal samples

1. To ensure availability and use of high quality methods and to ensure high quality performance by NRLs



Production of monosporic cultures of *Phyllosticta* spp.

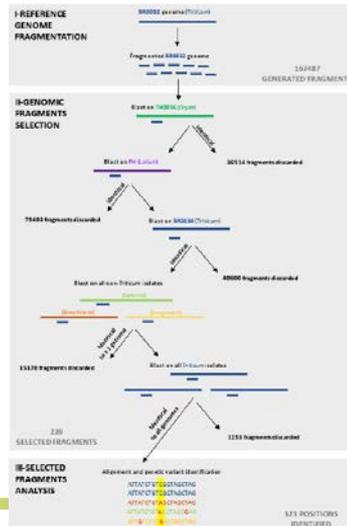
Production of diagnostic methods

Molecular diagnostic method to differentiate *Phyllosticta citricarpa* & *P. paracitricarpa*, among other *Phyllosticta* species, using a comparative genomics approach

1.4



P. citricarpa in MEA



P. paracitricarpa in MEA

2. To provide scientific and technical assistance to NRLs

2.1

Updating NRLs about research – EURL Website & Workshops

EURL Website as working tool with NRLs and a source of information for the society

It will be opened on the 26th of September

One-day annual workshop for NRLs will be organized.

First one at ANSES – Nancy, during the first half of 2020, about EURL activities

EURL
European Union Reference Laboratory for
FUNGI AND OOMYCETES

anses
Investigate, evaluate, protect

Identify

HOME PRESENTATION EURL ACTIVITIES DOCUMENTS NRLS WORKSPACE CONTACT US

NEWS
WEBSITE FOR EURL FOR FUNGI AND
OOMYCETES IS OPENED
The EURL for fungi and oomycetes website is operative
from 26th of September...

ALL THE NEWS

WELCOME TO EURL FOR FUNGI AND OOMYCETES WEBSITE

The European Union Reference Laboratory (EURL) for fungi and oomycetes has officially started its activities in August 2019.
This site intends to be a source of information for the general public about the EURL activities, tasks and duties, as well as the meeting point for all European National Reference Laboratories (NRLs) in mycology.

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PRESENTATION EURL ACTIVITIES DOCUMENTS NRLS WORKSPACE CONTACT US

01 January 2020

WORKSHOP FUNGI AND OOMYCETES

The first workshop organized by the EURL for fungi and oomycetes will be...

...activities is to keep NRLs up to date about research, providing information on EU regulated fungal and oomycete plant pathogens. EURL will organize a one-day annual workshop to the EU NRLs and other invited researchers, about topics of interest in mycology and plant pathology, as well as EU regulations, biosecurity, pathogen outbreaks ... EURL for fungi and oomycetes is open to suggestions for the theme of the future workshops. Submission of topic suggestions can be sent through the formulary available in the EURL website.

Our upcoming Workshop

2. To provide scientific and technical assistance to NRLs

2.2

Information on advances in diagnostic methods to NRLs

Up to date literature review of new diagnostic methods of EU quarantine pathogens
Available on EURL website & newsletters

Annual training courses for NRLs and other laboratories/experts

For 5-6 participants per course, and up to 2 sessions if high demand.

**The aim is to improve skills of NRLs after the PT when necessary.
First one after the organization of the PT about *Phyllosticta citricarpa***

2.3



2.4

Improving skills of EURL staff

Improving our own skills and build our expertise in EU quarantine pathogens
Training in *Synchytrium endobioticum* for the first working period

3. To provide scientific and technical assistance to the European Commission (EC) and other organizations

3.1

Scientific and technical assistance to the European Commission (EC)

Compile information about NRLs and support EC with expertise

An annual NRLs survey about research activities will be sent to all NRLs

Collaboration with EFSA and third countries

Assistance to EFSA with our expertise. Support to third countries under request

Tunisia requested support with *Phyllosticta citricarpa* outbreak

3.2

3.3

Assistance in emergency diagnosis

In case of disease outbreak in any member state, assistance with diagnosis of samples and pathogen identification, as well as **providing help to EU NRLs with positive sample confirmations, and carrying out species identification (MLST, WGS).**

4. To provide a reference collection of fungal and oomycete isolates and reference reagents

4.1

Reagents validation

To ensure the quality of reagents used for diagnostic purposes. **Different reagents, media and DNA extraction kit brands will be challenged to assure specificity, efficiency and sensitivity.** We will start with the method development for *Phyllosticta* species

Establishing the EURL reference collection

High quality fungal & oomycete collection, available for NRLs under request using EURL website. **All strains in the collection will be validated and available in different formats (DNA, culture, plasmid, microscopic slides), and originated from monosporic isolates**

4.2



Start Complete

First Name *

Last Name *

Email *

alexandra.puertolas@anses.fr

Telephone *

Laboratory *

Country *

Select

EURL strain code to request *

Species name *

Type of material *

- Agar slope
- Genomic DNA
- Microscopic slide
- Frozen mycelium
- Glycerol sample

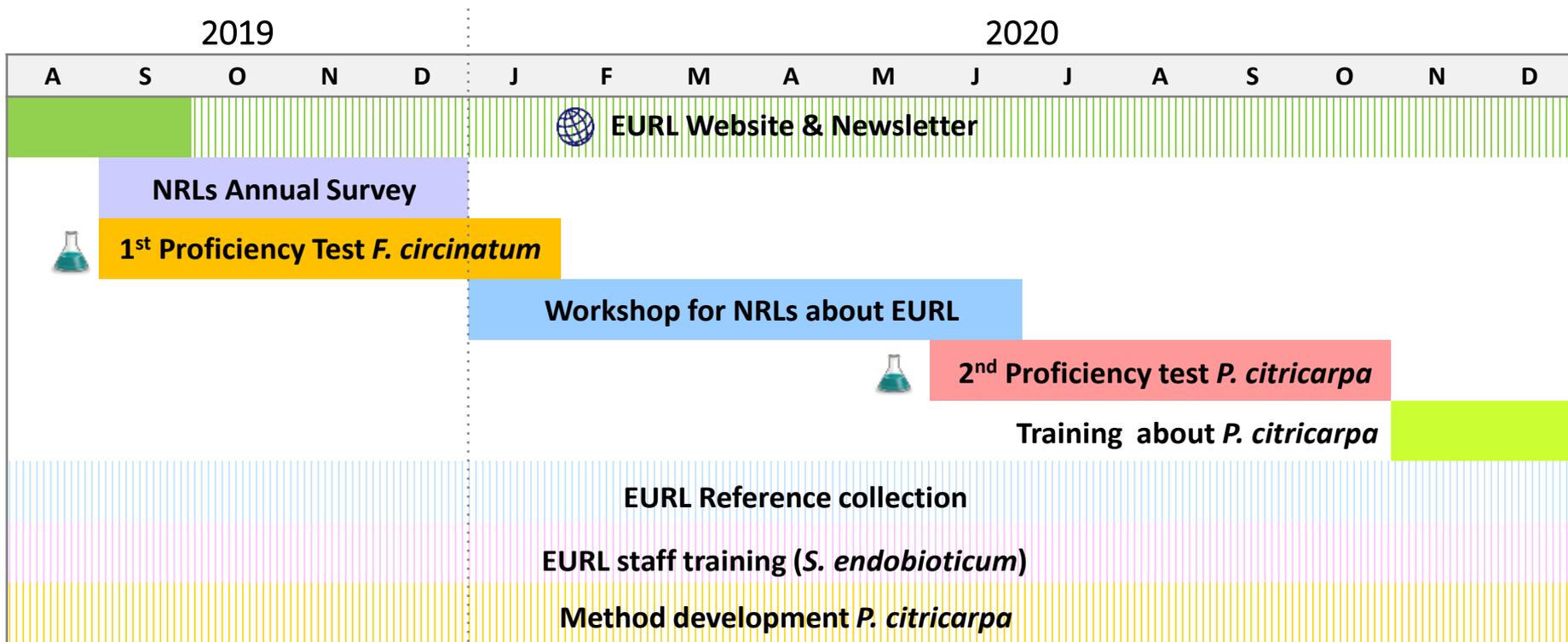
SUBMIT

4.3

List of reference reagents

List of reagents and suppliers used in validated methods recommended by EURL (and alternative ones). **The list will be available in the EURL website**

Timeline for EURL activities



After the opening on the 26th of September, **EURL Website & Newsletter** will be permanently and regularly maintained



The dates for the second PT and first training about *P. citricarpa* are approximated

Thank you for your attention

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