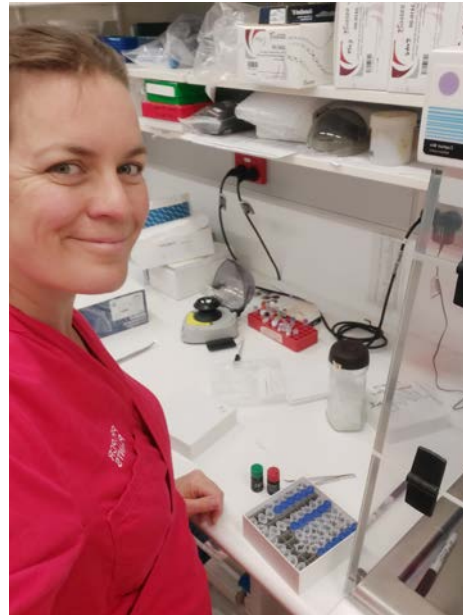


Residential: Expanding capacity for bacterial identification with LAMP assays

Cathryn Todd – SARDI/PIRSA



ADSW 2023

9 - 11 MAY | CANBERRA





Australian Government

**Department of Agriculture,
Fisheries and Forestry**

The National Plant Biosecurity Diagnostic and Surveillance Professional Development and Protocols Projects are coordinated and delivered by Plant Health Australia and are funded by the Department of Agriculture, Fisheries and Forestry.

The objectives of the Projects are to enhance and strengthen Australia's diagnostic and surveillance capacity and capability to identify priority plant pests that impact on plant industries, environment and the community.

ADSW 2023

9 - 11 MAY | CANBERRA



Background:

- SARDI Horticulture – Microscopy, culture & 16s sequence
- Previous collaboration with EMAI staff
- Transport delays for diagnostics
- SARDI's new Genie for LAMP assays



LAMP assays to detect:

NPPP 1. *Xylella* spp.

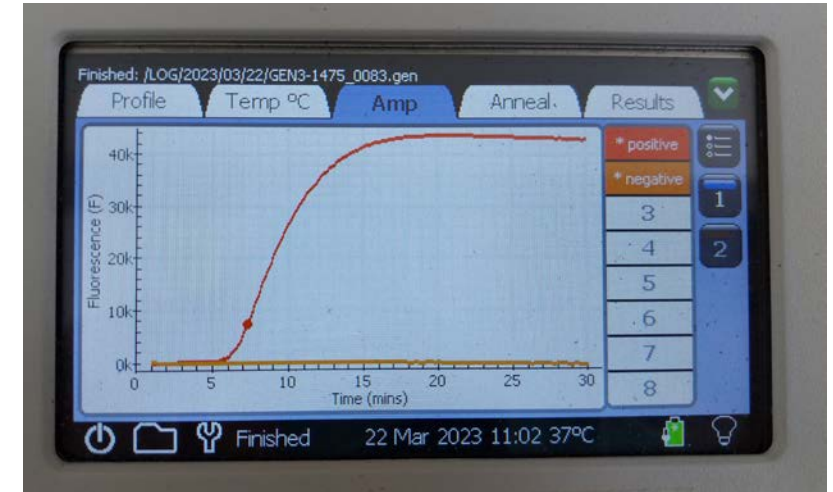
NDP 16. *Xanthomonas citri* subsp. *citri*
(citrus canker)

New draft NDP. *Xanthomonas fragariae*
(angular leaf spot of strawberry)



Expansion of SA's capability

- Access to positive controls & primers
- Reproduction of LAMP assays
- Learning the limits of assays (ie. *Xf* test doesn't pick up *Xt*!)



Value to host - EMAI

- LAMP assays in parallel on different devices
- SARDI helping validate another test for an NDP review



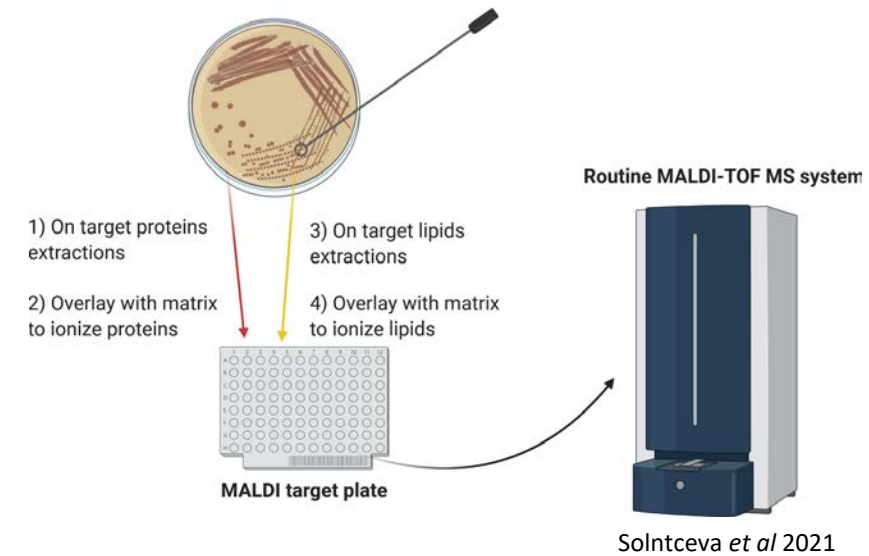
Also experienced:

LAMP assay for *Pseudomonas syringiae* pv. *actinidiae* (Kiwifruit bacterial canker)

Re-tried PestBlitz LAMP assays

MALDI -ToF MS

General diagnostics



Sampling in SA – training SA staff

Plant	LAMP Test	Number	Private gardens	Community space
Grapevine	<i>Xylella fastidiosa</i>	9	4	5
Olive		11	1	10
Strawberry	<i>Xanthomonas fragariae</i>	4	3	1
Citrus	<i>Xanthomonas citri</i> subsp. <i>citri</i>	15	7	8
Total		39	15	24



All negative results

Summary

Thank you EMAI staff &
Funding bodies

Expanded SA's capability
Building connections



LET'S GET SOCIAL

Follow us for the latest in plant biosecurity



[/plant-health-au](https://www.facebook.com/plant-health-au)



[@planthealthaustr](https://twitter.com/planthealthaustr)



[/planthealthaustralia](https://www.linkedin.com/company/planthealthaustralia)

APPS Adelaide

See you in 2023!

A Hybrid Conference

At the National Wine Centre
See you online or face to face!



Change & Adaptation

**24th APPS Conference
ADELAIDE 2023**



20 – 24 November 2023

12th Australasian SoilborneDisease Symposium



ASDS2024

Peppers on Salt, Kingscliffe NSW
26th - 29th August 2024

