

## Subcommittee on Plant Health Diagnostics – Meeting 26

### Communiqué

The Subcommittee on Plant Health Diagnostics (SPHD) reports to Plant Health Committee (PHC) and provides national leadership in plant health diagnostics to sustain and improve biosecurity. SPHD delivers on the National Plant Biosecurity Diagnostic Strategy (NPBDS), which aligns with Schedule 4 of the Intergovernmental Agreement on Biosecurity (IGAB).

The Department of Primary Industry and Fisheries, NT hosted SPHD members, observers and advisors at Berrimah Farm Laboratories, Darwin, on the 3-5 May 2018.

### Enhancing the National Plant Biosecurity Diagnostic Network (NPBDN)

#### *Professional development*

SPHD delivered the Annual Diagnosticians Workshop (ADW) in March this year. General diagnostic training was also delivered in conjunction with the workshop. The theme for the ADW 2018 and associated training was *New and Emerging Diagnostics*. Due to strong support in the feedback received at the ADW 2017, the ADW 2018 included number of member-driven, science-based presentation sessions.

SPHD continued to expand the scope of Laboratory Residentials to encompass all diagnostic activities including those performed outside the laboratory, renaming them as Diagnostic Residentials. There are currently six diagnosticians undertaking Diagnostic Residentials, those that have been completed presented their findings at the ADW 2018. Applications for the seventh round of Diagnostic Residentials will be open in August 2018.

Professional development activities included a fruit fly diagnostics workshop, Leafhoppers, Planthoppers and Spittlebugs Identification and a powdery mildew taxonomic and diagnostic workshop. Participants were taught morphological, molecular and taxonomic identification methods.

#### *Network enhancement*

SPHD received a grant from the ACWP to redesign and make significant upgrades to the National Plant Biosecurity Diagnostics Network website. The website redesign will enable diagnosticians to work more collaboratively across domestic borders and will encourage further sharing of ideas and knowledge. The redeveloped website is close to completion, and is expected to go live in October 2018.

#### *Capability and capacity audit*

An audit of the diagnostic system run by CSIRO and overseen by SPHD has recently concluded. Key findings from the audit indicate that the current state of diagnostics across people, protocols, molecular sequences and imaging is satisfactory. However, there is a great need for succession planning, particularly in human capability, as considerable expert knowledge lies with diagnosticians who are either retired or soon to retire. Initial determination of activities to address to critical gaps was undertaken at SPHD 25.

### Developing and maintaining capability to identify High Priority Pests

#### *Protocol development*

SPHD endorsed a National Diagnostic Protocol for *Diaporthe helianthi*, the cause of Stem canker of sunflower bringing the total number of endorsed NDPs to 40.

#### *Surge capacity*

SPHD is nearing the completion of a project working with New Zealand to develop two pilot laboratory workflow simulators (NSW and Tasmania) to use as tools to improve the surge capacity of laboratories for

PCR testing of foliar pathogens including *X. fastidiosa*. The simulators identify bottlenecks in workflows which can then be addressed to increase throughput, and the simulator re-run to continue the process. The project enabled NZ to add a different sample type processing to their existing simulator. The pilot simulators were presented at SPHD 26 and endorsed. Further work is planned to extend the process to other laboratories and other pests and/or tests.

## Implementing quality management systems

Preparations for Round 7 of the National Plant Health Proficiency Testing Program, coordinated by SPHD and delivered by the Australian National Quality Assurance Program are underway. An assessment on proficiency of participating laboratories from Round 6 were presented at SPHD 26.

## Facilitating the development of relevant national information systems supporting diagnostics

Work has begun on the implementation plan for the *National Plant Pest Reference Collections Strategy* (NPPRCS), with the identification of the specific tasks required to translate the document into real-world change. The NPPRCS was endorsed by SPHD and PHC prior to the meeting, being recognised as a well thought out approach to ensuring support for reference collections across Australia allowing them to meet the demands from trade and biosecurity. A finalised implementation plan is expected to be produced by the end of 2018 to facilitate improved guidance for investment and action in the biosecurity system.

## Next meeting and further information

The next SPHD meeting will be held in Canberra in October 2018 in conjunction with the Subcommittee on National Plant Health Surveillance. Further information about SPHD and its activities can be found at the [NPBDN website](#), provided by the local SPHD representative or the SPHD secretariat at [sphd@agriculture.gov.au](mailto:sphd@agriculture.gov.au).

The activities facilitated by SPHD have been made possible through grants from the Australian Government Modern Diagnostics Initiative, the Agricultural Competitiveness White Paper and the Plant Biosecurity and Response Reform Program.

