

Subcommittee on Plant Health Diagnostics – Meeting 23

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 Plant Biosecurity CRC hosted SPHD members, observers and advisers in Canberra, from 11th to the 13th October 2016. This included a joint meeting of SPHD and the Subcommittee on National Plant Health Surveillance (SNPHS) to improve coordination and delivery of surveillance and diagnostics in Australia.

Activities and outcomes since May 2016

Enhancing the National Plant Biosecurity Diagnostic Network (NPBDN)

Professional development

The National Plant Biosecurity Diagnostic Network (NPBDN) professional development plan for 2016/17 focuses on tropical diagnostics in support of the *Modern Diagnostics* initiative under the *Northern Australia White Paper*.

Expressions of Interest (EOI) have been received from NPBDN members for the fifth round of the Laboratory Residential Program, which primarily address key diagnostic capability gaps identified for Northern Australia. The Network Implementation Working Group will support the *Modern Diagnostics* program to assess the EOIs, with the Laboratory Residentials to be undertaken over the next 12 months.

Preparations have begun for the 2017 Annual Diagnosticians' Workshop (ADW2017). The workshop will run over two days in early April in Cairns, with activities centred around the tropical node of the NPBDN. ADW2017 participants will engage with the NAQS, contribute to addressing tropical diagnostic capability gaps, and gain an appreciation of the challenges of undertaking diagnostics in the north. General diagnostic training will also be delivered in conjunction with the workshop. The theme of the workshop and focus areas for associated training is tropical diagnostics. Expressions of interest will be opening soon, more information can be found on the [NPBDN website](#).

An advanced diagnostics workshop on Cerambycinae was held 22 August – 2 September 2016 at the Australian National Insect Collection (ANIC), Canberra. Four NPBDN members attended this workshop as a follow up to the Lamiinae workshop held in 2015. All course attendees successfully completed the workshop, being deemed competent at its conclusion.

These professional development activities facilitated by SPHD have been possible through a grant from the Department of Agriculture and Water Resources to Plant Health Australia under the *Plant Biosecurity and Response Reform* programme and the *Northern Australia White Paper*.

Network enhancement

SPHD will seek to undertake an evaluation of the NPBDN and the linked facilitated activities. The NPBDN is now 5 years old and SPHD deem it important to ensure that the activities provided to members are still relevant and meeting the needs of diagnosticians.

SPHD have assisted SNPHS to initiate development of a surveillance website and network. The surveillance network will be modelled on the NPBDN and aims to improve coordination and networking between those working in the field of surveillance.

Capability and capacity audit

SPHD reviewed and endorsed the recommendations of the Enhancing Diagnostic Capability for Priority Pests: collections and capability audit relating to data collection. The audit aims to identify gaps in diagnostic

capability through the assessment of protocols, people and collections. The outcomes from the audit, expected to be complete in 2017, will strengthen the NPBDN and inform investment in national capability building activities in plant health diagnostics.

SPHD continues to examine and improve national surge capacity of diagnostic laboratories during emergency responses. Inquiry into surge capacity will focus on bottlenecks in laboratory workflow for selected priority pests on two testing platforms. Activities include surveys of relevant plant health diagnostic laboratories and simulation exercises.

Developing and maintaining capability to identify High Priority Pests

Protocol development

SPHD endorsed four National Diagnostic Protocols (Table 1). This brings the total number of endorsed NDPs to 38.

Table 1 – endorsed NDPs

NDP No.	Scientific name of pest	Common name of pest
30	<i>Adoxophyes orana</i>	Summer fruit tortrix
36	<i>Fusarium oxysporum</i> f. sp. <i>ciceris</i>	Fusarium wilt of chickpea
37	<i>Ophiostoma</i> spp.	Dutch Elm disease
38	<i>Puccinia striiformis</i> f. sp. <i>hordei</i>	Barley stripe rust

SPHD expressed their appreciation for the ongoing support and invested effort from New Zealand in all aspects of National Diagnostic Protocol development.

SPHD will hold a workshop to revise the Reference Standards for NDPs to incorporate information that supports surveillance diagnostics (i.e. field based sampling, field triaging and additional high throughput diagnostic procedures). Following the modifications to SPHD Reference Standards, a review of NDPs will identify additional work required to ensure that they are meeting guidelines of the revised reference standards.

Implementing quality management systems

Round five of the National Plant Health Proficiency Testing Program (NPHPTP) has commenced and participating laboratories have received specimens. A presentation on the NPHPTP was made to the QUADS (Australia, New Zealand, Canada and United States) diagnostic group. Feedback received from QUADS was highly positive and complementary.

Facilitating the development of relevant national information systems supporting diagnostics

SPHD endorsed a *National Plant Pest Reference Collection Framework*. This is the first step in the development of the *National Plant Pest Reference Collections Strategy* and implementation plan, which will ensure that nationally significant reference collections in Australia meet the needs of trade, biosecurity and science by being current, relevant, sustainable, connected and accessible.

Next meeting and further information

The next scheduled face-to-face meeting of SPHD will be held in association with the ADW in April 2017 and will be hosted by the Commonwealth Department of Agriculture and Water Resources, NAQS Cairns.

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.

