

## International Plant Sentinel Network

### Membership Agreement

The International Plant Sentinel Network (IPSN) aims to provide a mechanism for botanic gardens and arboreta to work together to contribute to global plant health efforts.

#### **Background and purpose**

- i. The majority of the most damaging alien pests and pathogens that have had or are having a dramatic impact on plant species and ecosystems around the world are considered harmless in their native areas. In their native ranges, these pests are either controlled by natural enemies, or their original host plants have evolved a certain degree of resistance. Thus, when introduced into a new geographical range, where there are no natural predators and host species have not built up natural resistance, these organisms can cause untold damage.
- ii. Pest Risk Analysis (PRA) is the conventional tool that is used to assess the potential impact pest introductions could have at a national level and is used to identify organisms that should be subject to quarantine measures. A significant problem for PRAs is that they primarily focus on well-known pests and consequently new invaders that appear unexpectedly are easily missed. A practical approach to try and overcome this problem is the use of sentinel plants. Plants that are situated outside of their natural range can be monitored for susceptibility to damaging pests and pathogens that occur in their new environment.
- iii. The main aim of the IPSN is to enhance activities that provide early warning of new and emerging pest and pathogen risks and to:
  - Link botanic gardens and arboreta and plant health scientists at a local, regional and international level;
  - Increase botanic gardens and arboreta capacity for plant pest and pathogen surveying, identification and awareness through the provision of training materials and standard protocols;
  - Create a suitable platform for sharing best practice, information regarding integrated management techniques and potential threats;
  - Provide scientific evidence to plant health regulators in order to aid PRA efforts including increased knowledge regarding known quarantine organisms and potential new risks;
  - Facilitate access to diagnostic support wherever possible;
  - Facilitate access to a high level diagnostic network that can be used when local diagnostic centres cannot determine cause of infection or identify the problem organism;
  - Facilitate the creation of reciprocal research projects between those gardens with analogous climates and mutually beneficial collections.

#### **1. Agreement**

- i. Parties agree to be members and cooperate as part of an international network of relevant organisations and institutions to contribute to safeguarding plant health.

- ii. Membership shall be open to all organisations and institutions that are botanic gardens and arboreta and institutes involved in plant pests and pathogens at a regional, national or international level.
- iii. Parties will help safeguard plant health by sharing information with their National Plant Protection Organisation (NPPO) of any outbreaks of significance and making relevant information available to those included within the network.
- iv. The IPSN will support gardens by facilitating access to local diagnostic support.
- v. The IPSN will provide a platform for members to share information with other botanic gardens and arboreta as well as local, national and international diagnosticians.
- vi. The IPSN will develop and make available guidelines for prioritising which host species to monitor, training materials in order to build pest and pathogen capacity and standard protocols and examples of best practise for monitoring.
- vii. The IPSN will promote member garden's participation in the network and thus their commitment to safeguarding global plant health.

## 2. Activities

Activities may include but will not be limited to:

- i. Identify an 'IPSN contact person' who will coordinate IPSN activities within the botanic garden or arboretum and interact with the network coordinator, other member gardens and diagnostic institutes / local contacts.
- ii. Upload plant collection records to BGCI's PlantSearch database. This will enable the IPSN to locate member gardens that house host species of interest for reciprocal projects and / or other monitoring purposes. For instructions on how to do this please go to:  
  

<http://www.bgci.org/resources/plantsearchuploadinstructions/>

*(Please note gardens do not need to be a BGCI member in order to upload plant collection information)*
- iii. Monitoring plants in collections and sharing this information according to IPSN guidelines.
- iv. Participate in local / regional forums in order to network with other member gardens and institutes involved in the IPSN.
- v. Promote and make available plant pest and pathogen training materials, standard protocols and other online resources to interested staff members.
- vi. Help develop training materials, standard protocols and other online resources by providing suitable feedback (evaluations) on initial drafts.
- vii. Champion the network to other botanic gardens and arboreta and the general public

## 3. General

- i. This agreement does not prevent or hinder members from participating in similar activities with other public or private agencies, organizations or individuals.

This agreement is not intended to be a legally binding document.