## W-19 Increasing the role of botanic gardens in urban forestry resilience towards a changing climate and an increasing urbanisation

H. Sjöman<sup>1,2</sup>, P. Douglas<sup>3</sup>, K. Martin<sup>2</sup>, T. Freeth<sup>2</sup>, and J.H. Watkins<sup>4</sup>

**Duration:** 90 minutes

**Target audience:** Everyone interested in urban forestry and urban greening within the botanic gardens community, including horticulturists, senior management representatives, researchers, educators, etc.

**Objectives:** Participants will leave the workshop:

- Knowing examples of how botanical gardens can contribute to the development of long-term sustainable green environments with high resilience for a future climate
- Knowing examples of how botanical gardens can contribute to the development of knowledge about the capacity of different species to deliver important and crucial ecosystem services in urban environments
- Understanding the unique role botanic gardens can play as communicators within the field of urban forestry
- Having developed a list of ideas for ways their garden could further contribute to this work
- Being motivated to create and develop collaborations between botanical gardens and other key organisations on research and knowledge development for the improvement of public green spaces with high biological, social and technical values and functions
- Another objective is to use this workshop with interested participants to produce a scientific publication (Perspective Paper) where the discussions and visions developed during the workshop can be presented.

**Abstract:** This workshop will focus on the increasing role of botanic gardens in research and knowledge development of urban forestry including aspects in plant selection and deliverance of crucial ecosystem services in order to create resilience for future challenges connected to a changing climate and globally increasing urbanisation.

The green infrastructure in urban environments, also recognised as urban forests, are among our best allies in the fight against climate change and biodiversity loss. In urban environments the urban forests provide us with shade, heat mitigation, flood abatement, noise and pollution reduction, pollination, beauty, etc. Today, botanical gardens constitute a very limited part of the development of knowledge about urban forestry, yet botanical collections house knowledge and experiences that are of great value in the development of resilient green urban environments with high biological, social and technical qualities.

A key objective of the workshop is to discuss how to include botanical gardens in the world of urban forestry – how botanical gardens can and should be involved in developing sustainable urban green infrastructure, and not continue to identify

<sup>&</sup>lt;sup>1</sup> Gothenburg Botanical Garden, Sweden

<sup>&</sup>lt;sup>2</sup> Royal Botanical Garden Kew, UK

<sup>&</sup>lt;sup>3</sup> Denver Botanical Garden, USA

<sup>&</sup>lt;sup>4</sup> St. Andrews Botanical Garden, UK

themselves as an isolated green bubble in the city.

The session will explore the complementary strengths among botanic gardens, seed banks, and other sectors focusing on sustainable and urban forestry. Participants will examine how such collaborations can be developed and which spinoff effects can be developed. Attendees will consider ways that botanic gardens can individually support the work of urban forestry with potential to align institutions and grow networks to advance collaborative efforts in this area.