



Keynote Speaker

Károly Hrotkó

Prof. Dr.

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Károly Hrotkó is Full Professor at the Szent István University in Budapest. He received PhD in Horticultural Science and holds the scientific title Doctor of Hungarian Academy of Sciences. He was chair of the ISHS working group 'Rootstock breeding and evaluation' (2000-2008). He is an internationally recognised expert on rootstock physiology with a long-term cooperation experience made at the Slovak University of Agriculture in Nitra. In the last 25 years, he has been working on the development of intensive cherry growing as a visiting expert in China.

Prof. Hrotkó's research and teaching focus on tree physiology, especially of fruit trees and rootstock/scion interaction. During the last decade, his team has been doing research into urban forestry, urban trees and their environmental benefits and services. His research focus includes the following issues: (1) water use and transpiration capacity of leaves on urban trees; (2) CO₂ sequestration by leaves on urban trees; (3) deposition of air pollutants on leaves of urban trees.

Environmental Services of Urban Trees

Methods for Evaluation of Environmental Usefulness of Urban Trees

Invited Keynote Speech

Although it is commonly accepted that urban trees provide inevitable environmental benefits and services that make the urban environment more liveable, the knowledge on physiological capacities of tree leaves in urban conditions is still limited. Evaluation of the environmental benefits provided by urban trees in a complex model requires in situ measurements. Such measurements and complex data are almost completely missing.

The keynote speech will present recent research results and give an overview of the possible role of urban trees in improving micrometeorological conditions, the leaf gas exchange capacities of different species and varieties, as well as the characteristics of air pollutants deposition on different urban sites. The characterisation of tree – air – urban site interactions in this system may provide useful data for planning and designing urban tree plantings.



Street trees, Nantes, France
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