

## Information about the lecture

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<b>Speaker</b>	Dr. Carlo Calfapietra
<b>Title</b>	Green Infrastructure and air quality: experiences from the Cost Action GreenInUrbs and beyond
<b>Group of topics</b>	June 20 <sup>th</sup> , 2017 Funding and other financial Inscntives - Strategies for Building Greenup
<b>Language</b>	english
<b>Content</b>	Carlo Calfapietra & Gregorio Sgrigna, CNR-IBAF, Porano, Italy

Green Infrastructure (GI) provides a number of ecosystem services such as environmental and ecological benefits as promoted by the recently launched COST Action FP1204 “Greeninurbs”. A crucial issue in urban environment is the interaction of GI with atmospheric pollution. A number of studies have assessed the effects of air pollution on GI while others have focused on their role in mitigating air pollution. This interaction is sometimes very complicated because the effect of air pollution can limit the capacity of plants to absorb the pollutant itself. We present here a number of field campaigns and laboratory analyses carried out with different plant species in order to evaluate and quantify the potential of pollutant absorption in urban and periurban GI. The analysis focused on two harmful pollutants in urban and periurban environments: Ozone (O<sub>3</sub>) and Particulate Matter (PM<sub>10</sub>; PM<sub>2.5</sub>).

Moreover for some of the previous studies, pollutant removal potential has been compared with estimates from i-Tree (UFORE) Model, which although developed for north American cities has been used and in some cases validated in our studies.