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**Short term effect of alternative fertilizers on growth and physiologic performances of London plane and sycamore**

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Chemical industries annually release several new natural and synthetic fertilizer products to help urban trees survive the stresses associated with transplanting. In fact, a 5% failure rate for new transplants within the first five years is common and in many cases, it may exceed 25% with the surviving plants not often exhibiting good growth rates. Many authors report the primary determining factor in the transplanting success in the urban environment is a prompt response of the root system to water and nutrient uptake. It is well known that a correct provision of nutrients during the initial growing phases helps to maximize the fitness of seedlings by facilitating the development of a strong root system that can overcome post-transplanting stresses. Our project is aimed at testing the effects of two commercially-available products (biostimulants), considered alternatives to traditional fertilizers, applied at different concentrations and frequency during the growth season, in order to produce plants that are fit for transplanting into the urban environment. Experiments have been conducted on two species (*Platanus x acerifolia* and *Acer pseudoplatanus*), traditionally and frequently used as shading trees in Northern and Central Europe. Treatments were applied on young trees cultivated in greenhouse under standard growing conditions. The results of this study can provide precise information and recommendations of new cultivation methods to facilitate the rapid and effective establishment of new plantings in the urban environment.

**Biography**

Manuela Baietto has earned her PhD in Plant Biology and Crop Production in 2008 from University of Milan. She is Researcher and Teaching Assistant at Department of Agricultural and Environmental Sciences. Her main research interests include non-invasive diagnosis of wood diseases by means of sensory tools techniques, planting, analysis and management of green areas and the improvement of agricultural techniques for the cultivation of forest and ornamental trees in the nursery.

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