



Biochar as a soil amendment to improve tree survival and health in the urban environment

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Abstract:

Biochar has been suggested for use as a soil amendment as a means to sequester carbon, as well as increasing plant productivity by improving water holding capacity and nutrient retention of the soil. This study aims to determine if biochar is a viable soil amendment for trees planted into an urban landscape to increase planting survival rates and tolerance to abiotic stressors (e.g. salinity, drought, compaction), whilst attempting to define which physiological/biochemical responses induced by biochar produce these results. The significance of biochar feedstock and production conditions in providing these improvements will also be discussed. The benefits of trees in urban landscapes are well recognized, including improvements in human mental and physical health, environmental conditions and ecological value.

Biography:

Emma Schaffert is currently studying for her PhD at the University of Reading, UK into the use of biochar to enhance stress tolerance of urban trees. She is also a Research Technician at the Bartlett Tree Research Laboratory. She has authored several papers and technical articles in the areas of biochar, pest and disease protection, and soil science.

Recent Publications:

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and M. Collins. 2009. Biochar applications in soil. pp. 207–226. In: J. Lehmann and S. Joseph (Eds.).

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