

2nd International Conference & Expo on **Green Energy, Recycling & Environmental Microbiology**

November 28-30, 2016 Atlanta, USA

Comprehensive evaluation of biochar application in rice production in Ghana

Ernest Ohene Nkansah
University of Tsukuba, Japan

In the face of the dual challenge to mitigate global climate change and ensure food security for the growing global population, biochar promises to be an option for curbing these challenges. This is due to its properties like: enhancement of soil fertility and crop productivity, soil water retention and carbon sequestration. As a new technology, the introduction of biochar into farming faces lots of challenges and uncertainty. Biochar is a carbonaceous substance and a type of charcoal created through pyrolysis of biomass which is produced with the intent to apply to soil for agricultural and environmental management. Despite the multifaceted benefits obtained from biochar, there is inadequate work on the profitability and feasibility of the technology especially in developing countries primarily due to its cost of implementation. Farmers and other stakeholders therefore have little interest in investing or buying into the technology due to inadequate information on the profitability and risks involved. Biochar advocates therefore need to give a convincing argument to farmers about the benefits of biochar application in agronomy. This research therefore seeks to compare the social and private cost against their respective benefits in a cost benefit analysis to confirm feasibility of the technology in Ghana. Based on the results obtained policy options will be suggested for sustainable and effective implementation of the technology.

Biography

Ernest Ohene Nkansah is an Agricultural Engineer at the Ministry of Food and Agriculture, Ghana and is currently on a Government Scholarship for a Master's degree program in Environmental Science in Japan. He has a publication with the *Agriculture and Biology Journal of North America* to his credit and is an award winner for Ghana during a training course in China on the treatment and utilization of agricultural waste for African English speaking countries in 2014.

ernestobrempong@hotmail.com

Notes: