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Biochar from deinking paper sludge as a peat replacement in growing media preparation

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Nowadays, there is an important trend in Europe for peat replacement with biochar in growing media formulation in order to reduce the environmental impact of peat exploitation. One evidence is the the creation of a working group on peat replacement within the framework of an EU COST action Biochar as option for sustainable resource management funded by the European Union. The use of biochar can reduce the environmental impact peat uses and also it can diminish the economic cost of different growing media ingredients as coir, bark or green waste compost in soil-less cultivation. The objective of this work was to study the use of biochar from deinking paper sludge in the formulation of growing media. For this reason, peat and coir were replaced by prepared biochar. Hydrophysical and chemical properties of different substrates were tested. At the same time, plant growth assay was designed. Results shown that is possible to use biochar to replace peat in growing media formulation obtaining similar crop yields.