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REDUCED UPTAKE OF Cd AND Pb BY *Miscanthus sinensis x giganteus* CULTIVATED ON POLLUTED SOIL AND ITS USE AS BIOFUEL

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Abstract

The cultivation of *Miscanthus sinensis x giganteus* on a polluted soil near Copsa Mica – Romania has started in 2008. Since then every March and August the roots and stems have been analyzed, showing a very low amount of heavy metals in the aerial parts in February, when the harvesting takes place. The combustion properties of the material are similar to those of lignite, but without sulphur and with low ash amount. Because cultivation of edible plants poses the risk of heavy metal entering into the food chain, and soil remediation is unlikely, the cultivation of this plant and its subsequent usage as biofuel could become a feasible solution for the sustainable use of the soils polluted with Cd and Pb.

Key words: Copsa Mica, heating value, heavy metal uptake, *Miscanthus sinensis*

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