

## عنوان مقاله:

Evaluation of Heavy Metal Removal Using Phragmites Australis (Cav.) and Schoenoplectus Californicus (C.A. Mey.):  
A Comparison of the Dry Ashing and Wet Digestion Method

## محل انتشار:

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## خلاصه مقاله:

This study presents the evaluation of heavy metal removal using Phragmites australis (Cav.) and Schoenoplectus californicus (C.A. Mey.) in a laboratory wetland test (10-days). Two digestion methods: Dry Ashing (DA) and Wet Digestion (WD) to determine the final concentration of heavy metal in roots and stems of both plants were used. The final concentration of Cu (5.14 ug.g<sup>-1</sup>), Zn (27.34 ug.g<sup>-1</sup>) and Fe (107.91 ug.g<sup>-1</sup>) were determined in the roots of the Schoenoplectus californicus (C.A. Mey.). While in its stems the highest concentration of Pb (1.69 ug.g<sup>-1</sup>) was founded. In Phragmites australis (Cav.) the high concentrations of Cu (2.44 ug.g<sup>-1</sup>), Zn (5.22 ug.g<sup>-1</sup>) and Fe (28.10 ug.g<sup>-1</sup>) are found in the roots and Pb (0.70 ug.g<sup>-1</sup>) in the stems. Regardless of the plants studied, the WD method was the most suitable pretreatment method for determining Cu and Fe concentrations, while the DA method was the best for Zn and Pb.

## کلمات کلیدی:

dry ashing, Phragmites australis, Phytoremediation, Schoenoplectus californicus, Wet digestion

## لینک ثابت مقاله در پایگاه سیویلیکا:

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