Geophysical Research Abstracts Vol. 18, EGU2016-407, 2016 EGU General Assembly 2016 © Author(s) 2015. CC Attribution 3.0 License.



Impact of the post fire management in some soil chemical properties. First results.

Marcos Francos (1), Paulo Pereira (2), Meritxell Alcañiz (1), and Xavi Úbeda (1)

Department of Physical Geography and AGR. University of Barcelona. Barcelona. Spain. (marcosfrancos91@gmail.com),
Environmental Management Centre, Mykolas Romeris University. Vilnius. Lithuania.

Post-fire management after severe wildfires has impact on soil properties. In Mediterranean environments management of fire affected areas is a common practice. This intervention may change soil chemical properties of the soil such as major cations. The aim of this work is to study the impact of different types of forest management in soil extractable calcium, magnesium, sodium and potassium after a severe wildfire. The study area is located in Ódena (Catalonia, Spain). The wildfire occurred at July 27th of 2015 and burned 1235 ha. After the fire an experimental plot was designed 9 plots with 2x2 meters (4 square meters). The different managements were: a) clear-cuted area and wood removed, b) no treatment); and c) clear-cutted. The results of the first sampling showed significant differences among all treatments in extractable calcium, sodium and potassium. The amount of these extractable elements was high in clear-cutted treatment in comparison to the others. No differences were identified in extractable magnesium. Overall, in the immediate period after the fire, burned area management, changed the studied soil properties. We are currently studying the evolution of this soil properties in these plots with the time