

Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



AGE003-04

Room:202

Time:May 27 15:15-15:30

Enhancing Infiltration and Carbon Storage in Soils by Artificial Macropore Systems

Yasushi Mori^{1*}, Tetsuya Yamamoto¹, Atsushi Fujihara¹

¹Shimane University

Soil is largest carbon storage body in all terrestrial medium such as vegetation and the atmosphere. However, these days, soils could not show its function as water storage layer or culture medium for plant, because of climate change or rough management. In this study, artificial macropores are introduced in soils, then, effective solute transports in soils are performed by controlling convection and dispersion of solutes. Organic matters at surface soils are effectively introduced into the soil body, which would enhance carbon storage in soils and remediate soil environment.

Keywords: soil, macropore, infiltration, carbon storage