Geophysical Research Abstracts
Vol. 12, EGU2010-11477-1, 2010
EGU General Assembly 2010
© Author(s) 2010

Characteristics of fulvic acid extracted from different size soil aggregates

Kai Li (1,2) and Sen Dou (1)

(1) Faculty of Natural Resource and Environment, Jilin Agricultural University, Changchun, Jilin province, China 130118; email: dousen@tom.com, (2) Department of Letters and Science, Jilin Agricultural Science and Technology College, Jilin, Jilin province, China 132101,kaili1122@126.com

Aggregate and Organic matter are the basic matter of keeping soil structure and fertility. The relationship between aggregate and soil organic matter was closely. The aggregate separate method and modified humus composition method were combined and the characteristics of fulvic acid in different soil aggregates were studied in this paper. The results showed that comparing FA of the three size aggregates (2∼0.25mm, 0.25∼0.053mm and <0.053mm), the C/H ratios of 2∼0.25mm aggregates were highest, butlgK and the E_4/E_6 and 2920/1620 ratios were lowest. The C/H ratio of 0.25∼0.053mm aggregates were lowest,ΔlgK and the E_4/E_6 ratio were highest. The 2920/2850 ratios of <0.053mm aggregates were higher.

KEYWORDS Different size soil aggregate; Fulvic acid; Elemental composition; Infrared spectroscopy; Differential thermal analysis.