

Comparison of the CEC in two soils using Ammonium Acetate, and Sodium Acetate and Ammonium Chloride

O. Rodríguez² y A. Rodríguez²

Abstract

An acid (Tropohumult) and an alkaline (Camborthid) soil were used in this research. The objective consisted in determining if the mean values measuring CEC with the NH_4Cl 0,2 N method proposed, would produce consistent, repetitive and comparable results with those obtained with the two CEC routine methods (Ammonium Acetate and Sodium Acetate). Results showed that the CEC values obtained with the two routine methods were highly variable. CEC results obtained with the Ammonium Chloride method showed low variability in the soil in Quibor. It would seem that the use of the Ammonium Chloride method would avoid a series of error sources inherent in the two routine methods, because the NH_4Cl 0,2 N does not modify the soil pH nor dissolve carbonates as occurs in the two routine methods compared. Results for the acid soil of Villanueva showed high variability.

Key words: ECEC, Tropohumults, acid soils, Camborthids, Alkaline soils.

Recibido el 11-5-2001 ● Aceptado el 26-7-2002

1 Financiado por el proyecto CDCHT-UCLA 03-2A-96.

2 UCLA Decanato de Agronomía. Dep. de Química y Suelos. Apartado 400. Lara-Venezuela.
Email: orodrigu@telcel.net.ve