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Evaluation of the Behavior of Micronutrients in Salty Soils of Low Cheliff

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Abstract : The study investigates the assessment of micronutrient bioavailability and behavior in saline soils based on the determination of three cations and one anion on three soil profiles affected by secondary salinization in Lower Cheliff. The chemical fractionation method was used for the speciation study (different forms) of micronutrients in these soils. The results show that total form quantities of cations are height than norms in agricultural soils, thus the quantities of anion are lows. At the other hand, the quantities of available forms are lows. Statistical analysis reveals that cationic micronutrients localize preferentially in the coarse fraction of the soil in salty conditions and that sodicity causes a decrease in the iron reserve in the soil. The pH range '7.49 - 8.76' represents a constraint for the complexation of micronutrients by organic matter. The study concluded that quantities of total and available forms of micronutrients in salty soils are influenced by soil properties such as: pH, electrical conductivity and exchangeable sodium.

Keywords : chemical fractionation, micronutrients, salty soils, speciation
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