

AVAILABLE MICRONUTRIENTS IN SOILS OF CHIKKARSINKERE HOBLI OF MADDUR TALUK, MANDYA DISTRICT OF KARNATAKA

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Abstract: Available micronutrients and their relationship with different soil properties was studied in four hundred soil samples collected from different locations of 42 villages representing the soils of Chikkarsinkere hobli of Maddur Taluk Mandya district of Karnataka. The soils were analysed for textural separates, physico-chemical properties and status of available micronutrients. On the basis of pH and EC values, these soils are moderately acidic to very strongly alkaline (5.6 to 9.4). Majority of the soils under study area were found deficient in available zinc. Available iron, copper and manganese were sufficient to adequate. The availability of micronutrients in soils significantly influenced by soil properties viz, textural separates, organic carbon, CaCO₃, CEC and pH of soils. Available Zn ranged between 0.02 to 6.36 mg kg⁻¹ with a mean value of 0.63 mg kg⁻¹, available Fe ranged from 0.14 to 95.4 mg kg⁻¹ with a mean value of 25.29 mg kg⁻¹. Available Cu ranged between 0.14 to 6.10 mg kg⁻¹ with a mean value of 1.29 mg kg⁻¹. Available Mn ranged between 1.20 to 40.20 mg kg⁻¹ with a mean value of 13.41 mg kg⁻¹. Organic carbon, clay, and CEC were positively correlated with available Zn, Fe, Cu and Mn while pH, CaCO₃ and sand were negatively correlated.

Keywords: Available micronutrients, Fertility, Correlation, Critical limit

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