

## Research Article

# Distribution of micronutrient cations (Zn, Cu, Mn, Fe) and their relationship with soil properties of saffron growing soils of district Kishtwar in J&K

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### Summary

Sixty surface soil samples representing twenty saffron growing villages of district Kishtwar in Jammu & Kashmir were analyzed for the basic soil parameters viz., pH, EC, OC and texture. The available micronutrients (DTPA extractable) viz., Zn, Cu, Mn and Fe were investigated by using atomic absorption spectrophotometer. The availability of micronutrients and their relationship with soil properties were also studied. Soil DTPA-extractable micro-nutrients, Zn, Cu, Mn, and Fe ranged from 1.24 to 5.55, 1.20 to 2.97, 13.26 to 47.56 and 7.17 to 17.17 mg kg<sup>-1</sup> with mean values of 2.34, 2.10, 22.35 and 10.65 mg kg<sup>-1</sup>, respectively. This showed that the soils were sufficient in these nutrients. DTPA extractable Cu, Mn and Fe gave negative significant correlation with soil pH. Cu was positively and significantly correlated with organic carbon. Further, Mn showed positive correlation with clay.

**Key words :** DTPA-extractable, pH, Micronutrients, Soil properties, Saffron

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