Research Article

Soil fertility status of tomato (*Lycopersicon esculentum*, Mill) grown in areas of Hassan district, Karnataka

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**Summary**

Hassan and Belur taluks are the major tomato growing areas in the district and hence, this study was restricted to these two taluks. Surface soil samples from a depth of 0-15 cm were collected from 80 tomato-grown plots. Study revealed that the soil pH ranged from neutral to alkaline range (6.9 - 8.5) while, the electrical conductivity was in the range of 0.05 to 0.95 dS m\(^{-1}\). The soil organic-C content varied to a large extent 1.3 to 12.8 g kg\(^{-1}\). The soil organic-C content was low in more than 50 per cent of tomato soils. The available nitrogen content ranged from 205.0 to 376.3 kg ha\(^{-1}\). More than 70 per cent of tomato fields were found low in nitrogen. In contrast, both available phosphorus and potassium contents were found higher in majority of tomato grown soils. The available phosphorus was found high in almost all soils. Similarly, the available potassium content was higher in 90 per cent plots. None of the tomato grown soils were found lower in calcium while, 9 per cent of the fields recorded magnesium in lower. The available sulfur content was low in almost 68 per cent of tomato soils (5.6 ± 2.5 mg kg\(^{-1}\)) and only 9 per cent of fields recorded higher sulphur content. The DTPA-Fe, Mn, Cu and Zn were found higher in 93, 91, 57 and 68 per cent of the tomato grown soils, respectively

**Key words**: Soil fertility, Tomato, Nutrient status