

RESEARCH ARTICLE

Use of dexcel map method for mapping of soil fertility status in Itagi village of Ranebennur Taluk, Karnataka

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SUMMARY

It is possible to prepare soil fertility maps by use of MS office (word / Excel / power point) using village land map with survey numbers in excel sheet. The village Itagi is a part of Ranebennur taluk, Karnataka, India which has major soil types black clay soil and red sandy loam soil. Problem cause analysis indicated the low soil fertility status and unscientific use of fertilizers as the reasons for low crop yields. In 86 random locations (on selected survey numbers) soils are sampled, labeled and processed. Samples are analyzed for soil pH, electrical conductivity (EC), organic carbon, macro nutrients and micro nutrients. The status of soil for each property is classified into three classes. Looking to each survey number on the excel sheet, the polygons are filled with colours for respective classes (low, medium and high). The results revealed that 69 per cent of samples belong to alkaline pH and oil salinity is medium in the area. Available nitrogen and phosphorous are low (59 % and 48 %) and available potash is medium (70 %). Organic C belongs to medium to low category. B belongs to low category, while majority of the soils have low status of other micronutrients except Cu. The DEXCEL maps prepared for pH, Av. NPK and organic C indicate the status of soil properties in the village land on respective survey numbers. Which side of the village, the particular soil parameter belongs to low category can be observed and suitable measure can be adopted for the management.

Key Words : Dexcel map, Method for mapping, Soil fertility status

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