



Research Paper

## Preparation of soil fertility map of Babhaleshwar Farm, Nashik, Maharashtra, India

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### Summary

For efficient utilization of soil and water resources, soil testing of such farm was carried out in Nashik. Babhaleshwar farm for providing comprehensive information was characterized. Representative soil samples from each of eighteen plots of Babhaleshwar farm were collected. The soil survey of representative area was completed by plane table survey method. The soil samples were tested in laboratory for determining various soil properties viz., soil pH, soil electrical conductivity, soil colour, soil texture, liquid limit, plastic limit, bulk density and soil nutrients like organic carbon content, gypsum content, soil calcium carbonate, available nitrogen, available potassium and available phosphorus. From result obtained after analysis data were filled into the software and prepared soil fertility software. A standard soil fertility map is a two dimensional document presented on a paper or on various other kind of supports and gives greatly reduced, simplified pictures of the spatial organization of soils in the natural environment showing the soil properties and available soil nutrients. The work is carried out for preparation of soil fertility map of Babhaleshwar farm which belongs to K.K. Wagh Education society, Nashik. The Babhaleshwar farm is situated in the Shinde palae at Sinnar, Nashik. The area of farm was about 32.61 ha. The area selected for project work is 10.05 ha. There are 18 plots in the farm.

**Key words :** Soil fertility map, Soil properties, Soil survey and sampling

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### Introduction

Agriculture being the backbone of Indian economy, it is necessary that agricultural activities should be more productive and precise. More production can be achieved, if soil and water are efficiently used. For efficient utilization of these resources, it is important to prepare a soil fertility map showing different to properties of soil. Soil survey is a study and mapping of soil in their natural environment. It is the systematic examination, description, classification and mapping of an area. It is one of the best tools for the management of soil resources. Mapping of soil i.e. establishing and drawing soil boundaries of different kinds of soil on standard topographical base map. Soil sampling is most important step in a good soil testing programme. The chemical analysis of soil will measure the nutrient status of the soil and

serve as a guide to profitable use of fertilizers. Soil samples are collected from the field to study the soil types and to evaluate the fertility status of the soil. Hence, it is necessary to collect the composite soil sample from the field.

A standard soil fertility map is a two dimensional document presented on a paper or on various other kind of supports and gives greatly reduced, simplified pictures of the spatial organization of soils in the natural environment showing the soil properties and available soil nutrients. The work was carried out for preparation of soil fertility map of Babhaleshwar farm which belongs to K. K. Wagh Education society, Nashik. The Babhaleshwar farm is situated in the Shinde Palace at Sinnar, Nashik. The area of farm was about 32.61 ha. The area selected for project work is 10.05 ha. There are 18 plots in the farm. This work was carried out in the year of 2010-2011 in above mention farm. The basic objective of