

Analysis of Soil to Ensure NPK Proportion at Various Sites of Manikpunj Village, District Nashik (M.S.) India

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Abstract: Nitrogen (N), phosphorus (P) and potassium (K) are the vital macronutrients of the soil that potentially controls the growth and development of various crops. Adequate availability of NPK in the soil is important to accelerate crop growth and improve yield. It is time to investigate the NPK proportion of different soils before growing crops to minimise losses for farmers and crop choice. Soil samples from various sites of Manikpunj village have been collected by visiting the fifteen farmers, and analysis of NPK has been carried out using standard methods. The proportion of NPK in various soils is controlled by rocks, climate, geomorphology, biological activity, and time. In the present work, the authors gathered data regarding NPK proportion in soils collected from various sites of Manikpunj village in Nashik district. It was observed that different areas of soil had different physicochemical characteristics. Proper use of suitable inorganic fertilisers (N-P-K) would effectively sustainable the management and improve soil fertility status. Such types of monitoring of soil samples are beneficial to knowing the concentration of various parameters present in the soil. From the above study, it is observed that, in the soil of the Manikpunj village area, the potassium is present in samples F2, F3 at a higher concentration and moderate concentration of nitrogen in samples F1, F5, F6 and samples F6, F9, was observed with very less phosphorus content. As per our data, we recommended that Manikpunj village farmers preferably Cultivate leguminous crops once a year or use biofertilisers, Vermicompost fertilisers, and chemical fertilisers rich in nitrogen and phosphorus to cultivate various crops in their field.

Keywords: Soil, NPK, Crop, Manikpunj, Growth, Biofertilizers

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