

SOIL TEST CROP RESPONSE (STCR) CORRELATION STUDIES ON WHEAT

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Abstract: Soil test crop response (STCR) correlation studies on Wheat were carried out in village Chirkoma, district Balrampur (C.G.) during Rabi 2012-13 taking MP-1203 as test crop to quantify Wheat production in the context of the variability of soil properties and use of balanced fertilizers based on targeted yield concept. Soil properties show moderate variation in texture (Sandy to sandy loam), organic carbon content (3.0 to 9.0 g/kg), and pH (4.67 to 7.52). Soil fertility status for N is low to medium (140 to 260 kg/ha), P is low to medium (5.28 to 14.56 kg/ha) and K ranges from medium to high (146 to 387 kg/ha). Database regarding nutrient requirement in kg/t of grain produce (NR), the percent contribution from the soil available nutrients [CS (%)] and the percent contribution from the applied fertilizer nutrients [CF (%)] were computed for calibrating and formulating fertilizer recommendations. The yield target for 30 q/ha was tested in farmers' fields. The percent achievement of targets aimed at different level was more than 90%, indicating soil test based fertilizer recommendation approach was economically viable within the agro-ecological zone with relatively uniform cropping practices and socio-economic conditions.

Keywords: Nutrient requirements, Wheat, Yield target

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