

EVALUATION OF IMPROVED NUTRIENT MANAGEMENT PRACTICE IN YIELD OF RICE IN JHAPA DISTRICT

ABHISHEK SHRESTHA, GANESH GUPTA, ABHIMANYU SHRESTHA & ROSHAN SUBEDI

Institute of Agriculture and Animal Science, Lamjung Campus, TU Lamjung, Nepal

ABSTRACT

Rice is one of the most important cereal crops in Nepal. As per the preliminary estimate of f.y.2014/15, the rice crop was grown in 1,425,346 ha and producing 4,788,612 mt and its productivity is 3.171 t/ha. It contributes nearly 20% to Agricultural Gross Domestic Product and provides more than 50% of the total calories required to the Nepalese people. But the productivity of Nepal is very less compared to other developed country. The main cause is the less use of fertilizer and lack of site nutrient management technology. So A field experiment was conducted on farmer's field at two sites of Jhapa district viz. Dhukurpani(Damak)and Gauradha using Nutrient Expert® Rice model from 3rd week of July to 2nd week of october. The research design was Randomized Completely Block Design with 3 treatments and 13 replication. Three treatments were NE (Nutrient Expert recommendation), GR (Government recommendation), and FP (Farmer practices). The result revealed significant difference in terms of no. of effective tiller/ m², plant height, yield at 15.5% moisture and straw weight. The highest yield (5 ton ha⁻¹) was obtained from NE field which was followed by GR (4.08 ton ha⁻¹) and FP (3.8 ton ha⁻¹). NE based practices produced (1.2 ton) higher yield and in comparison with GR it produced (0.7 ton ha⁻¹) higher yield .Comparison of Nutrient Expert® (NE) estimated attainable Rice yield provided by the software with actual Rice yield from the farmer field trial; NE-based fertilizer recommendations proved to be successful in reaching the yield targets estimated by the software. The actual Rice yields recorded in farmer fields were similar than the NE estimated attainable yields, so NE recommendation was found better over GR and FP

KEYWORDS: Nutrient Expert, Government Recommendation, Farmers Practice