

Boosting mustard production through integrated nutrient management front line demonstrations

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SUMMARY

Mustard is an important *Rabi* oilseed crop of India. It occupies about 24.20 per cent of area and 48.28 per cent of production of the total oilseed production in India. A majority of the farmers in Rajasthan do not apply balance fertilizer of NPK and S in this sequence, mainly because of their ignorance about its role as well as high cost. The oilseed based cropping system and application of continuous profit motivated imbalanced nutrient application is the matter of great concern for sustainability. In spite of heavy inputs, the net result in such a system is the decline in crop productivity because of limitation of one or more nutrients. To overcome the yield gap 30 integrated nutrient management front line demonstrations of recommended package of practices involving balance fertilizer (@ 60 kg N₂+ 40 kg P₂O₅ + 250 kg gypsum or 40 kg S ha⁻¹) at adopted farmers fields were laid out during *Rabi* 2008-09 to 2009-10 in two villages of two tehsils. Existing farmer's practices as control were taken for the comparison. Integrated nutrient management front line demonstrations on mustard variety Vasundhara and Bio-902 (Pusa Jai Kisan) were conducted at farmers fields in district Chittorgarh (Rajasthan) during *Rabi* seasons of the years 2008-2009 and 2009-2010. On two years overall average basis about 28.41 per cent higher grain yield was recorded under demonstrations than the farmers' traditional practices. The extension gap, technology gap and technology index were 4.53 qha⁻¹, 3.37 qha⁻¹ and 14.04 per cent, respectively. On two years overall average basis incremental benefit: cost ratio was found as 2.79. The trend of technology gap reflected the farmer's cooperation in carrying out demonstrations with encouraging results in subsequent years. By conducting integrated nutrient management (INM) front line demonstrations of proven technologies, yield potential of mustard crop could be enhanced to a great extent with increase in the income level of the farming community.

Key Words : Mustard, INM- front line demonstration, Technological gap, Extension gap, Technological index

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