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CALIBRATION OF FERTILIZER (NPK) DOSES FOR GARLIC

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ABSTRACT

Field studies were carried out to find out the optimum fertilizer (NPK) requirements of garlic. These fertilizers were applied in different combinations with and without FYM. In 1992-93, NPK dose of 150-50-25 kg ha^{-1} producing a yield of 12.0 t ha^{-1} was found to be an economical dose with maximum VCR 11.9. In 1993-94, maximum economical return (13.9 VCR) was obtained by applying 100-50-0 kg ha^{-1} of NPK without FYM.

INTRODUCTION

Garlic has long been recognized all over the world as a valuable spice for food and a popular remedy for various ailments and physiological disorders. It contains carbohydrates (33.1%) proteins (6.4%) Fat (0.5%), Fiber (1.5%) and phosphorus (0.15%) (Lorenz and Maynard 1988). Garlic is also a commercial vegetable crop having a promising potential for export purposes. Pakistan started its export in 1979-80 with 9 [illegible]

obtained 24.88 t ha^{-1} garlic yield with the application of 100 kg ha^{-1} of N and P. A significant increase in yield of garlic (20.5 t ha^{-1}) has been reported by Maksoud (1985) with the application of 360 kg N and 142 kg P_2O_5/ha. A favorable effect of FYM alongwith mineral fertilizers has been documented by Shinde and Soutakke (1986) as the highest yield of garlic was obtained with the application of 120, 60 and 120 kg of N, P and K, respectively alongwith 40 t of FYM /ha. In Indian Punjab 125-62-0 kg ha^{-1} dose of NPK is recommended for garlic (Tandon, 1991).

The standardized optimum fertilizer recommendations for garlic are lacking as little research efforts have been focussed and reported in this connection in Pakistan. The study was therefore, undertaken to asses and calibrate the optimum fertilizer doses for garlic to obtain maximum and economical yield.

MATERIALS AND METHODS