International Journal of Agricultural Sciences
Volume 8 |Issue 1| January, 2012 | 63-65

RESEARCH PAPER

Impact of integrated nutrient management on the yield performance of summer tomato (*Lycopersicon esculantum* Mill.) cv. KANCHAN SPECIAL

PAVITRA DEV, I.P.SINGH, SATYAPARKASH[1], BRAJ MOHAN*, VINUJ KUMAR AND MANENDER SINGH

Sardar Vallabhbhai Patel University of Agriculture and Technology, MEERUT (U.P.), INDIA

Abstract **:** The experiment was conducted at Horticultural Research Centre of Sardar Vallabhbhai Patel University of Agriculture and Technology; Meerut-250110 (U. P.) during spring season, 2009 with cv. KANCHAN SPECIAL. The current approach of integrated nutrient management focused on disseminating the technical know how to major stakeholders to optimize use of organic and inorganic for sustainable agriculture. The experiment consisted eight treatments during the study. The highest yield of tomato was recorded with the application of FYM and recommended dose of NPK fertilizer. The yield parameters of summer tomato like, no. of fruit /plant, fruit weight (g), fruit diameters (cm) and fruit yield (q/ha) was found significantly highest at the treatment combination T_6 (60 kg N+ 30 kg P_2O_5+ 40 kg K_2O +30 tonnes FYM/ha.) followed by other treatments.

Key Words **:** Tomato, FYM, Vermicompost, N, P and K

View Point Article **:** Dev, Pavitra, Singh, I.P., Satyaparkash, Mohan, Braj, Kumar, Vinuj and Singh , Manender (2012). Impact of integrated nutrient management on the yield performance of summer tomato (*Lycopersicon esculantum* Mill.) cv. KANCHAN SPECIAL. *Internat. J. agric. Sci.*, **8**(1): 63-65.

Article History **: Received :** *06.07.2011;* **Revised :** *14.08.2011;* **Accepted :** *08.10.2011*

INTRODUCTION

Tomato (*Lycopersicon esculentum* Mill.,) is one of the most popular fruit vegetable of the family Solanaceae, grown in the world. Tomato is universally treated as a protective food and is also a very good source of income to small and marginal farmers. It is a rich source of minerals, vitamins and organic acid (healthy acid). An adequate application of fertilizers and optimum plant population assume great importance in yield maximization of a particular crop. Major component of organic farming are organic manures, biofertilizers and biopesticides (Asokan *et al*., 2000). Organic manures not only balance the nutrient supply but also improve the physical and chemical properties of soil (Nair and Peter, 1990). During the decades, the concept of integrated nutrient management aims at efficient and judicious use of all major sources of plant nutrients in an integrated manner so as to get maximum economic yield without any deleterious effect on physiological and biological properties of the soil. The organic manuring has positive influence on soil texture and water holding capacity. In this connection to give more emphasis on organic vegetable, production, which minimizes cost of production, increase quality of product and maintain the soil fertility.

MATERIALS AND METHODS

The present investigation was carried out on summer tomato cultivar Kanchan Special during the year 2009 at Horticultural Research Centre of Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut-250110 (U. P.). The experiment was conducted in Randomized Block

*** Author for correspondence. Present Address:** Department of Horticulture, Gocher Mahavidyala, Rampur Maniharan, SAHARANPUR (U.P.) INDIA

[1]S.V.B.P. University of Agriculture and Technology, Krishi Vigyan Kendra, Baghra, MUZAFFARNAGAR (U.P.) INDIA