



## Research Paper

**Article history :**

Received : 12.06.2013

Revised : 23.09.2013

Accepted : 07.10.2013

# Influence of chemical fertilizers and biofertilizers on dry matter yield and NPK uptake by cabbage (*Brassica oleracea* var. capitata Linn.)

■ V.K. SINGH<sup>1</sup>, K.P. SINGH AND ASHISH RANJAN<sup>1</sup>

**Members of the Research Forum**

**Associated Authors:**

<sup>1</sup>Department of Horticulture, Bihar Agricultural University, Sabour, BHAGALPUR (BIHAR) INDIA

**Author for correspondence :**

**K.P. SINGH**

Department of Horticulture, Bihar Agricultural University, Sabour, BHAGALPUR (BIHAR) INDIA  
Email : vikuranjan@gmail.com

**ABSTRACT :** An experiment was carried out during Rabi 2006-07 and 2007-08 at Bihar Agricultural College, Sabour to find out the effect of inorganic fertilizers and bio fertilizers on dry matter yield per plant and NPK-uptake by plant from soil. Five levels of inorganic fertilizers ( $F_1-N_{80}P_{40}K_{40}$ ,  $F_2-N_{120}P_{60}K_{60}$ ,  $F_3-N_{160}P_{80}K_{80}$ ,  $F_4-N_{200}P_{100}K_{100}$  and  $F_5-N_{240}P_{120}K_{120}$ ) and five treatments of bio fertilizers ( $M_1-O$ ,  $M_2-Azotobacter$ ,  $M_3-Azospirillum$ ,  $M_4-VAM$  and  $M_5-PSB$ ) were taken. The data of two years were pooled and analysed. The results of the investigation revealed that maximum dry matter production per plant and NPK- uptake by plant from soil was obtained at fertility level of  $N_{200}P_{100}K_{100}$ . The interaction effect of inorganic fertilizers and bio fertilizers were also found highly significant. The plant grown at fertility level of  $N_{200}P_{100}K_{100}$  along with application of *Azospirillum* as seed and seedlings treatment as well as soil application gave the highest dry matter yield per plant as well as NPK – uptake by plant from the soil.

**KEY WORDS :** Chemical fertilizer, Biofertilizer, NPK, Cabbage

**HOW TO CITE THIS ARTICLE :** Singh, V.K., Singh, K.P. and Ranjan, Ashish (2013). Influence of chemical fertilizers and biofertilizers on dry matter yield and NPK uptake by Cabbage (*Brassica oleracea* var. capitata Linn.). *Asian J. Hort.*, 8(2) : 568-571.