## GROWTH AND PRODUCTIVITY OF TOMATO (LYCOPERSICON ESCULENTUM MILLER) GROWN IN GREENHOUSE AS AFFECTED BY ORGANIC, MINERAL AND BIO-N-FERTILISERS

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ABSTRACT : The effects of organic, mineral and bio-N-fertilisers on growth and productivity of tomato plants (Lycopersicon esculentum Miller) grown in greenhouse under sandy soils conditions were studied in two experiments carried out in newly reclaimed land. The results indicated that, applying organic manure (chicken manure in high rate) combined with bio-N fertiliser (rhizobacteria) and mineral-N fertilisers gave the vigorous plants expressed as plant length, number of leaves and stems as well as shoots dry weight in both seasons. Moreover, it increased number of fruits, average fruit weight and total fruit yield per plant as well as the best physical properties of fruits i.e., diameter and flesh thickness. In addition, it gave the best values of total acidity, vitamin C content, TSS percentage, dry matter and N, P, K, Fe, Mn, Zn, Cu, Ni and Pb contents of fruits. It could be noticed that organic, mineral, or bio-N fertiliser applied alone had a little effect if compared with mixed application of two of them or combined application of all of them.

Key words: chicken manure - vitamin C - Ni and Pb content