

## **Effect of organic manures and inorganic fertilizers on plant growth of indeterminate tomato (*Solanum lycopersicum* L.) hy. GS-600**

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Received June 5, 2018 and Accepted August 13, 2018

**ABSTRACT** : Improvement in plant growth can be brought about by the application of different doses of essential nutrients. Continuous and unscrupulous use of fertilizers, without the incorporation of organic manure cause environmental degradation especially, in the soil thereby affecting its fertility on long term basis. For maintaining optimum productivity of the land and building up of soil fertility, the addition of organic manures to crops has been suggested. Hence, the present investigation was carried out to find out the effect of different treatment combinations of organic manures along with various levels of inorganic fertilizers on plant growth improvement of indeterminate tomato (*Solanum lycopersicum* L.) hy.GS-600, the results revealed that the T<sub>7</sub> (50% RDF + 12 t FYM/ha) was recorded maximum plant height (171.34 cm), cluster per plant (7.47), number fruits per cluster (7.11) and average fruit weight (76.62 g). This should be practiced to achieve desired yield and they played direct role in supplying macro and micro nutrients and indirectly in improving the physical, chemical and biological properties of soil.

**Key Words** : Organic manures and inorganic fertilizers, plant growth, indeterminate tomato hy.GS -600.