Tomato

Manuring & Fertilization

The fertilizer dose depends upon the fertility of soil and amount of organic manure applied to the crop. For a good yield, 15-20 tonnes of well-decomposed FYM is incorporated into the soil. Generally, application of 120 kg N, 80 kg P_2O_5 and 50 kg K_2O per hectare is recommended for getting optimum yield. Half dose of N and full dose of P and K is given at the time of planting. The balance half of N is given as top dressing 30 days after transplanting.

For hybrid varieties, the recommended dose per hectare is 180 kg N, $100 \text{ kg P}_2\text{O}_5$ and $60 \text{ kg K}_2\text{O}$. 60 kg N and half of P & K are given at the time of transplanting. Remaining quantities of P & K and 60 kg N is top dressed 30 after transplanting. A third dose of 60 kg N is applied 50 days after transplanting.

Growth Regulators

Effect of growth regulators in tomato crop is as follows-

Plant-growth regulators	Concentration (mg/litre)	Method of application	Attributes affected
Gibberellic acid (GA)	10-20	Foliar spray	Higher yield at low temperature
	40-100	Seed treatment	Seed germination
Ethephon	100-500	Foliar spray	Flowering, fruiting and yield
	1,000	Pre-harvest spray	Fruit ripening
PCPA	50-100	Foliar spray at lowflowering	Tomato fruit set at and high temperatures.

(Source: 50 Years of Crop Science Research in India, ICAR)