

Recent Trends of Tomato in Cultivation Aspects

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Introduction-

The solanaceous family is evolved from the plant. "Night shade ".It is considered that Beauty, like and Death are present in that plant. The toxic ingredients' like Atropine and scopolamine causes paralysis in the Involuntary muscles of the body including the heart and the physical content of leaves also given skin irritation and poisons. This mechanisms is generally act as defensive system and for its survival that why the name "Deadly night shade " is popular .It's also the top 10 deadliest plants in the world. Being evolved from that plant this solannaceous vegetables sprended all around the world and gives income to the millions of formers every year.

TOMATO

B.N.-*Solanum lycopersicum* L.

Family- Solanaceae

Chr.no- 2n:24

Origin – Peru Ecuador region

Tomato is one of the most important vegetable crop grown and consumed throughout the year next to potato in solanaceous fruit vegetables in terms of area and it also rank first as a processing crop about 68% of global tomato production is consumed fresh and remaining 32% is processed. The major leading states in our country are madhyapradesh, Andhrapradesh, Karnataka, Telangana and Gujarath. The total area of cultivation was also increased with 769.87 thousand hectares with production of 20708.44 thousand Mt. and the export from India in 2017-18 was around 48 Thousand metric tons which values about 11,421 lak Rupees .So we need to

focus on this crop for welfare of farming community and some of the trends in cultivation are discussed below.

Trends In Cultivation (Tomato):-

Seed is used as a material for propagation in tomato and now days many scientists are focusing on the using of Nano technology in the farming as a components like the Nano fertilizers .using of zinc oxide nano particle for seed germination in tomato 250 mg/L of concentration helps the for better growth of seedling .However the many other studies like phytotoxicity mechanisms for example size distribution of particles in solution has to be studied deeply. The A biotic streets is becoming an challenging factor for both the growth and development of the plant improves seed germination, growth and yield characters applying of salicylic acid of 0.5 mm acts a good by seed pres 800 kg gives better results in India.In case of soil which are having high acid reactions. we use the lime as a remedy which is costly for alternative methods .the Bio-char 4t/ha with Vermi compost 25 t/ha along with 100% RDF given the better results(Sanjay Swami.,2019).and this is very much applicable to the Northeast regions of our country. In case of calcareous soil using of Iron in foliar application of the rate of 500 and 100 mg/l in the early mornings starting at 40 days after transplanting in intervals of 7 days shown the best results. However this experiment was conducted in North America.

Irrigation is the major contribute in case of tomato .canes around 94% of water was found in tomato fruit many farmers are shifted to Drip irrigation and Sprinkler irrigation methods and government of India in schemes like per drop more crop etc. studied different effects of Recommended dose of fertilizers will helps to increase the growth and yield attributing characters .not only that but also the residues of N,P,K are found maximum in soil .so the replacement of irrigation with fertigation helps more effectively in many aspects.

The use of mulching also coming in to progress and farmers are showing more interested about this kind of practices in the cultivation. cause the mulching helps in multiple ways like moisture maintains ,wee control and providing favorable micro climate condition



Fig.1 Tomato cultivation by using Polymulching



Fig. 2 Tomato cultivation by using polymulching.

.Mulching by using poly mulching need based irrigation not only decreased the number of needful irrigation but also increased the yield attributing characters like no of fruit plant ,no of effective branches plan

Conclusion

Along with the mentioned technologies like Nano –fertilizers using mulching . fertigation many other techniques like Vegetable grafting, training systems of tomato mainly cherry type in playhouse ,drip irrigation systems and many more are concentration by various research institutes in KVK are working .so hard to improve the yield and quality of tomato crop in our country. However due to the increasing rate of population and also changing climate conditions. we have concentrate on the new varieties and hybrids which can meet all the needs in view of farmers and consumers.