Performance evaluation of Capsicum crop in Open Field and under Covered Cultivation

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The performance of Capsicum crop (Swarna variety) in open field and under covered cultivation was evaluated at Precision Farming Development Centre experimental field at Bhopal. Under covered cultivation, black colour shade net having 50% shade factor was used in the study. Same crop cultural practices in the open field and under covered cultivation were adopted for comparison. Drip irrigation system was adopted in both the cases and irrigation system parameters such as frequency of irrigation and wetting pattern were collected. Other parameters such as soil temperature, duration of the crop, morphological parameters of the crop and yield were monitored. The study revealed that under shade net the crop yield was increased by 80 per cent over open field cultivation along with water saving of about 40 per cent in covered cultivation. The wetting pattern from the emitting device of 2 lph indicated maximum spread of 40 cm from emitter in case of crop under covered cultivation where as in open field the spread was 25 cm. Duration of the crop was also extended by 40 more days under covered cultivation. Sun scalding affect was found absent under covered cultivation where as, majority of the fruits were damaged due to sun scalding in open field.

Biography

K.V.Ramana Rao has completed his Ph.D in Agricultural Engineering from I.A.R.I. New Delhi. For the last 14 years he is serving Indian Council of Agricultural Research. Presently he is working as Senior Scientist at Central Institute of Agricultural Engineering, Bhopal. He is the Principal Investigator of Precision Farming Development Centre mandated to cater the needs of farmers and officials of Madhya Pradesh State in plasticulture applications in horticultural crops. He has published more than 15 research papers in reputed journals and authored 4 books. He is the recipient of Norman E Borlaug International Agricultural Technology Fellowship for the year 2011.