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Original Research

Effect of plant conformations and training techniques on Sweet pepper growth and yield under polyhouse conditions

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Abstract: Protected cultivation has gained momentum in Himachal Pradesh during last few years due to technology advancement and various interventions by the state funded schemes. More and more area are being brought every year under polyhouse cultivation. Sweet pepper is a principle potential money spinner crop grown under naturally ventilated polyhouse conditions due to introduction of new color variants and their off-season production and availability during lean periods. However, improved suitable production technologies under protected structures in mid hill conditions of the state, do not yield optimum results. Among different agro techniques, proper spacing and pruning of greenhouse grown capsicum help in improving the canopy, fruit set, fruit quality and fruit yield. The current study was done with the objective to determine appropriate spacing for various training systems. The investigation was performed in Factorial Randomized Block Design with triplicates and information was collected on various growth, yield and yield contributing parameters. It was observed that $60 \text{ cm} \times 30 \text{ cm}$ spacing and four stem trained plants yielded maximum amount of fruits/plant (21.5), yield/plant (1.7 Kg) and yield/m² (11.6 Kg), whereas 60cm×30cm spacing along with two stems training produced exceptionally tall plant of height of 184.2 cm with mean fruit weight, length and width of 88.6 g, 7.8 cm and 7.6 cm, respectively. However, spacing and training had insignificant effects on days to 50% blooming, duration of first harvest, and reaping period. On the basis of overall performance, the 60 cm \times 30 cm spacing and training on four stems is recommended for obtaining higher yield in capsicum.

Keywords: Protected cultivation, Capsicum, training, spacing.