

Evaluation of Hot Pepper (*Capsicum Frutescens*) Varieties for Growth and Green Fruit Yield at Karma R & D Center, Nala, Kavre.

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Abstract

Hot peppers (*Capsicum frutescens*), member of family Solanaceae are used as spice vegetable and are cultivated widely over the world. They are used as fresh, dried or processed products. The research was conducted on hot pepper varieties to evaluate growth, green fruit yield and quality. The experiment was laid out on Randomized Complete Block Design (RCBD) at Karma R & D Center, Nala, Kavre during May-October, 2019. The experimental material consisted of five F1 hybrid varieties of hot pepper collected from different sources, each variety replicated four times. Stem diameter (cm), number of harvests, yield (kg/plant), fruit length (cm) and fruit weight (cm) were observed highest on the variety Karma-747. In addition, this variety took shortest duration for 50 % flowering. Nepa hot-555 performed better in comparison to Marshal as it had the highest stem diameter (cm), more numbers of primary branches, numbers of harvests, numbers of fruits, yield (kg/plant) and fruit breadth (cm). Likewise, it also took the shortest duration for 50 % flowering. Based on the experiment, Karma-747 was found as the variety with highest yield potential but if farmer wants medium sized, dark green coloured fruit, Variety Nepa hot-555 found as better variety. Variety Nepa hot is recommended to those farmers who want to cultivate small sized hot pepper with high pungency.

Keywords: *Capsicum frutescens*, Precocity, Pungency, Reproductive, Vegetative