Growth response of Green Cayenne Pepper (*Capsicum frutescens* L.) to Planting Distance and Mulch Type.

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ABSTRACT

Green cayenne pepper (Capsicum frutescens L.) is a horticultural plant from the Solanaceae family which has complete nutrition and therefore has high economic value. The aim of this research is to determine the best planting distance and type of mulch for the growth and yield of green cayenne pepper plants. The research method is a field experiment designed using a split plot design. The main plot is a type of mulch, namely without mulch, rice straw mulch, silver black plastic mulch, and black plastic mulch. Sub plots are planting distances, namely 60 cm x 40 cm, 60 cm x 50 cm, and 60 cm x 60 cm. The research data were analyzed using analysis of variance (ANOVA) followed by Duncan's Multiple Test (DMRT) at 5% level. The research results showed that there was no interaction between mulch type and plant spacing. The mulch type treatment using straw gave the best results in terms of green cayenne pepper plant height and number of branches at plant age of 49 HST, flowering age, number of fruit, fruit weight per planting, fruit weight per harvest plot, fruit weight per hectare, and harvest index. The plant spacing treatment of 60 cm x 60 cm gave the best results for plant height at 49 HST, number of fruit, fruit weight per plant, fruit weight per harvest plot, fruit weight per hectare, and harvest index.

Keywords: Green Cayenne Pepper, Planting Distance, Mulch Type