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Application of empty fruit bunches (EFB) and cow manure (CM) compost as planting medium on the growth and yield of chilli (*Capsicum annum*) treated with different fertilizer

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Abstract: Comparison of empty fruit bunches (EFB) and cow manure (CM) compost application as planting medium was conducted using four different treatments of fertilizer on growth and fruit yield of chili (*Capsicum annum*, Cilibangi-3 variety). The four fertilizer treatments were without fertilizer, chemical, organic, and both chemical and organic fertilizer. The experiment was done from August to December 2014 with three replications in the glass house, Universiti Kebangsaan Malaysia (UKM). The result showed a significant different for plant biomass (190.10 g), weight (420.17 g) and total fruits per plant (45.33) in EFB but not significant for plant height and ripening time at $p < 0.05$. While for CM, significant different occurred on the plant height (100.80 cm), weight (485.67 g) and total fruits per plant (54.67) but no significant different for plant biomass and ripening time at $p < 0.05$. Thus, different response was observed between EFB and CM planting medium. Application of EFB treated with chemical fertilizer demonstrated better growth and fruit yield, while CM was better growth and fruit yield when treated both chemical and organic fertilizers.

Keywords : Empty fruit bunches (EFB) compost, cow manure (CM) compost, chili (Capsicum annum, Cilibangi-3 variety), growth, yield.

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