

Efficiency of fertilizer formulation, stock solution volume and media on chili (*Capsicum annum kulai F1*)

ABSTRACT

The growth of the greenhouse chili industry is rapidly increasing in the world including Malaysia. Currently, compost is the most popular growing media. Four fertilizer formulations commonly used by farmers (Local), including the recommended Cooper, Bennoit and Cooper Modified formulation, were evaluated in combination with two volumes (400 and 750 L) for enhancement fruit yield of chili in soilless culture. The results indicate that, the day of blooming and fruiting was reduced by 91% and 50% in media containing coconut dust (CD) + empty fruit bunch (EFB) compared with CD alone. Yield with CD+EFB was increased 36% compared with CD while volume of water shows insignificant difference. Interestingly, Cooper, Local and Cooper Modified formulation enhanced 32, 28 and 19% of yield, respectively. As conclusion, combination of CD+EFB with Cooper, Local and Cooper Modified were more efficient in yield production compared with CD alone for future research.

Keyword: Coconut coir dust (CD); Empty fruit bunch (EFB); Fertilizer formulation; Volume; Yield