Dairy farm effluent compost as medium for production of chilli (capsicum annuum l. 'kulai') in fertigation system

ABSTRACT

Cattle industry contributes to a significant production of animal wastes in the world. In Sabah, organic wastes are generated abundantly from the dairy industry. Dairy farm effluent compost (DFE compost) is reported to be useful as a medium for Pak Choy production, but this is seldom studied for other crops. Hence, the present study was carried out to investigate the potential of DFE compost as a medium for chilli production by fertigation system. Four types of media (treatments) were prepared (DFE compost and Cocopeat vs. Sterilised and Nonsterilised), and the experiment was carried out following a Completely Randomized Design with nine replicates per treatment. Single fruit fresh weight (11.52 g) was significantly higher ($P<0.05$) in sterilised DFE compost than that in other media. Based on the medium-specific analysis, either DFE compost or cocopeat only, chilli yield was usually significantly higher in the sterilised rather than in the non-sterilised medium (T-test, $P<0.0.5$). The findings indicated that DFE compost can be used as an alternative medium for chilli production by fertigation system, but some amendments, such as, sterilization are required to enhance its effects.