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# INTERNATIONAL CONFERENCE ON ANIMAL AND PLANT ECOLOGY AND MANAGEMENT

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# **APEM 2018**

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## Effect of Potting Media on the Growth Performance of Cherry Tomato (*Solanum lycopersicum*)

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## Abstract

Tomato (*Solanum lycopersicum*) is a fruit vegetable, and its fruits contain excellent source of vitamins and antioxidants. Soil has been the only potting medium for tomato cultivation until the soilless culture was introduced, coupled with the decline in availability of quality soil. Peat moss and perlite are among the popular soilless media, but they are costly in Malaysia, and the exploitation of peat moss might contribute to greenhouse gas effect. Coco peat and rice husk are more easily available in Malaysia. This study compared the effect of four potting media, peat moss and perlite (3:1), coco peat (1), topsoil (1), and topsoil and rice husk (1:1) on growth performance of cherry tomato. The treatments were arranged in a completely randomised design with seven replicates per treatment. pH, water holding capacity, electrical conductivity and nitrogen content of the potting media were analysed before the experiment. Plant height, leaf number, root shoot ratio, flower number, total number of fruits and fruit sweetness of the plants in peat moss and perlite, topsoil, and topsoil and rice husk were not significantly different from each other. The plants in coco peat did not perform well, and few plants died toward the end of the experiment. Topsoil and rice husk medium could be a good choice as potting medium for tomato in containers in terms of cost and environmental concerns.

Keywords: tomato, soilless, topsoil, rice husk, peat moss and perlite