

**INFLUENCE NUMBER OF EARTHWORMS TO THE
PLANT GROWTH (*Capsicum frutescens*)**

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ABSTRACT

INFLUENCE NUMBER OF EARTHWORMS TO THE PLANT GROWTH (*Capsicum frutescens*)

Earthworms are generally known that they can increase plant growth in optimum amount present in the soil. However, the earthworm's interaction with the plant is dependent on the soil type and soil ratio mixture. This study was conducted to determine the optimum number of earthworms needed which can give the best effects to the plant growth on different ratio of sand and clay based on the physical plant growth of *Capsicum frutescens*. The earthworms were put into sealed polybags containing *Capsicum frutescens* in fixed numbers of 5, 10 and 15 earthworms. Three sets of soil ratio were used for each of the fixed number of earthworms, which are 50 clay : 50 sand, 70 clay : 30 sand and 30 clay : 70 sand. The responsiveness of *Capsicum frutescens* was measured in term of height, number of leaves, length and width of leaves, and girth of stem. The optimum number of 5 to 10 earthworms were shown in 50 clay : 50 sand and 10 to 15 earthworms for 70 clay : 30 sand soil ratio, while the possibility that less than 5 earthworms needed in 30 clay : 70 sand mixture. One possible conclusion is that the presences of earthworms increase plant growth.