

ABSTRACT

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GROWTH AND RESULTS OF MIANA (Coleus scutellarioides L.) ON DIFFERENT ORGANIC FERTILIZERS THROUGH THE APPLICATION OF AUTOMATED DRIP IRRIGATION

(xii+47+12)

Miana plants are ornamental plants that have potential as medicine. The part of the miana plant that is utilized both as an ornamental and medicinal plant is the leaf. Organic fertilization is one of the important aspects in increasing the optimal growth and yield of miana plants. The purpose of this study was to analyze the effect of different organic fertilizers on the growth and yield of miana through the application of automated drip irrigation technology. The design used in this study was a single-factor Randomized Complete Group Design, namely organic fertilizer with five levels and five replications. The levels of organic fertilizer treatment in this study were no fertilizer, cow manure, goat manure, chicken manure, guano fertilizer, and quail manure. The results showed that differences in organic fertilizers affect the growth of miana through the application of automation drip irrigation technology can be seen in the parameters of plant height, number of leaves, and number of branches. Cow manure gave the highest average value and was able to increase miana growth at the beginning to the end of the observation week compared to other treatments. The difference in organic fertilizers affects the yield of miana through the application of automated drip irrigation technology can be seen in the parameters of leaf area, stem dry weight, leaf dry weight, total biomass and total flavonoids. Goat manure provides the highest average value and increases miana yield in the parameters of leaf area, stem dry weight, and total biomass, cow manure provides the highest average value and increases miana yield in the parameter of leaf dry weight, while quail manure provides the highest average value in the parameter of total flavonoids.

Keywords: Biopharmaca, Biomass, Fertilizer type, Leaf simplisia

Bibliography (1977-2023)