

ABSTRACT

EFFECT OF PLANT MEDIA COMPOSITION ON THE GROWTH AND YIELD OF RED SPINACH (*Amaranthus tricolor* L)

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A good planting medium is a medium that is able to provide enough nutrients and water for plant growth. Various types of planting media that can be used include soil, compost, husk charcoal, cocopeat, and sand. Optimum growth of red spinach seeds can be supported by using good and efficient planting media compositions. This study aims to determine the effect of the composition of the growing media on the growth and yield of red spinach (*Amaranthus tricolor* L.). This research was conducted in the greenhouse of the experimental garden of the Village Rancanasar, Subdistrict Karangpawitan, Regency Garut, from January to February 2023. The study used a randomized block design with 6 treatments, namely 1) Soil + Compost + Charcoal Husk; 2) Soil + Compost + Cocopeat; 3) Soil + Compost + Sand; 4) Compost + Husk; 5) Compost + Cocopeat; 6) Compost + Sand; and each treatment was repeated 4 times. Data were analyzed using a randomized block design (RBD) with the application of SPSS (Statistical Program for Social Science) and continued with Duncan's Multiple Range Test with an error rate of 5%. The results showed that the composition of the growing media affected the number of leaves, plant height, leaf area, and fresh weight of red spinach plants. The composition of the planting medium compost + sand had the best effect on the growth and yield of red spinach (*Amaranthus tricolor* L.).

Keywords: Red spinach, growing media, composition.