

عنوان مقاله:

The influence of vermicompost on the growth and productivity of cymbidiums

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خلاصه مقاله:

The effects of cattle manure vermicompost on the growth and productivity of cymbidium (*Cymbidium* sp.) plants were evaluated under shade conditions. Cymbidium was grown in a container medium including 50% pumice, 30% charcoal, 10% vermiculite and 10% peat moss, which was basic plant growth medium substituted with 10%, 20%, 30% and 40% (by volume) vermicompost. The control consisted of container medium alone without vermicompost. Plants were supplied regularly with a complete mineral nutrient solution. The greatest vegetative growth resulted from substitution of container medium with 30% and 40% vermicompost, and the lowest growth was in the potting mixtures containing 0% vermicompost. Most flower buds and inflorescences occurred in the potting mixture containing 30% and 40% vermicompost, and the greatest length of inflorescences was observed in 30% vermicompost. Cymbidium grown in a container medium substituted with 30% and 40% had the most and greatest number of flowers. Some of the cymbidium growth and productivity enhancement, resulting from substitution of container medium with vermicompost, may be explained by nutritional factors; however, other factors, such as plant-growth-regulators and humates, might have also been involved since all plants were supplied regularly with all required nutrients.

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کلمات کلیدی:

Cymbidium, Flowering, Humates, Nutritional factors, Vermicompost

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