

CONSIDERING Some Of Vegetative Characters Of Medicinal Herb *Viola Odorata* On The Perlite Substrate

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Introduction

Viola odorata is one of the valuable herbal medicines that has been used in traditional medicine from long time ago. The effects of softening, anti-intestine stimulations and anti-cancer are the pharmaceutical properties of this herb(2).

Perlite is a volcanic source aluminosilicate. it can be restored the required water for the herb in the root zone and added as a Hydraulic conductivity improver in the substrate(1).

By considering the value and scarcity of this pharmaceutical herb and developing of using the soilless media such as perlite, considering the effect of perlite substrate on the growth characters of this valuable herb is the goal of this research.

Materials and Method

This research was performed by using the seedlings of *Viola odorata* in greenhouse research center of Islamic Azad University, Khorasgan branch, Esfahan. The used substrates were included loam-manure(50%-50%)ratios and perlite-loam- manure(25%-25%-50%)ratios. one seedling was planted in each flower vase.

There were 3 repetitions and each repetition was included 9 flower vases for each treatment. The factors under measurement were including bush height and the number of leaves. This research was done in factorial form and completely randomize design(CRD).

Result and Discussion

The maximum numbers of leaves and bush height rate related to the treatment by perlite + loam + manure and it had a meaningful difference in many times with the treatment by loam + manure. Maloupa and et al(1996) reported the same results. The results was analyzed by SAS software and showed that, the substrate including perlite, regarding its light texture and good ventilation, was more suitable in comparison with the perlite -less substrate. But, in general, it cannot be introduced as a perfect substrate for this herb.

Keywords: perlite, *Viola odorata*, vegetative characters

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