

Testing efficacy of arbuscular mycorrhizal product Symbivit[®] on *Pelargonium peltatum* plants

Experiments conducted by Symbio-m Ltd. Czech Republic



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Summary:

Effect of the inoculation of growing substrate with mycorrhizal product Symbivit[®] was tested in an experiment with *Pelargonium peltatum* plants. Mycorrhizal inoculation positively affected fresh and dry shoot weight, number of inflorescences of *P. peltatum* plants and mycorrhizal colonization of plants roots.

Purpose/Aims:

The aim of this work was to evaluate the effect of inoculation of growing substrate with mycorrhizal product Symbivit[®] on the growth of *Pelargonium peltatum* plants.

Procedure/Methods:

The pot experiment was conducted on *Pelargonium peltatum* plantlets in the experimental greenhouse of Symbio-m Ltd. in 2007. The mycorrhizal product Symbivit[®] was mixed into the growing substrate (mixture of peat and zeolite in 4:1) before planting in a dose of 32g per 400 mL pot. The experiment involved two treatments: control, uninoculated plants and plants inoculated by Symbivit[®]. Each treatment consists of 10 *P. peltatum* plants.

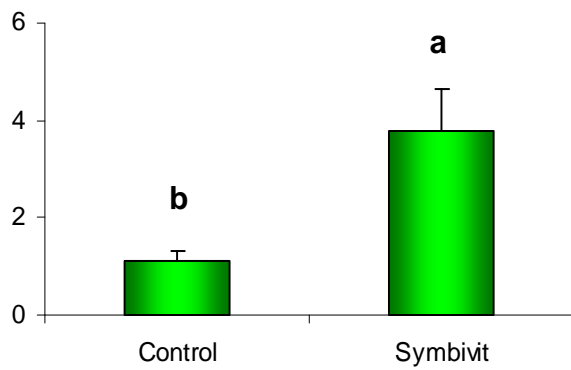
15 weeks after application the fresh and dry shoot weight and number of inflorescences were determined. The mycorrhizal colonization was evaluated for 4 plants per each treatment as a length of root colonized by symbiotic fungi (root maceration in 10% KOH for 45 min in 90°C, Trypan staining, microscopic evaluation). Data were statistically analyzed by ANOVA. The bars above columns in figures refer to standard error (SE). The columns marked by the same letters are not significantly different.

Results:

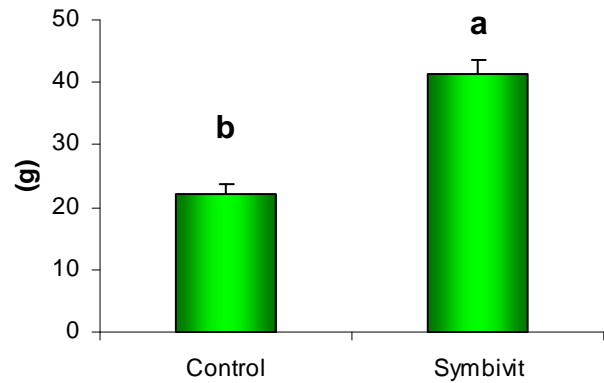
It was proved that Symbivit[®] - treated plants exhibited positive effects on vegetative growth of *Pelargonium peltatum* plantlets, i.e. 2x higher number of inflorescences than control plants, fresh and dry shoot weight and mycorrhizal colonization.

Testing efficacy of mycorrhizal product Symbivit® on blooming and growth of *Pelargonium* plantlets

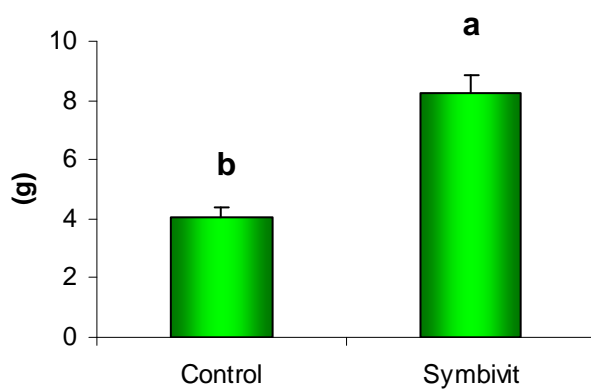
No. of inflorescence



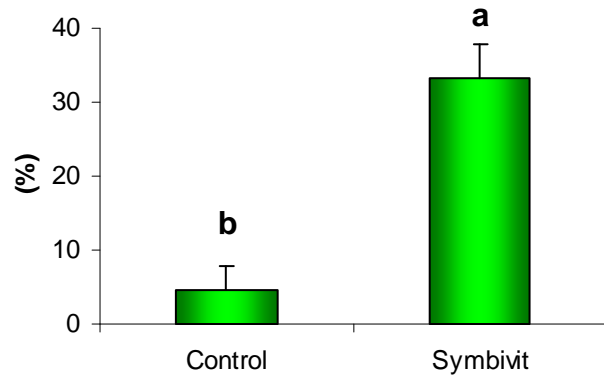
Fresh shoot weight



Dry shoot weight



Mycorrhizal colonization



Comparison of the effects of mycorrhizal product Symbivit® on growth of *Pelargonium* plants 6 weeks after application

