RESEARCHES CONCERNING ROOTING TECHNOLOGY 
OF PELARGONIUM GENUS

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SUMMARY

In Romania Pelargonium geraniums are one of the most popular decorative plants for both indoor and outdoor use. They are good additions to the perennial landscape border. Pelargonium geraniums enjoy a long growing season and enhance landscaping when planted directly in the ground; in hanging baskets or window boxes, or in containers on decks, patios or entrances. Pelargonium sp. belongs in the family Geraniaceae, a large cosmopolitan family of approximately 11 genera and 800 species in subtropical and temperate regions of the world. There are approximately 270 species of Pelargonium which occur in S-E and NE Africa, Asia, St. Helena, Madagascar, Australia and New Zealand.

Their mass propagation is performed using cuttings or seeds, (Mithila et al. 2001). In the last period in vitro propagation it is more efficient method. Petioles gave significant yield difference over 6 cm vine length and generally showed high potential for vegetative propagation in terms of rooting ability and survival rate (Lewu, Grierson and Afolayan, 2006).

Some Pelargonium selections do not propagate easily from cuttings; these types are best purchased as new plants each year. For this reason we wish to improve the rooting technology.

At the USAMV Cluj from 2006 to 2007, three species of genus Pelargonium (P. zonale, P. peltatum, P. grandiflorum) were investigated concerning their vegetative propagation by shoot cuttings and root growth. A study was conducted in two separate experiments.

In the first experiment, three stem tip cuttings (5, 8 and 12 cm) of the species were rooted in substrate experiment in a greenhouse. In the second experiment, three substrate tip (perlite, perlite 50% + peat 50%, mix soil + peat + compost - 2:1:1:1) were used for rooting.

Data were collected and statistical analyzed on various growth and development indices. In the first experiment, the 8 cm shoot length exhibited best result for different parameters measured. The substrate perlite and peat in rapport 1:1 gave the best results for all species.

BIBLIOGRAPHY