

THE INFLUENCES OF GRAPE MARC EXTRACTS ON THE ROOTING OF CUTTINGS IN SOME FLOWER SPECIES

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The aim of the present study is to evaluate the effect of white and red grape marc on the rooting of *Sansevieria trifasciata* leaf cuttings and *Pelargonium zonale* stem cuttings.

The researches were conducted at the Horticultural Research Centre of Iasi University of Life Sciences. The rooting of *Sansevieria trifasciata* and *Pelargonium zonale* cuttings was done in perlite. This substrate was periodically humidified with distilled water for the control variant and with different concentrations (from 0.025% to 0.2%) of Sauvignon Blanc (SB) and Merlot (M) grape marc aqueous extracts for the other variants. The experiment consisted of nine variants, each repetition containing ten cuttings: C- control (distilled water) V1-M1, V2-M2; V3-M3, V4-M4, V5-SB1, V6-SB2, V7-SB3, V8-SB4.

In all samples of *Sansevieria trifasciata*, the average number of roots on leaf cuttings and the average length of the roots had values close to the control. The highest number of roots per seedling was obtained at V5 (30) and the control (28). The average length of the roots varied from 3.5 cm for control to 1.8 cm at the V6 variant. The biometric determinations on the average number of leaf/cutting showed a positive influence of the SB1 extract (0.025%) on the growth of new leaf from all the Sauvignon Blanc concentrations. The average percentage of leaf cuttings that formed new leaves was 50% for V5, V7 and 10% for V2 and V6. The average length of the new leaves varied from 8 cm at V5 to 3 cm at the V6 variant. At *Pelargonium zonale* cuttings rooted in presence of SB, the average percentage of rooted cuttings was higher compared to perlite-rooted variants treated with aqueous extracts of Merlot grape marc (M). Compared to the control (90% rooted cuttings), in the rooted variants on SB, the values were close to the blank variant being between 88% in V5 and 93% in V8. As for the M extract, it had an inhibitory effect, the percentage of cuttings ranging from 70% - V1 to 50% - V4. In the treated variants, the largest number of roots was obtained in V7 (9) and V8 variants (11) and the smallest number in V3 and V4 (3). The average root length was greater for cuttings in SB-treated variants compared to M-treated variants.

From all studied grape marc extracts, only Sauvignon Blanc 0.025% aqueous extract proved a slight positive influence on the rooting of *Sansevieria trifasciata* cuttings. At *Pelargonium zonale* the biometric determinations on the percentage of rooted cuttings, the average number of roots and the average length of the roots showed a slightly positive influence of SB extract and a negative influence of M extract compared to the control variant.

Keywords: Merlot, *Pelargonium zonale*, *Sansevieria trifasciata*, Sauvignon Blanc, waste.

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