

INFLUENCE OF MAGNETIZED WATER WITH DIFFERENT MAGNETIC FIELDS AND
PHOSPHORUS FERTILIZATION ON GROWTH AND FLOWERING PARAMETERS OF

Rosa damascena Mill

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ABSTRACT

A study on the effect of irrigation with magnetized water and phosphorus fertilization on vegetative growth and flowering of *Rosa damascena* was conducted from April/ 2009 to Nov./2009. Water was magnetized by two magnetic fields levels. Magnetization was applied by passing regular water through magnetrons for one time. Magnetic field levels were 500 or 1500 gauss. Two concentrations of P fertilizers were sprayed ; 20 or 40 g/l. Control plants were sprayed with distilled water. Results were as follows : Watering plants with magnetic water with both magnetic fields significantly increased plant height, branch diameter, no. of leaves, leaves area and vegetative dry weight. However, magnetized water decreased no. of branches/plant. Magnetized water with 500 gauss was more effective on all parameters. Plant height reached up to 69.65 cm.; branch diameter 3.86 cm.; no. of leaves /plant 100.25 ; leaves area 89.38 cm² ; leaves chlorophyll content 465.5 mg/m² . Moreover, Magnetized water with 500 gauss was superior on all flowering parameters tested comparing with 1500 gauss. No. of flowers was 7.81 flowers/plant , flower diameter 12.98 cm. , flowering period 9.79 days, vase life 11.79 days and dry weight of flowering 31.44 g.