

EFFECT OF TWO GROWTH REGULATORS ON THE DEVELOPMENT OF ROOTED TILLERS OF VETIVER

(*Vetiveria zizaniodes* L. Nash)

ABSTRACT

In order to increase the rate of multiplication of vetiver (*Vetiveria zizaniodes* L. Nash) exogenous applications to rooted tillers were made, of Benciladenine Purine (BAP) to 3 concentrations (0, 500 and 1500 ppm). Concluding that is better to use the one of 500 since generates the same effect in the development of adventitious shoots than the greater amount of this regulator. Also the effect of 3 sizes of tillers was studied (5, 10 and 20 cm) 3 concentrations of Naftalenacetic Acid (0, 500 and 1000 ppm). The most advisable combinations were tillers of 10 cm with 500 ppm and tillers of 20 cm without ANA. In another experiment with esquejes of greater size (30 cm), 6 concentrations of ANA (0, 200, 400, 600, 800 and 1000 ppm) and 30 minutes of immersion were proven. The better results were found with 200 ppm and an inhibiting effect in the growth of the shoots was observed with 1000 ppm. For that reason, for tillers greater lower concentrations can be used. Using tillers of similar size (30 cm), applying to different concentrations (500 and 1000 ppm) and times of application (30 and 60 min.) of ANA, the best combination went to the one of 500 ppm-60 min. due to display of greater values in the roots length. Thus it is possible to be concluded that is advisable to stimulate the development of adventitious shoots by application of BAP, as the rooting of them with ANA but also must consider the size of tillers and the time of application.

Key words: grow regulators, rooted tillers, vetiver, rooting