Effect of Medium and Different Hormone Combinations on Regeneration of Shoots and Morphological Changes in Strawberry Mericlones

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Abstract

In this study the effect of four growth media including MS, NN, B5 and AM and three different hormone combinations were investigated on regeneration of two strawberry cultivars Camarosa and Selva. The experiment was done in factorial design for each cultivar separately. The meristem explants were introduced in culture media supplemented with different hormonal combinations and maintained in a growth room at a 16h photoperiod (36 μ mol.m⁻².s⁻¹), 25 ± 1°C. After ten weeks, number of regenerated plantlets, biggest leave length, middle leaflet length and width, middle petiolate length, number of dent in middle leaflet and root length were studied. The results showed that number of regenerated shoots were higher in MS and NN medium. Hormonal combinations B1:(BA=1.0ppm+IBA=0.05ppm+GA_3=0.05)and B2:(Kinetin=5ppm+2,4-D = 0.5 ppm + GA_3 = 0.05ppm) were also resulted in higher regeneration number compared to B3. The results showed that Camarosa were more stable and had a higher regeneration in miropropgation process based on morphological traits.

Keyword: Strawberry, Medium, Micropropagation, Meristem culture

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AGRICULTURAL BIOTECHNOLOGY, Vol. 9, No. 2 2010

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