

EFFECT OF MEDIA COMPOSITION ON THE MULTIPLICATION RATE OF VARIOUS SWEET POTATO GENOTYPES

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Besides improper, not site- and/or cultivar-specific production technology, the uncontrolled quality and hygienical status of planting material can contribute to yield stability problems. Micropropagation has been suggested as a reliable technique for ensuring rapid propagation of healthy propagules. This work, therefore, sought to assess the multiplication rate of several sweet potato genotypes in different compositions of culture media. The experiment was laid in a Completely Randomized Design (CRD). In vitro multiplication rates were the following in the case of the genotypes involved, achieved on the MS0 and the MS1BN media: ‘Boribon’ (479 vs. 343), ‘Emmur’ (607 vs. 661), ‘Beauregard’ (549 vs. 170), ‘Covington’ (80 vs. 0), ‘Norangel’ (557 vs. 710), ‘Ásothalmi12’ (475 vs. 325) and ‘Purple’ (867 vs. 111). The results suggest that a hormone-free medium tends to be most appropriate for sweet potato micropropagation. The research was supported by the “VP3-16.1.1-4.1.5-4.2.1-4.2.2-8.1.1-8.2.1-8.3.1-8.5.1-8.5.2-8.6.1-17” Rural Development Program, in connection with the grant document with the identification number 1924527185.