

## PRELIMINARY RESULTS OF MICROPAGATION OF VEGETATIVE ROOTSTOCK FOR PLUM AND APRICOT WAVIT

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Currently, when growing seedlings of stone fruit crops, different types of rootstocks are used, which affect the strength of the growth of trees in the future garden, their productivity and resistance to many adverse environmental factors. All this allows one to optimally plan the efficiency and criteria for establishing plantings. Wavit is a promising, medium-sized rootstock for large stone fruits and has been zoned in the Republic of Moldova since 2021. Plants of the Wavit Prudom rootstock transferred to our institute from Germany served as the material for the research. The tops of actively vegetating plants, as well as green cuttings with axillary bud, were introduced into *in vitro* culture. Sterilization of plant material was performed using HMJ Tabidez 56, H<sub>2</sub>O<sub>2</sub>. Was used Murashige-Skoog (MS) and Gamborg (B5) media. Tops of actively vegetating plants and axillary buds with a part of the shoot demonstrated resistance to the toxic effect of the sterilizer and retained the ability for further development. Comparison of proliferation activity on two different nutrient media did not reveal significant differences for the rootstock under study. On MS medium with BAP 0.5 mg/l, the multiplication factor was 3; on B5 plus BAP 0.5 mg/l - multiplication factor was 2.8. Increasing the concentration of cytokinin in the medium to 1.5 mg/l proportionally increased the yield of additional shoots to 4.5 on MS medium and to 4.3 on B5 medium. Green cuttings of the rootstock for 5 years showed the possibility of root formation from 0 to 30%. There was no dependence on the concentration of the tested auxin and exposure time. Therefore, the main method of rootstock propagation is micropropagation. The results of the work done showed that propagation of Wavit rootstock can be successfully carried out by microclonal propagation. This will significantly reduce reproduction time and costs. Propagated *in vitro* and grown to a height of 30-60 cm, Wavit pond plants will be tested in variety-rootstock combinations with zoned and promising plum varieties under soil and climatic conditions of the Republic of Moldova.

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