

# Study of the effect of growth regulating substances of different nature in the clonal micropropagation of aspen

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The used plant material, which has unique economic-valuable properties – triploid (giant) aspen (*Populus tremula gigas*) in vivo grown only in the territory of the Kostroma region (clone № 35). In 2014 and early 2015 in the laboratory of micropropagation in the Branch FBU VNIILM «Central European forest experiment station» studies have been conducted to improve the technology of clonal micropropagation of triploid (giant) aspen (*Populus tremula gigas*) clone No. 35 with the use of growth regulating substances of different nature. The studies found that the use of non-biotechnology plant growth regulators such as EPIN-Ekstra, has a lot of useful properties for a more complete disclosure of potential plants can be considered as a modifying element of the technology of clonal micropropagation of triploid aspen. Application of EPIN in a concentration of 0.5 mg/l of the nutrient medium at the stage of elongation of the plants has a positive effect on the increase in plant growth in height. Application of standard for biotechnology growth regulating substances (cytokinins 6-BAP and the auxin IBA) at a concentration of 1.0 mg/l not favor the formation of high values of indicators of cultural development – the heights of the plants, the multiplication factor of culture.