

# The Use of Modern Biotechnological Research to Improve the Productivity of Birch Republic of Tatarstan

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The Republic of Tatarstan is fixed mass drying birch forests in forests and shelterbelts, and trees showed signs of bacterial disease dropsy, caused by the bacterium *Erwinia multivora*. In connection with the massive shrinkage of birch wood and the loss of quality, foresters need to take measures to improve the birch forests, which account for 17.3% of the forested area of the Republic of Tatarstan.

For comprehensive research and selection of elite high-yielding, disease-resistant clones birch (*Betula pendula* Roth.) we conducted a survey of forest plantations Sabinsky Forestry of the Republic of Tatarstan. A survey of selected 3 copies straight-trunk birch, well cleaned of twigs, and with no signs of disease.

In the laboratory of clonal micropropagation Sabinsky Forestry Ministry of Forestry of the Republic of Tatarstan conducted the study and the first sterile culture drooping birch obtained.

For introduction to the culture growth medium WPM with the addition of 6-benzilaminopurina (BAP) – 1 mg / l, Adenine – 20 mg / l, gibberellic acid – 0.3 mg / l, Lysine – 100 mg / l. After 50 to 60 days of culture at the base of the explants formed callus. In these adventitious buds were formed, and then escapes, which were isolated and placed on their WPM medium for rooting and development. Microplants successfully passed 2-3 cycles multiplication and ingrained in the WPM medium without stimulants.

Research to identify more productive and disease-resistant clones birch forests in the Republic of Tatarstan continues.