The Influence of Auxins on the Biosynthesis of Isoprene Derivatives in Callus Cultures of *Vaccinium corymbosum* var. *bluecrop*

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Callus cultures of *Vaccinium corymbosum* var. *bluecrop* were optimized for their isoprene derivatives production by supplementing Schenk-Hildebrandt (SH) medium with constant concentration of kinetin (2.32 μM) and two different amounts of selected auxins. Every auxin, except for IBA, used in 10-time higher concentration (2,4D, NAA, IAA, NOA) stimulated biosynthesis of β-sitosterol and inhibited triterpene synthesis. Quantitative analysis of isoprene derivatives in callus biomass collected on the 25th day of the experiment proved that the analyzed callus of *Vaccinium corymbosum* var. *bluecrop* synthesized the highest amount of isoprene derivatives after subculturing on SH medium modified with 22.6 μM of 2,4D and 2.32 μM of kinetin.

Key words: Callus Cultures, *Vaccinium corymbosum* var. *bluecrop*, Isoprenes