

RESEARCH ON THE COMPOSITION OF MACROELEMENTS, MICROELEMENTS AND HEAVY METALS OF SOME WILD BILBERRY (*VACCINIUM MYRTILLUS* L.) CALLUSES OBTAINED BY *IN VITRO* CULTURES

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Abstract

Calluses derived from 3 different bilberry populations from Romania were analyzed for macroelements, microelements and heavy metals content using atomic absorption spectrophotometry (AAS). The calluses used in this study were analyzed after three *in vitro* subcultures on a WPM medium culture supplemented with ANA, BAP and different concentration of adenine sulphate(AS). The content of macro and microelements from calluses have varied in correlations with the AS concentration from the medium culture and genotype. We found the iron level was much higher in the calluses composition than in the mother plants and zinc levels were 5-9-times higher than those of the control(range 0,06-1,8 $\mu\text{mol/DM}$).

Key words: *Vaccinium myrtillus* L., calluses, macroelements , microelements, AAS

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