

GC-MS Analysis of Compounds Extracted from Buds of *Populus balsamifera* and *Populus nigra*

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The composition of hexane and ether extracts from buds of two poplar species (*Populus balsamifera* and *P. nigra*) was investigated by GC-MS method. In hexane extracts, 54 “neutral” compounds were recorded. The greatest amounts of them are sesquiterpenes and *n*-alkanes. Among 56 components of ether extracts, many aliphatic acids and hydroxyacids were detected. However, the main fraction consists of phenolcarboxylic acids, substituted cinnamic acids, and their esters. It was established that chemotaxonomic differences between *Populus balsamifera* and *P. nigra* are observed in the case of both hexane and ether bud extracts.

Key words: *Populus balsamifera*, *Populus nigra*, Bud Extracts, GC-MS Analysis