

ANALÝZA LIPOFILNÝCH EXTRAKTÍVNYCH LÁTOK V LISTNATÝCH DREVINÁCH

ANALYSIS OF LIPOPHILIC EXTRACTIVES IN HARDWOODS

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ABSTRACT

The content of extractives of birch (*Betula verrucosa* Ehrh.) (26 and 62 years old), aspen (*Populus tremula* L.) (20 and 40 years old), alder (*Alnus glutinosa* (L.) Gaertn.) (28 and 59 years old), willow (*Salix alba* L.) (15 and 33 years old), black locust (*Robinia pseudoacacia* L.) (15 and 62 years old), lime (*Tilia cordata* Mill.) (38 and 91 years old) and ash (*Fraxinus excelsior* L.) (33 and 39 years old) was determined by ethanol-toluene extraction. Lipophilic part of extractives was characterised by gas chromatography. The seven hardwoods showed significant differences in the content and composition of the main groups of extractives (fatty and resin acids, sterols, sterol esters, triglycerides).

Key words: birch, aspen, alder, willow, black locust, lime, ash, lipophilic extractives, gas chromatography.

SUMMARY

The lipophilic extractives of the hardwoods investigated (*Betula verrucosa* Ehrh.) (26 and 62 years), aspen (*Populus tremula* L.) (20 and 40 years), alder (*Alnus glutinosa* (L.) Gaertn.) (28 and 59 years), willow (*Salix alba* L.) (15 and 33 years), black locust (*Robinia pseudoacacia* L.) (26 and 62 years), lime (*Tilia cordata* Mill.) (38 and 91 years) and ash (*Fraxinus excelsior* L.) (33 and 39 years) are composed of fatty and resin acids, sterols, sterylesters, triglycerides and others compounds. The relative amount and composition of these extractive groups are significantly different in the various wood species. From the results it would be possible to select wood species that produce lower amounts of lipophilic extractives for diminishing of pitch problems in pulping and papermaking processes.