ANTIOXIDANT ACTIVITY OF HERBAL POLYSACCHARIDES AND COUGH REFLEX

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The extraction of *Fallopia sachalinensis* leaves resulted in two fractions (FS-1 and FS-2). Chemical and spectral analyses of samples revealed the prevalence of pectic polysaccharides with high galacturonic acid, arabinose, galactose and rhamnose content. Arabinogalactan with higher content of phenolic prevailed in FS-1, whereas rhamnogalacturonan predominated in FS-2 fraction. Both polysaccharides showed significant antioxidant activity according to DPPH and FRAP assays. Evaluation of antitussive activity in healthy adult male awaken guinea pigs after oral application of 50 and 75 $mg.kg^{-1}$ body weight showed significant suppression of cough reflex, without impact on specific airways resistance. The suppression of cough after application of sample FS-2 was found to be comparable with codeine.

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