SUMARY

Extraction of compounds from flowers *Acer platanoides* was carried out in the first part of our work. Two extracts have been prepared - ether and ethanol. Identification of the compounds was done by the help of a thin layer chromatography with using the standards of phenolic compounds. According to the results TLC the presence of rutin, apigenin, hesperetine, hyperoside and chlorogenic acid were supposed. The presence of a compound of reducing character was proved in the ether extract. The HPLC analysis confirmed the presence of rutin in the ethanol extract. Further, the content of total phenolic compounds was determinated in the ethanol extract and results were expressed as gallic acid equivalent, i.e. 0,135 mg GAE/mg of extract. The second part of our work was aimed at testing antioxidant activity of ethanol extract by help of DPPH test. Very high values of antioxidant activity have been measured. Compounds of phenolic character were supposed to participate in antioxidant activity of ethanol extract.