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FLAVONOIDS OF *Fraxinus raibocarpa*

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The leaves and bark of *Fraxinus raibocarpa* Rgl., family Oleaceae, collected in the Pamir-Alai at the beginning of fruit-bearing were extracted with methanol. After the elimination of the bulk of the solvent, colorless crystals deposited from the methanolic extract with composition $C_6H_{14}O_6$, mp 166-167°C (yield 1%), which were identified as D-mannitol by their IR spectrum and a comparison with an authentic sample.

The residue from the evaporation of a methanolic extract of the leaves was dissolved in hot water and the solution was extracted with chloroform and with ethyl acetate. The ethyl acetate extract was isolated on polyamide in gradient chloroform-methanol and water-ethanol systems and yielded two flavonoid compounds: quercetin 3-O- β -D-glucopyranoside (isoquercitrin) $C_{21}H_{20}O_{12} \cdot 2H_2O$, mp 228-230°C, $[\alpha]_D^{20} - 20.5^\circ$ (c 0.6; MeOH) and rutin $C_{27}H_{30}O_{16} \cdot 2H_2O$, mp 187-189°C, $[\alpha]_D^{20} - 11.5^\circ$ (c 0.7; MeOH). An extract of the bark under similar conditions yielded the flavonoids kaempferol 3-O- β -D-glucopyranoside (astragalol) $C_{21}H_{20}O_{11}$, mp 172-176°C, $[\alpha]_D^{20} - 18.7^\circ$ (c 0.6; MeOH), and kaempferol $C_{15}H_{10}O_6$, mp 272-275°C. The substances obtained were identified by their UV and NMR spectra, the products of acid hydrolysis, and the results of comparison with authentic samples. It was shown by paper chromatography that the flavonoid composition of the leaves and the bark were similar, consisting of the four substances mentioned, but the compounds isolated were predominant in these organs of the plant.

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