

CHEMICAL COMPONENTS OF *Urtica dioica* GROWING IN GEORGIA

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We investigated the chemical composition of the aerial and subterranean parts of dioecious nettle (*Urtica dioica* L.) collected in Goriisk region (Georgia) during the height of flowering. The aqueous-alcohol extract of the air-dried raw material of both parts afforded sterols, saponins, amino acids, coumarins, N-containing compounds, and phenolic substances; the CHCl_3 extract, sterols and triterpenoids.

Substances **1-6** were isolated from the aerial part; **7**, from the subterranean, using the literature methods [1, 2]. Studies by physicochemical methods and comparison with authentic samples identified them as caffeic acid (**1**) [3], rutin (**2**) [4], quercetin (**3**) [4], hyperin (**4**) [5], and isoquercitrin (**5**) [6].

Qualitative reactions with diazotized sulfanilic acid suggested that **6** was a phenolic compound, mp 190-195°C. It fluoresces dark violet in UV light on paper chromatography and acquires a strong blue fluorescence after spraying with base solution; a wine-red color, with diazotized sulfanilic acid. UV spectrum (MeOH, λ_{max} , nm): 230, 270, 300. IR spectrum (KBr, ν_{max} , cm^{-1}): 3400 (OH), 2940 (OCH_3), 2840-2805 ($\text{O}=\text{CH}-$), 1630-1520 (aromatic), 1253 (furan ring), 1280, 1235, 1035 (ether bond of guaiacyl) [7, 8].

Compound **6** was assigned as a lignan [1].

Compound **7** after recrystallization from methanol has mp 138-139°C, $[\alpha]_{\text{D}}^{25}$ -38.0° (*c* 0.1, methanol). The IR spectrum was identical to that of β -sitosterol. The acetate melts at 123°C [4]. The yield of **7** was 0.03%.

Hyperin from dioecious nettle was isolated for the first time.

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