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N-PHENYL-β-NAPHTHYLAMINE FROM Centaurea salonitana

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We obtained a resinous residue from the epigeal part of <u>Centaurea salonitana</u> Vis. collected in the flowering phase in the region of the town of Pyatigorsk by its leaching with hot water followed by extraction with chloroform. By chromatographing this resin on silica gel with elution by petroleum ether—benzene (99:1) we isolated colorless crystals with the composition $C_{16}H_{13}N$, M^+ 219, mp 108-109°C.

The substance had a bright blue fluorescence in UV light and with diazotized sulfanilic acid it gave a stable bright crimson coloration. The maxima of the UV spectrum in methanol and on the addition of sodium methoxide were, nm (log ϵ): 272 (4.32), 310 (4.26), 350 (3.2). The NMR spectrum taken in CCl₄ has a multiplet consisting of the signals of 12 aromatic protons (6.8-7.7 ppm) and a broadened singlet at 5.65 ppm (1H), due to a NH group. The IR spectrum (paraffin oil) contained narrow absorption bands at (cm⁻¹) 3395, 1630 (N-H), 1600, 1500 (C=C bond) and 1305 cm⁻¹ (C-N).

The elementary analysis, mass and NMR spectra, and melting point of the compound isolated corresponded to N-phenyl- β -naphthylamine; the second possible isomer – the α -naphthylamine derivative – has mp 62°C [1].

The isolation of N-phenyl- β -naphthylamine from plant sources has been reported [2], but this is the first time that this substance has been obtained from plants of the genus Centaurea.

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