ALKALOIDS OF Allium

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Plants of the genus *Allium* (family Liliaceae) are widely distributed throughout the terrestrial globe. In "Flora of the USSR," 220 species of this genus are described [1, 2]. It was previously considered that the genus *Allium* is not alkaloid-bearing, but in an investigation of several species of this genus alkaloids were found in them [3]. We give the results of a study of two species of plants of the genus *Allium*: *A. senescens* L., collected in the flowering period in the environs of the village of Vakhmistrovo, Ulan-Ude region, Buryat ASSR on July 25, 1983; and *A. anisopodium* L., collected in the same period in the environs of the town of Ulan-Ude on July 7, 1983.

The dried comminuted epigeal part (1 kg) and the bulbs (0.5 kg) of A. senescens were extracted with 80% ethanol. The ethanolic extract was evaporated in vacuum to the semiviscous state and the residue was dissolved in 5% sulfuric acid. The acid solution, after being washed with ether, was made alkaline with 20% sodium carbonate solution and extracted with chloroform. The epigeal part yielded 0.13% and the bulbs 0.10% of combined alkaloids (on the weight of the dry raw material). When 1.3 g of the combined alkaloids from the epigeal part of the plant was separated on a column of silica gel, a chloroform-methanol (10:1) eluate yielded an alkaloid with mp 91-92°C, which was identified (Rf, mixed melting point, IR spectra) by comparison with an authentic sample as alline [3, 4].

Similarly, from the epigeal part of A. anisopodium (1.5 kg) were obtained 2.57 g of combined alkaloids (0.17% on the weight of the dry raw material) from which the alkaloid alline was again isolated by chromatographic separation.

Thus, the alkaloid alline has been obtained for the first time from the plants A. senescens and A. anisopodium.

LITERATURE CITED

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