DORONINE FROM *Senecio othonnae*

D. S. Khalilov, M. V. Telezhenetskaya, and S. Yu. Yunusov

UDC 547.944/945

Continuing a study of *Senecio othonnae* collected in Azerbaidzhan (Khizy region) [1], we have separated on a column of alumina the mother liquor remaining after the isolation of otosenine and floridanine. The column was washed with mixtures of ether and chloroform (1:1; 1:5; and 1:10) and then with chloroform and with mixtures of chloroform and ethanol (9.5:0.5; 9:1; 5:1). The ether–chloroform (1:1) eluate yielded a base (I) with mp 111-112°C (benzene–heptane), $[\alpha]_D$ + 44.2 (c 1.42; chloroform); picrate 233-234°C. The subsequent eluate gave otosenine and floridanine.

The IR, mass, and NMR spectra of (I) coincided with those for the alkaloid doronine [2]. A mixed melting point of the two substances showed no depression.

From the roots of *S. othonnae* collected in the Nakhichevan ASSR in the flowering phase we have obtained 1.04% of combined alkaloids by the ion-exchange method [3]. Their separation on a column of alumina by a method similar to that described above also gave doronine, otosenine, and floridanine.

To check the native nature of doronine, we extracted the raw material with ethanol. Separation of the ethanolic extract from a column gave a substance identical with the doronine obtained from the ion-exchanged total alkaloids, and also with the doronine isolated from *Doronicum macrophyllum* by chloroform extraction [2]. This is the first time that doronine has been isolated from plants of the genus *Senecio*.

LITERATURE CITED

1. D. S. Khalilov and M. V. Telezhenetskaya, Khim. Prirodn. Soedin., 685 (1973).
2. Sh. A. Alieva, U. A. Abdullaev, M. V. Telezhenetskaya, and S. Yu. Yunusov, Khim. Prirodn. Soedin., 194 (1976).
3. V. E. Dauksha, Farmats. Zh., 25, No. 6, 44 (1970.

Institute of the Chemistry of Plant Substances, Academy of Sciences of the Uzbek SSR, Tashkent. N. Narimanov Azerbaidzhan State Medical Institute, Baku. Translated from Khimiya Prirodnykh Soedinenii, No. 6, pp. 866-867, November-December, 1977. Original article submitted July 1, 1977.

 0009-3130/77/1306-0734$07.50