

2. D. L. Nhieu, N. Tap, and N. K. Can, *Duoc Hoc*, No. 6, 12 (1984).
3. N. Norbert, H. E. Boar, and J. W. Forbes, *J. Am. Chem. Soc.*, 76, 2463 (1954).
4. C. Djerassi and J. Fishman, *Chem. Ind. (London)*, No. 22, 627 (1955).
5. E. Schlittler, H. U. Huber, F. E. Bader, and H. Zahnd, *Helv. Chim. Acta*, 37, 1912 (1954).
6. M. S. Habib and W. E. Court, *Planta Med.*, 25, No. 4, 331 (1974).

COMPONENTS OF THE LEAVES OF *Haplophyllum ramosissimum*

I. A. Bessonova, D. Kurbanov, and S. Yu. Yunusov

UDC 547.944/945

Continuing a systematic study of plants of the genus *Haplophyllum* [1], we have subjected to chemical investigation the leaves of *H. ramosissimum* Vved., gathered by one of us in the budding and incipient flowering phase in the Ustyurt desert near Kosbulak.

The dry comminuted raw material (680 g) was extracted with methanol. The total alkaloids (0.35 g; 0.05% of the weight of the dry leaves) were obtained from the evaporated extract in the usual way [2], and their chromatography on silica gel gave the alkaloids evoxine (210 mg), mp 154-155°C (methanol), methylevoxine (28 mg), mp 122-123°C (ether), and acetyl-evoxine (32 mg), mp 161-162°C (acetone), and also the coumarins scoparone (30 mg), mp 141-142°C (acetone) and obtusinin (20 mg), mp 140-141°C (acetone) [3].

This is the first time that obtusinin has been isolated from this plant.

By chromatography on silica gel, the neutral fraction of the methanolic extract, yielded the coumarins scoparone (52 mg), obtusinin (30 mg), and scopoletin (17 mg), mp 199-200°C (acetone), and also cinnamide (10 mg), mp 144-155°C, shown to be identical in its spectral characteristics with a sample isolated from *Reseda luteola* [4].

All the substances with the exception of the cinnamide were identified by direct comparison with authentic samples.

This is the first time that cinnamide has been isolated from a plant of the family Rutaceae.

LITERATURE CITED

1. I. A. Bessonova and S. Yu. Yunusov, *Khim. Prir. Soedin.*, 47 (1989).
2. I. A. Bessonova, D. Kurbanov, and S. Yu. Yunusov, *Khim. Prir. Soedin.*, 46 (1989).
3. A. D. Matkarimov, É. Kh. Batyrov, V. M. Malikov, and E. Seitmuratov, *Khim. Prir. Soedin.*, 328 (1980).
4. K. L. Lutfullin, M. M. Tadzhibaev, V. M. Malikov, U. A. Abdullaev, and U. Rakhmankulov, *Khim. Prir. Soedin.*, 826 (1977); M. M. Tadzhibaev, Author's Abstract of Dissertation for Candidate of Chemical Sciences [in Russian], Tashkent (1978).

Institute of the Chemistry of Plant Substances, Uzbek SSR Academy of Sciences, Tashkent. Translated from *Khimiya Prirodnikh Soedinenii*, No. 2, pp. 284, March-April, 1990. Original article submitted June 8, 1989.