CARBOHYDRATES AND ALCOHOLS

OF Andrachne rotundifolia

F. N. Zufarov and Z. N. Nazirov

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We have investigated the epigeal part of <u>Andrachne</u> rotundifolia, family Euphorbiaceae, collected in the period of flowering and incipient fruit-bearing in the Tashkent oblast [1].

The comminuted plant material was extracted with chloroform. The yield of extractive substances was 6.5%; of these the fraction soluble in acetone amounted to 5.4% of the weight of the raw material. The acetone-soluble fraction was heated with petroleum ether (bp 40-70°C). The petroleum ether extracts were passed through a column of alumina and eluted successively with petroleum ether, benzene, ether, acetone, and methanol.

The benzene fraction yielded β -sitosterol, $C_{29}H_{50}O$, with mp 137-138°C [2]. The acetone-insoluble fraction was heated with petroleum ether (bp 40-70°C). The petroleum-ether-soluble fraction was passed through a column of alumina.

The petroleum-ether eluates yielded octacosane, $C_{28}H_{58}$, with mp 61-62°C and pentatriacontane $C_{35}H_{72}$, with mp 74-75°C [3, 2], the benzene fraction yielded hexacosanol, $C_{26}H_{54}O$, with mp 78-79°C [3, 2], and the methanolic fraction yielded dotriacontanol, $C_{32}H_{65}O$, with mp 88-89°C [2].

These substances were identified by mixed melting points, elementary analyses, and IR spectra with authentic samples.

This is the first time that the hydrocarbons and alcohols mentioned have been isolated from a plant of the genus Andrachne.

LITERATURE CITED

- 1. S. S. Sakhobiddinov, Wild Medicinal Plants of Central Asia [in Russian], Tashkent (1948), p. 70.
- 2. G. Jenkins and W. Hartung, The Chemistry of Organic Medical Products, 2nd ed., J. Wiley (1943).
- 3. U. Kh. Khalimova, I. Kadyrov, Kh. Isaev, and A. Ismailov, Khim, Prirodn. Soedin., 756 (1970).

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