

## FLAVONOIDS OF SOME SPECIES OF *Eryngium*

M. T. Ikramov, V. A. Bandyukova,  
and Kh. Kh. Khalmatov

UDC 547.972

We have studied the epigeal parts of *Eryngium coeruleum* M. B., *E. macrocalyx* Schrenk, and *E. octophyllum* Eug Kor., family Umbelliferae, collected in the flowering phase in the Tashkent and Syr'dar'ya oblasts.

The flavonoids were extracted with 70% ethanol from the *E. octophyllum* raw material which had been deresinified with chloroform. The concentrated aqueous residue was repeatedly treated with butan-1-ol, and distillation of the extract gave a substance  $C_{27}H_{80}O_{16}$  with mp 191-192°C (from water).

On the basis of the bathochromic shifts in the presence of complex-forming and ionizing additives, the IR spectra, and mixed melting points, the substance was identified with rutin.

The flavonoids were extracted with 70% ethanol from the *E. macrocalyx* raw material which had been deresinified with chloroform. The concentrated aqueous extract yielded a flavonoid with mp 221-223°C, which was identified by its IR spectrum, a mixed melting point, and the products of its hydrolysis as kaempferol 7-rhamno-3-glucoside.

---

Tashkent Pharmaceutical Institute. Translated from *Khimiya Prirodnikh Soedinenii*, No. 1, pp. 117-118, January, 1971. Original article submitted November 10, 1970.

© 1973 Consultants Bureau, a division of Plenum Publishing Corporation, 227 West 17th Street, New York, N. Y. 10011. All rights reserved. This article cannot be reproduced for any purpose whatsoever without permission of the publisher. A copy of this article is available from the publisher for \$15.00.