

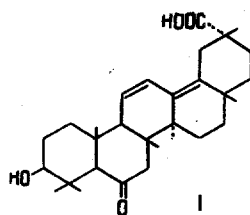
A GLYCOSIDE OF MERISTOTROPIC ACID

N. P. Kir'yalov and G. S. Amirova

Khimiya Prirodnkh Soedinenii, Vol. 4, No. 6, p. 388, 1968

From an extract of the roots of *Meristotropis triphylla* Fisch. et Mey. we have isolated meristotropic acid [1], the structure [2, 3] of which corresponds, probably, to (I). In view of the possibility of the formation in the acid hydrolysis of triterpene compounds of heteroannular dienes, we made an attempt to obtain meristotropic acid or a suitable derivative of it by omitting the stage of acid hydrolysis. An extract of the roots of *M. triphylla* was boiled with ethanol or methanol. The alcoholic extract was evaporated and cooled. The precipitate that deposited was chromatographed on silica gel. Colorless needle-like crystals with mp 208–210° C (from ethanol) were obtained.

IR spectrum: 3200 (OH group), 1700 (CO group of a carboxyl), and 1695 cm^{-1} (CO group of a ketone). UV spectrum: λ_{max} 258, 250, and 242 $\text{m}\mu$ (1.5 mg of substance in 80 ml of 70% ethanol). It is known that these maxima are also characteristic for meristotropic acid. The substance isolated is perhaps an insufficiently pure glycoside consisting of meristotropic acid and two molecules of uronic acids.



The acid hydrolysis of the glycoside formed meristotropic acid.

The isolation from the roots of *M. triphylla* of a glycoside with mp 208–210° C and a characteristic UV spectrum shows that the conjugated system of double bonds in meristotropic acid is created in the plant itself.

REFERENCES

1. N. P. Kir'yalov and T. N. Naugol'naya, ZhOkh, **33**, no. 2, 694, 1963.
2. A. D. Zorina, L. G. Matyukhina, and A. A. Ryabinin, KhPS [Chemistry of Natural Compounds], **2**, 217, 1966.
3. N. P. Kir'yalov and G. S. Amirova, KhPS [Chemistry of Natural Compounds], **4**, 87, 1968.

13 June 1968

Komarov Botanical Institute, AS USSR

Komarov Botanical Institute, AS AzerbSSR

UDC 547.918+547.597

A SAPONIN OF *PRIMULA TURKESTANICA*

A. M. Zakharov, E. P. Zinkevich, and A. I. Ban'kovskii

Khimiya Prirodnkh Soedinenii, Vol. 4, No. 6, pp. 388–389, 1968

We have studied the subterranean organs of the plant (roots and rhizomes) collected in 1966 in the region of the Chon-Ashu pass (Kirgiz SSR) at a height of 3600 m above sea level.

From a methanolic extract of the defatted raw material (1.2 kg), after threefold precipitation with acetone from methanol, we obtained 87 g of a purified mixture containing about eight compounds.

When this mixture was filtered through inactivated alumina, about 60% of substances not containing flavonoids was obtained. From the results of chromatography on a thin layer of hydrated silica in the chloroform–methanol–water (62:31:7) system, the mixture contained three substances (A, B, and C), of which only A was a saponin.