

**MONOCARBOXYLIC ACIDS OF THE ESSENTIAL OILS OF  
*Rhododendron mucronulatum* AND *Rh. sichotense***

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The essential oil was obtained by the steam distillation of leafy shoots of *Rhododendron mucronulatum* Vorosch. (Korean rhododendron) and *Rh. sichotense* Pojark. The acids were isolated by the method of [1]. Their amount ranged from 0.43% (*Rh. sichotense*) to 2.19% (*Rh. mucronulatum*). Their qualitative compositions were analyzed by GLC on a Chrom-5 instrument with a flame-ionization detector. Glass column (3 mm × 1.2 m) filled with 10% of SP-1000 on Supelcoport 80/100 as the stationary phase. The rate of flow of carrier gas (helium) was 30 ml/min. Programmed rise in the column temperature from 100 to 220°C at the rate of 4°C per minute. Identification was achieved on the basis of the retention temperatures of standard substances. The amounts of the components were determined by the method of absolute calibration.

TABLE 1. Amounts of Monocarboxylic Acids in the Essential Oils of Rhododendrons

Acid	Retention temperature, °C	Rh. mucronulatum	Retention temperature, °C	Rh. sichotense
Butyric	145	0.95	144	0.049
Valeric	155	0.52	152	0.038
Caproic	163	0.62	163	0.039
Enanthic	174	0.35	173	0.079
Caprylic	182	0.21	182	0.012
Pelargonic	193	0.23	192	0.133
Capric	204	0.04	203	0.075
Tridecanoic	220	0.08		-
Palmitic	-	-	230	0.089

The results of analysis, given in Table 1, show qualitative and quantitative differences in the various acids of the essential oils of two morphologically close species of rhododendrons of the flora of the Far East, investigated for the first time. Differences in acid composition may serve as an additional indication of the species independence of the rhododendron species investigated.

**REFERENCE**

1. A. Liberti and G. Cartoni, Gas Chromatography [Russian translation], Moscow (1961), p. 299.