

ESSENTIAL OILS OF *Pimpinella pseudotragium*

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We are continuing an investigation of the essential oils of species of *Pimpinella* L. which, as reported previously [1], have hitherto been little studied. In the present paper we consider *P. pseudotragium* DC, on which there is no information in the literature. The essential oil was obtained by steam distillation [2] from whole plants gathered in the Shakhbuz, Ordubad, and Sharur regions of the Nakichevan AR. It consisted of a bright blue or, from the fruit, of a bright green transparent liquid sweet to the taste and with a characteristic pleasant odor. Its physicochemical contents were determined in accordance with the instructions of GOSTs [State Standards] [3]: acid No.) 5.61; ester No) 14.025; d^{26}) 0.9466,; n_D^{20}) 1.515. The amount of essential oil in the whole plants was 1.52-1.97%, in the epigeal mass 1.92-2.205, in the stems and leaves 0.73-0.78%, in the flowers 2.23-2.76%, and in the fruit 4.63-4.82%.

The qualitative composition of the essential oil was determined in the same way as in [1], without preliminary separation into fractions, by GLC on a Janaco chromatograph using the same conditions.

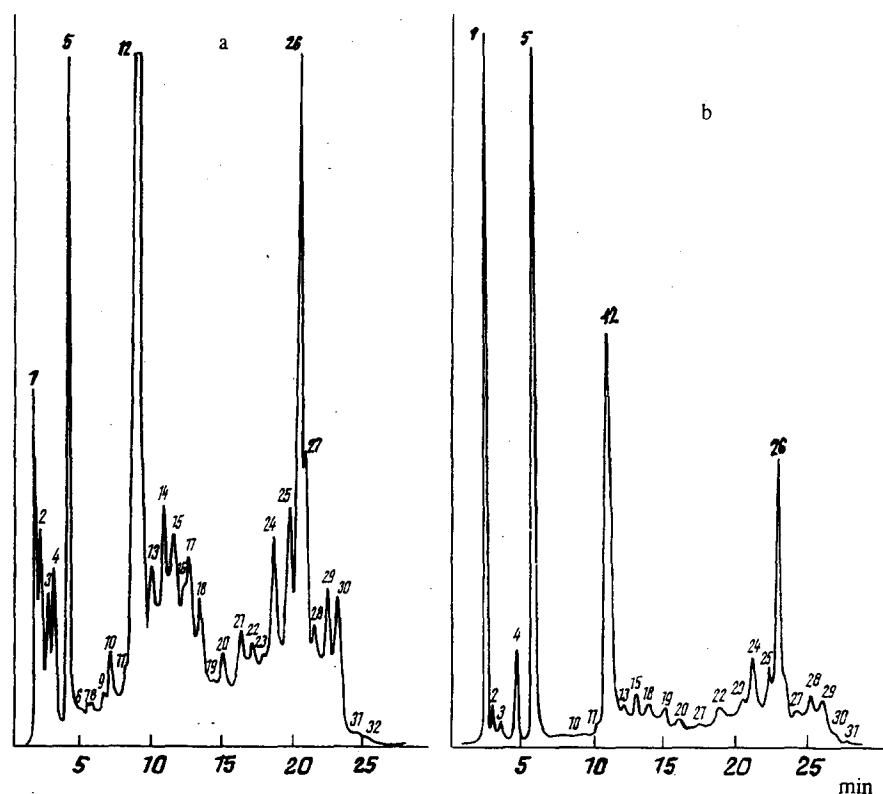


Fig. 1. GLC of the essential oil from whole plants (a) and from the fruit (b) of *Pimpinella pseudotragium*: 1) α -thujene; 2) α -pinene; 3) camphene; 4) α -terpinene; 5) limonene; 10) camphor; 11) menthol; 12) linalyl acetate; 13) linalool; 15) α -terpineol; 18) *trans*-anethole; 19) geranyl acetate; 23) eugenol; 24) isoeugenol; 26) thymol; 29) chamazulene; the others are unidentified components.

In the essential oil from the whole plant we detected 32 components, while in the fruit there were only 24. Monoterpene hydrocarbons made up 14.1% (33.7% in the fruit), including: α -thujene, 2.7 (12.1); α -pinene, 2.5 (0.4); camphene 1.2 (0.7); α -terpinene 1.7 (2.5); and limonene, 6.0 (18.0). Oxygen-containing compounds made up 58.1% (48.4% in the fruit), including: *p*-cymene, 0.1; camphor, 2.0 (0.5); menthol, 1.1 (0.9); linalyl acetate, 22.7 (21.0); linalool, 3.2 (1.5); α -terpineol, 4.3 (2.4); methylchavicol, 2.9; pulegone, 1.8; *trans*-anethole, 3.4 (1.6); geranyl acetate, 0.5 (1.4); eugenol, 1.4 (2.4); isoeugenol, 4.8 (6.7); thymol, 10.0 (10.0); and chamazulene, 2.9 (2.3). The unidentified components totaled 23.8%, or, for the fruit, 15.6%.

REFERENCES

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