

COMPONENTS OF THE ESSENTIAL

OIL OF *Abies nordmanniana*

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The essential oil was isolated from various parts of *Abies nordmanniana* (Stev.) Spach (Caucasus pine, Nordmann variety, Pinaceae), which is a cliff-dwelling plant of Georgia. The yields were (vol. %): seeds, 6.0; cone scales, 0.2; needles, 0.3; shoots, 0.19. The indices of refraction are (n_D^{19}): 1.476, 1.475, 1.491, and 1.479, respectively. Eleven monoterpene hydrocarbons were observed by GLC, including six principal components (Table 1).

Table 1 shows that the oil has a high content of α - and β -pinene and limonene.

The good yield of high-quality essential oil from the seeds makes them a promising source of oil for use in medicine and as fragrances.

TABLE 1. Monoterpene Hydrocarbons of Caucasus Pine, %, GLC

Compound	Seeds	Cone scales	Needles	Shoots
α -Pinene	23.89	47.42	24.80	30.45
Camphene	Tr.	Tr.	14.66	6.14
Δ^3 -Carene	Tr.	Tr.	Tr.	Tr.
β -Pinene	7.07	19.41	14.61	35.89
β -Myrcene	Tr.	Tr.	23.59	Tr.
Limonene	69.04	33.15	19.05	17.23

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