BRIEF COMMUNICATIONS

FATTY ACID COMPOSITION OF THE FRUIT OIL OF *Elaeagnus angustifolia*

R. D. Kusova and M. S. Luk'yanchikov

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Russian olive, *Elaeagnus angustifolia* L., family Elaeagnaceae, grows in Kazakhstan, Transcaucasia, and in the Northern Caucasus [1, 2]. We have investigated the oil obtained from the fruit of this plant growing on the territory of the Daghestan ASSR.

The oil was extracted from the dried and comminuted fruit by treatment with petroleum ether [3]. The oil was yellow-orange with a density d_4^{20} of 0.9260, an acid No. of 6.86 mg KOH/g, n_D^{20} , 1.4760, saponification No. 197.5 mg KOH/g, iodine No. 113.3% I_2 .

In the unsaponifiable fraction we determined the amount of carotenoids - 9.8 mg % - and of tocopherols - 36.5 mg %.

In saponifiable fraction we studied the composition of the fatty acids in the form of their methyl esters [4] by the GLC method on a Tsvet-106 instrument with a flame-ionization detector using a glass column filled with poly(ethylene succinate) (15%). The support for the stationary phase was Chromaton N-AW-HMDS, (0.16-0.20 mm).

The temperature of the column was 184°C and that of the evaporator 250°C. The rate of flow of the carrier gas, nitrogen, was 30 ml/min.

Composition of the fatty acids (%): $C_{16:0}$ -4.4; $C_{16:1}$ -1.9; $C_{18:0}$ -0.9; $C_{18:1}$ -23.4; $C_{18:2}$ -52.2; $C_{18:3}$ -12.2.

Thus, it has been shown that the main esters and neutral lipids of the olive are oleic, linoleic, and linolenic, making up 92.8%, and the amount of vitamins in the fatty oil is low.

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