Thus, it has been established that the triglyceride fraction of the oil studied contains the following fatty acids: lauric, 0.33%; myristic, 0.11%; palmitic, 3.65%; stearic, 0.66%; oleic, 1.65%; and linoleic, 1.21%. The other acids appear in the form of small peaks which were not identified.

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THE OIL OF THE SEEDS OF MURETIA TRANSITORIA

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<u>Muretia transitoria</u> belongs to the family Umbelliferae [1]. The seeds of the plant contain 17% of an olive-green oil. The oil has not been described in the literature. According to our investigations, its specific gravity is $d_4^{20} 0.9126$.

 n_D^{20} 1.4711, and its absolute viscosity 0.665 (20° C). Saponification number 189.75; iodine number 100.62%; thiocyanogen number 82.05%. Content of unsaponifiables 1.4% and of phosphatides 0.22%. For the mixture of fatty acids from the oil we found the neutralization number 199.05 mg/g; the mean molecular weight 281.88; the iodine number 103.48%, and the thiocyanogen 84.69%. The total mixture of acids was separated by Twitchell's method into a solid and a liquid fraction (table).

Fatty acids	Yield, %	C _{16:0}	C _{16:1}	C _{18:1}	C _{18:2}
Total mixture Liquid fraction Solid fraction	$100 \\ 65.7 \\ 34.3$	3.79 3.53 5.37	0.78	79.24 50.98 94.63	16.19 44.44

Since petroselinic (6,7-octadecenoic) acid (mp 34° C) is present in the oil of many Umbelliferae it should of course be present in the solid fraction. For proof, this fraction was destructively oxidized by Hilditch's method [2]. Among the oxidation products in the monocarboxylic acid fraction we found 92.38% of lauric acid and in the dicarboxylic acid fraction 94.43% of adipic acid, This confirmed our assumption that the solid acid fraction consists mainly of petroselinic acid. Its content calculated on the oil is 32.46%. By oxidizing the petroselinic acid by Lapworth's method [3] we obtained 6, 7-dihydroxystearic acid with mp 122.4° C, neutralization number 177.2, mol. wt. 316.59 (theoretical 316.57). The gas-liquid chromatography of the saturated acid fractions isolated by Bertrand's method permitted the detection in the oil of, besides palmitic acid, a small amount of other saturated acids from C₁₀ to C₂₂.

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