SEED OILS OF SOME SPECIES OF THE FAMILY SOLANACEAE

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We have investigated the seed oils of several species of the family Solanaceae growing in various regions of Azerbaidzhan [1, 2]. Plants of this family give a large number of oil-rich seeds which can be used for technical and food purposes.

To isolate the oils, the freshly collected seeds were dried, ground with a hand mill, and extracted with petroleum ether (40-60°C), and the solvent was distilled off. The physicochemical indices of the oils were determined by the methods usually adopted [3]. The results obtained are given in Table 1 (see page 679).

Judging from the iodine and thiocyanogen Nos., the oils studied belong to the linolenic group. The investigation of the oils is continued.

LITERATURE CITED

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TABLE 1

Plants, growth site, and date of collection	Amount of oil, % on the weight of the air-dry raw ma material	Density, g/cm³	Refraction index	Acid No., mg of KOH/g	Saponification No., mg of KOH/g	Iodine No., % of I_2	Thiocyanogen No., % of I_2	Phospholipid content, %	Unsaponifiables, %	Neutralization No. of the fatty acids, mg of KOH/g
Solanum kieseritzkii C. A. Mey., 800 m above sea level, Lenkoranskii region, October 5, 1971	17,81	0,9217	1,4518	1,32	186,3	117,2	91,3	0,11	1,48	205,5
S. dulcamara L., Baku, Botanical Gardens, September 10, 1971	18,36	0,9228	1,4628	1,38	191,1	118,6	95,1	0,12	1,52	207,1
S. persicum W., Baku, Botanical Gardens, September 10, 1971	21,27	0,9282	1,4558	1,28	188,8	115,3	92,9	0,13	1,24	202
S. pseudopersicum Pojark., Baku Botanical Gardens, September 10 1971	20,84	0,9264	1,4567	1,31	188,2	117,1	93,1	0,15	1,36	206,2
S. nigrum L. Baku, Botanical Gardens, September 10, 1971	16,71	0,9228	1,4463	1,73	188,3	112,8	91,3	0,11	1,11	201,3
S. transcaucasicum Pojark., Lenkoranskii region, October 5, 1970	16,91	0,9211	1,4211	1,67	186,6	106,2	92,2	0,11	1,29	201,6
S. luteum Mill. Baku, Botanical Gardens, September 10, 1971	15,62	0,9272	1,4252	1,29	184,2	109,8	91,8	0,12	1,11	201,3
S. rostratum Dun. Environs of Stepanakert, September 18, 1971	11,85	0,9412	1,4483	1,92	191,1	118,3	96,8	0,10	1,21	202,7
S. sisymbriifolium Lam., Environs of Astara, October 5, 1971	15,41	0,9446	1,4541	1,87	189,4	118,7	95,4	0,11	1,19	202,3
Physalis alkekengi L., Environs of Zakataly, August 25, 1975	11,86	0,9264	1,4681	9,2	189,8	116,3	96,3	0,16	1,49	204,1
Ph. ixocarpa Brot. et Hornem. Environs of Zakataly, August 25, 1975	16,71	0,9256	1,4714	10,1	192,8	118,9	95,8	0,14	1,56	206,3
Atropa caucasica Kreyer., Lenkoran', near "30 km," October 5, 1971	19,25	0,9423	1,4694	9,7	198,4	121,4	92,2	0,12	1,48	201,8
Lycium barbarum L., Baky, Baku, Botanical Gardens, October 16, 1974	17,21	0,9244	1,4743	1,28	191,2	119,2	76,31	0,10	1,53	200,0
L. turcomanicum Turez. ex Baku, Botanical Gardens, October 16, 1974	19,28	0,9238	1,4687	1,17	190,3	118,4	71,68	0,17	1,61	201,5
Hyoscyamus niger L., Fizuli, village of Garakollu, September 14, 1969	25,8	0,9342	1,4673	12,1	188,6	139,5	88,1	0,15	1,92	201,6
H. reticulatus L., Fizuli, village of Garakollu, September 14, 1969	27,41	0,9271	1,4478	11,2	189,7	138,3	89,3	0,11	1,90	201,1
Datura stramonium L., Baku, Botanical Gardens, October 12, 1971	27,71	0,9218	1,5612	6,3	185,4	128,5	79,5	0,18	1,32	202,8
D. tatula L., Baku, Botanical Gardens, October 12, 1971	29,13	0,9228	1,5528	6,8	186,2	127,4	81,5	0,20	1,26	202,5