a hydrolysate of the acid fraction (2 N H_2SO_4, 98°C, 32 h) contained D-galacturonic acid and the same monosaccharides as in the neutral fraction.

The partial hydrolysis of the PSs (2 N H_2SO_4, 98°C, 4 h) gave a polyuronide (yield 25%). D-Galacturonic acid was detected in the products of acid and enzymatic ("Fluka" pectinase) hydrolysis. The IR spectrum of the polyuronide had the following absorption bands: 3400, 2930, 1750, 1630, 1410, 1310, 1230, 1020, 1110, 950, 890, 830 cm^{-1}.

The formation of the polygalacturonide on partial hydrolysis, its cleavage by pectinase, and the absence of acidic oligosaccharides from the hydrolysis products indicate the presence in the pectin molecule of polygalacturonide sections having no side chains.

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A PHYTOCHEMICAL INVESTIGATION OF THE EPIGEAL PART OF *Adonis aestivalis*

V. Ya. Yatsyuk, V. S. Dolya, and É. V. Gella

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Continuing an investigation of plants of the genus *Adonis* [1], we have studied the cardenolide composition of the epigeal part and the fatty-acid composition of the lipids of the fruit of *Adonis aestivalis* L. (summer adonis) collected in crimea province in the flowering-fruit-bearing period. By chromatography of an ethanolic-chloroform extract on alumina (Brockman grade III) and rechromatography on silica gel, we isolated two individual substances (1) and (2).

Substance (1) — $C_{23}H_{32}O_6$, mp 136-138/230°C, $[\alpha]_D^{20}$ +42 (c 0.1; ethanol).

Substance (2) — $C_{36}H_{54}O_{11}$, mp 196-203°C, $[\alpha]_D^{20}$ +31.8° (c 0.1; ethanol).

On the basis of color reactions (Legal, Raymond, Lieberman, Keller-Kiliani, etc.), UV spectra, and the absence of depressions of the melting points with authentic samples, it was established that substance (1) was strophanthidin, and substance (2) k-strophanthidin-β [2].

The fatty oil was extracted from the fruit with petroleum ether (bp 40-70°C). The fatty oil content amounted to 17.46%.

Physicochemical constants of the oil, refractive index n_D^{20} — 1.4754; acid No., mg KOH/g — 5.14; saponification No., mg KOH/g — 192.37; iodine No., % iodine — 134.16; thiocyanogen No., % iodine — 78.52.

The fatty acid composition of the oil determined by gas-liquid chromatography [3] was as follows: (%) $C_{3:0}$ — 0.4, $C_{14:0}$ — 0.2 $C_{16:0}$ — 12.5, $C_{16:1}$ — traces, $C_{18:0}$ — 2.1, $C_{18:1}$ — 12.7, $C_{18:2}$ —72.1, $C_{18:3}$ — traces.

From the value of the iodine No. and the fatty acid composition, the oil may be assigned to the semidrying type.

Kursk State Medical Institute.

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POSITION DISTRIBUTION OF PETROSELINIC ACID IN THE TRIACYLGLYCEROLS OF *Acanthopanax sessiliflorus*

D. T. Asilbekova, S. D. Gusakova, and A. I. Glushenkova

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There is almost no information in the literature on the nature of the distribution in triacylglycerols (TAGs) of acids of unusual structure such as isooleic acids. One of such acids is the 18:1(6) acid (petroselinic), which is found mainly in the lipids in the seeds of representatives of the families *Umbelliferae*, *Garryaceae*, and *Araliaceae* [1].

Our aim was to ascertain the order of distribution of the 18:1(6) acid over the three positions of the TAGs of the seeds of *Acanthopanax sessiliflorus* (Purp. et Maxim) Seem. (family *Araliaceae*).

The triacylglycerols isolated from the seed lipids by the usual method [2] contained 52.8% of the 18:1(6) acid (wt.%, GLC). The analysis of the structure and compositions of the TAGs was carried out by Brockerhoff's method [3]. The amounts of the 18:1(6) acid in the TAGs, the monoacylglycerols (MAGs), the D-phosphatidylphenols (D-PPs), and the lysophosphatides (LPs) were calculated from the results of the GLC analysis of the fragments of periodate-permanganate oxidation of each group of acids isolated from the given fractions [2]. The calculation was based on the molecular mass of the methyl esters of the 9:0 and 12:0 acids. The results obtained are shown in Table 1.

The results show that in the TAGs of *A. sessiliflorus* the 16:0 and 18:0 saturated acids and the 16:1 monoenoic acid occupy the sn-1 position, and the 18:3 acid the sn-3 position. In the sn-2 position are bound 2/3 of the total amount of the 18:2 acid, and the remainder

TABLE 1. Fatty Acid Compositions of the Products of the Stereospecific Analysis of the TAGs of *Acanthopanax sessiliflorus*

Sample	Acid, moles-%, GLC						
	16:0	16:1	13:0	18:1 (b)	13:1 (a)	18:2	18:3
TAGs	3,1	Tr..	Tr..	52,8	8,9	34,1	1,1
DAGs	2,2	Tr..	Tr..	55,2[a]		42,6	Tr.
FFAs of phospholipolysis	2,7	Tr..	—	32,2		65,1	—
D-PPs	1,9	Tr..	Tr..	47,9	8,5	40,2	1,5
Positions in the TAGs:							
sn-1	8,4 (90,3)[b]	Tr.	Tr.	57,2 (36,1)	10,5 (39,3)	23,9 (23,4)	—
sn-2	—	—	—	20,3 (12,4)	9,8 (36,7)	69,9 (68,3)	—
sn-3	0,9 (9,7)	—	—	80,9 (51,5)	6,4 (24,0)	8,5 (8,3)	3,3 (100)

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