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UDC 547.958:665.37

In a study of the phospholipids (PLs) of the cotton plant of variety 159-F in various stages of development, unidentified PLs were detected the chromatographic mobilities and fatty-acid compositions of which have been given in previous papers [1-5]. It has been established that the PL  $X_1$  is present in all the organs apart from the bark of the stems, but there is a larger amount in the vegetative organs than in the generative organs, while the PL  $X_3$  is present in the generative organs and, of the vegetative organs, only in the bark of the stems. By column and thin-layer chromatography from the total PLs of the leaves of the cotton plant we have isolated the PL  $X_1$ , and from the total PLs of cotton flowers of the first day the PL  $X_3$ .

The PLs  $X_1$  and  $X_3$  can be assigned to phosphatidylglycerol (PG) and diphosphatidylglycerol (DPG), respectively, although a number of authors [6-13], even with similar systems and sorbents, give different chromatographic mobilities. For a more accurate identification we carried out a physicochemical analysis of the PLs  $X_1$  and  $X_3$ . The products of severe acid hydrolysis of the PLs  $X_1$  and  $X_3$  contained phosphoric acid, glycerol, and fatty acids. IR spectroscopy showed the presence of absorption bands characteristic for the following groups:  $\text{CH}_3$ ,  $\text{CH}_2$ , ester  $\text{C}=\text{O}$ , phosphatidylcholine was performed by the method of enzymolysis using phospholipase D [14]. The chromatographic mobility, and qualitative reactions of the PG synthesized and of PL  $X_1$  and of mixtures of them agree with one another. According to the products of severe acid hydrolysis, qualitative reactions, IR spectroscopy and chromatographic mobilities, PL  $X_1$  and the PG synthesized were identical. The chromatographic mobility and quantitative reactions of the PL  $X_3$  and of standard DPG (a standard preparation of cardiolipin, Khar'kov) corresponded to one another. The products of severe acid hydrolysis and the IR spectroscopy, chromatographic mobility, and qualitative reactions of PL  $X_3$  confirmed that it was diphosphatidylglycerol.

Thus, in the PLs of the generative and vegetative organs of the cotton plant of variety 159-F two PLs -  $X_1$  and  $X_3$  - have been identified as phosphatidylglycerol and diphosphatidylglycerol.

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Translated from *Khimiya Prirodnikh Soedinenii*, Vol. 6, pp. 847-848, November-December, 1989.  
Original article submitted February 10, 1989.