From the petroleum ether mother liquor remaining in the production of tigogenin from leaves of <u>Yucca gloriosa</u> (mound lily yucca) in the Batumi Pharmaceutical Chemicals Factory [1], by chromatography first on a column of alumina and then with KSK silica gel, fractions have been obtained which, on the basis of their luminescence in UV light and the color reaction with the Liebermann-Burchard reagent have been assigned to the sterols.

The fractions ioslated were analyzed on a Chrom-41 gas-liquid chromatograph with a flame-ionization detector; conditions: the phase SE-30 (3%) on Chromaton (0.25-0.315 mm), length of the glass tube 2.5 m, diameter 0.2 cm, rate of flow of helium, 25 ml/min; amount of sample 1 μ l; solvent, chloroform; column temperature 260°C.

As a result, it was established that the sterol fraction consisted of the following components (%): β -sitosterol, 85.77; cholesterol, 60; campesterol, 40.23; 24-ethylidenelophenol (citrostadienol) 1.50; stigmasterol, 1.42; and a monomethylsterol, 19.88 [2].

Thus, the dominating sterols in the waste from the production of tigogenin are β -sitosterol and cholesterol.

In addition to sterols, a fatty-acid fraction was eluted from the column. After methylation and analysis by the GLC method, the following acids were detected in it (%): $C_{16:0}$ - 54.8; $C_{18:0}$ - 16.8; $C_{18:1}$ - 20.9; $C_{18:2}$ - 7.5.

The study of the sterols and lipids of this plant is being performed for the first time.

LITERATURE CITED

- 1. E. P. Kemertelidze and T. A. Pkheidze, Khim.-farm. Zh., 6, No. 12, 44 (1972).
- 2. L. Goad and T. W. Goodwin, Prog. Phytochem., 3, 113-198 (1972).
- 3. Handbook on Methods of Investigation, Technical and Chemical Control, and the Accounting of Production in the Oils and Fats Industry [in Russian], Leningrad, Vols. 1 and 2 (1967).

I. G. Kutateladze Institute of Pharmacochemistry, Georgian SSR Academy of Sciences, Tbilisi. Translated from Khimiya Prirodnykh Soedinenii, No. 5, pp. 762-763, September-October, 1988. Original article submitted February 3, 1988; revision submitted April 12, 1988.