UDC 547.972

N. A. Kaloshina, V. I. Glyzin, and A. I. Ban'kovskii

In an investigation of the flowers of *Cardus nutans* L. (musk bristlethistle), family Asteraceae, collected in the flowering period in the environs of Vitebsk, we found substances of flavonoid nature [1].

The combined polyphenolic compounds were extracted with 96% ethanol. They were separated on a column of polyamide sorbent with elution by mixtures of ethanol and water. Two individual substances were isolated, which were identified on the basis of their melting points, elementary compositions, chromatographic behavior, and UV, IR, and NMR spectra [2, 3] as kaempferol $3-\alpha-L$ -rhamnofuranoside and acacetin $7-\beta-D$ -glucopyranoside (tilianin).

LITERATURE CITED

- 1. N. A. Kaloshina, Modern Problems of Pharmaceutical Science and Practice [in Russian], Kiev (1972) p. 690.
- 2. V. I. Litvinenko and N. K. Maksyutina, Khim. Prirodn. Soedin., 420 (1965).
- 3. T. I. Mabry, K. R. Markham, and M. B. Thomas, The Systematic Identification of Flavo-noids, Springer, New York (1970).

Zaporzh'e Medical Institute. Translated from Khimiya Prirodnykh Soedinenii, No. 5, pp. 654-655, September-October, 1975. Original article submitted April 16, 1975.

^{© 1976} Plenum Publishing Corporation, 227 West 17th Street, New York, N.Y. 10011. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission of the publisher. A copy of this article is available from the publisher for \$15.00.