Synthesis of Lagochiline and Lagochirsine Esters

I.V.Kravtsov¹, D.A.Brovko¹, I.D.Sham'yanov¹, <u>V.G.Kartsev</u>²

¹New Horizons in Chemistry Labs Ltd., Kashirskoe sh. 24/15, Moscow, Russia fax: +7(095)111-9212,

e-mail: <u>info@nchlab.com</u>, <u>sales@nch-labs.com</u>

²InterBioScreen Ltd., PO Box 218, Moscow, 121019 Russia, e-mail: <u>screen@ibscreen.chg.ru</u>

The diterpenoids lagochiline (1) and lagochirsine (2) with a grindelane-like skeleton (extracted from various plants of the genus Lagochilus) exhibit a wide spectrum of biological activity [1]. The acylation of hydroxy groups in physiologically active compounds may strengthen their action [2, 3]. In this context, we have synthesized the esters of (1) and (2) in 40–97% yield.

R = trans-Crotonyl, Ph, 2-FPh, 2-ClPh, 4-ClPh, 2,4-diClPh, Fur, 5-BrFur

The structure of synthesized esters was confirmed by ¹H NMR and mass spectra.

- [1] Mavlyankulova Z.I., Zainutdinov U.N., Mukhamedkhanov S.I., Leont'ev V.D., Aslanov Kh.A., *Khim. Prirodn. Soedin.* 1980, no. 1, p. 46.
- [2] Taiwar K.K., Kumar L., Kolsi P.S., Experientia 1983 39 117.
- [3] Zaman S.S., Sharma R.P., *Heterocycles* 1991 **32** 1593.