THE SYNTHESIS OF POTENTIAL METABOLITES OF ANTIFUNGAL SUBSTANCE LNO 18-22

Lenka Elsnerová

Abstract

A lot of substances with potential antifungal activity derived to the structure of incrustoporine were synthetized in last years. When a substance signed LNO 18-22 (3-(4-bromophenyl)-5-acetyloxymethyl-2,5-dihydrofuran-2-on) was tested to biological activity. Metabolites of this substance with supposed structure 3-(4-acetylphenyl)-5-acetylmethyl-2,5-dihydrofuran-2-on (PSM3) and 3-(4-hydroxylphenyl)-5-acetylmethyl-2,5-dihydrofuran-2-on (PSM2) were discovered in the assessed sample.

These substances were synthetized and they confirmed structure of metabolites found in mouse urine after intraperitoneal administration of the potential antifungal drug LNO 18-22.

The aim of this thesis was their synthesis to verify structures.