Synthesis and *in vitro* Study of Antiviral and Virucidal Activity of Novel 2-[(4-Methyl-4*H*-1,2,4-triazol-3-yl)sulfanyl]acetamide Derivatives

Monika Wujec^a,*, Tomasz Plech^a, Agata Siwek^a, Barbara Rajtar^b, and Małgorzata Polz-Dacewicz^b

- ^a Department of Organic Chemistry, Medical University, Staszica 6, 20-081 Lublin, Poland. E-mail: monika.wujec@am.lublin.pl
- ^b Department of Virology, Medical University, Chod ki 1, 20-093 Lublin, Poland
- * Author for correspondence and reprint requests

Z. Naturforsch. **66 c**, 333–339 (2011); received May 22, 2010/April 7, 2011

2-[(4-Methyl-4*H*-1,2,4-triazol-3-yl)sulfanyl]acetamide derivatives were synthesized and their structures were confirmed by ¹H NMR, IR, and elemental analysis. Cytotoxicity of the compounds towards HEK-293 and GMK cells was evaluated. Moreover, the antiviral and virucidal activities of these compounds against human adenovirus type 5 and ECHO-9 virus were assessed. Some of the newly synthesized derivatives have the potential to reduce the

viral replication of both tested viruses.

Key words: Antiviral Agents, ECHO-9 Virus, Adenovirus-5