Full Paper Registration Code of Publication: 14-38-6-59 Publication is available for discussion in the framework of the on-line Internet conference "Butlerov readings". http://butlerov.com/readings/ Contributed: August 06, 2014.

Synthesis and antibacterial activity of 5-aryl-4-acyl-3-hydroxy-1-(2-ethylhexyl)-3-pyrrolin-2-ones

© Vladimir L. Gein,¹* Tatiana F. Odegova,¹ Ludmila I. Varkentin,¹ Ludmila F. Gein,² and Andrey N. Korol¹

¹ Department of General and Organic Chemistry. Perm State Pharmaceutical Academy. Polevaya St., 2. Perm, 614990. Russia. Phone: +7 (834) 282-58-30. E-mail: geinvl48@mail.ru ² Department of General and Bioorganic Chemistry, Perm State Medical Academy named after Acad. E.A. Wagner. Petropavlovskaya St., 26. Perm, 614000. Russia. Phone: +7 (834) 282-46-38.

*Supervising author; ⁺Corresponding author *Keyword:* heterocycles, 1,4,5-trisubstituted tetrahydropyrrole-2,3-diones, three-component reaction, ethylhexylamine, antimicrobial activity.

Abstract

By the reaction of 1,4,5-trisubstituted 3-hydroxy-3-pyrroline-2-ones from a mixture of aromatic aldehyde and 2-ethylhexylamine we obtained 5-aryl-4-acetyl-1-(2-ethylhexyl) -3-hydroxy-3-pyrroline-2-ones. The antimicrobial activity of these compounds has been studied. The structures of all synthesized compounds were proved by IR, NMR ¹H spectroscopy.