



BOOK OF ABSTRACTS

— INTERNATIONAL CONFERENCE —

„NATURAL ORGANIC MATTER (NOM) GEOCHEMICAL FLOWS AND PROPERTIES:
FROM THEORY TO PRACTICE”

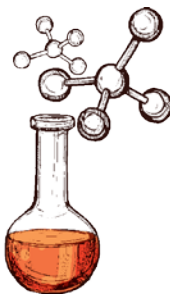
HUMIC



UL Academic Centre House of Nature

5-8 JUNE 2019

RIGA, LATVIA



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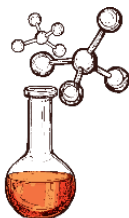
International Conference

**NATURAL ORGANIC MATTERS
GEOCHEMICAL FLOWS AND PROPERTIES:
FROM THEORY TO PRACTICE**

5 – 8 June 2019
Riga, Latvia

Book of Abstracts

University of Latvia
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The International conference of IHSS Nordic-Baltic Chapter is organised by University of Latvia and International Humic Substances Society (IHSS).

The aim of the conference is to exchange the results of recent studies and provide a place for creative discussions for those, who are interested in NOM and humic substances. We hope that the topics of the conference will be addressed by researchers not only from Northern Europe, but from other countries as well. We are inviting you to contribute to the success of the conference, enjoy warm and friendly atmosphere of Riga and meet old and new members of the NOM and humus research community.



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METABOLIC ROLE USING A FEED ADDITIVE OF HUMIC NATURE "HUMILID" ON THE ORGANISM OF ANIMALS

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Keywords: humic substances, metabolism, adaptation processes.

Abstract: Humic substances are products of biotransformation of organic matter under anaerobic conditions. When applied to animals, they do not accumulate in the body, and they are metabolized to the end products due to the heterocyclic structure of their molecules and the presence of a large number of functional groups. Therefore, the purpose of this study is to determine the effect of the feed additive humic nature "Humilid" on the physiological state, qualitative and quantitative performance indicators in farm animals and adaptation processes in laboratory rats in model experiments.

The studies were carried out on rabbits of Hyplus, of black African ostriches and broiler chickens of the Cobb-500 cross on the basis of production complexes. In these animals, were determined an indicators of protein, lipid, carbohydrate metabolism and performance. Under the conditions of the model of water-immobilization stress (VIS), the adaptive capacity and the state of hemostasis system were determined in rats.

Was found that used "Humilid" contributes to the normalization parameters of the hemostasis system and more active processes of adaptation of the organism to the damaging factors under the influence of VIS. In productive animals, "Humilid" has shown an improvement in the physiological state of the body due primarily to the activation of the erythrocyte system and the protein-synthetic processes. The activation of metabolic processes in the body as a whole is due to an increase in the muscle tissue of the experimental animals of the content of total protein, essential amino acids, essential fatty acids, a decrease in the fat content. As a result increase of biological value of meat products.

Using of "Humilid" promotes the improvement of the overall functional state of the animal organism and the increase of quantitative and qualitative indicators of their productivity and the basis for more rapid adaptation to various stress factors.
