

дослідної групи мав перевагу над аналогами контрольної групи на 0,1 мл або 16,7% при $P > 0,95$.

Щодо морфологічних показників, то ми спостерігаємо позитивні зміни, так, підвищена частка живих сперматозоїдів у собак дослідної групи порівняно з контрольною на 5%, а частка мертвих сперматозоїдів та сперматозоїдів з дефектами голови, хвоста зменшилася на 2%, 3% та 1% відповідно.

Ключові слова: відтворювальна здатність, спермограма, собаки, пси, препарат «Трі-Сол».

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CURRENT PROBLEMS OF ECOLOGY, AGRICULTURE AND ANIMAL WELFARE IN THE CONTEXT OF GLOBAL CLIMATE CHANGES: AFTERWORD

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Проведено аналіз доповідей I Міжнародної науково-практичної конференції «Добробут тварин в умовах глобальних змін клімату» (Дніпро, 21-22 квітня 2020 р.) (AWCGCC), який дозволив узагальнити актуальні проблеми в сфері екології, сільського господарства і добробуту тварин в контексті глобальних кліматичних змін.

Introduction. Conducting conferences, symposia and seminars in any field of scientific activity contributes to the enrichment of knowledge and implementation of the best practices and allows to outline current issues that have not been resolved yet. Recent years' researches have shown increased number of problems connected with

global climate changes, which influence all industries on the Planet without exception.

Methods. The material for the analysis were messages (abstracts) on the main areas of the 1st International Scientific and Practical Conference on «Animal Welfare in the Conditions of Global Climate Changes» (Dnipro, April 21-22, 2020) (AWCGCC), which made it possible to summarize current issues in the field of ecology, agriculture and animal welfare in the context of global climate changes.

Results. It should be said that among the AWCGCC conference participants (about 100 people) were representatives of 28 leading institutions of Ukraine, Belarus, Poland and the Republic of India. It is necessary to note the general integrated approach of the participants to the existing problems in the field of ecology and animal welfare in the context of anthropogenic impact on the environment and global climate changes, as well as close cooperation between scientists not only from different industries within Ukraine (agrarians, specialists in the food industry, medical and technical specialties), but also from institutions of other countries. The analysis of the abstracts both domestic and foreign scientists made it possible to formulate current trends of researches in the field of environmental protection and animal welfare, including:

- finding out the causes of global warming^[56] and the main sources of biosphere pollution^[35];

- problems connected with environmental pollution by animal husbandry waste and ways of utilization, processing and rational use of manure^[36,37];

- monitoring of the content of heavy metals^[8,11,17], radionuclides^[39-40], antibacterial^[2] and hormonal^[1] preparations in water, in livestock production and in waste of agricultural enterprises by using modern (advanced) methods^[15,50];

- assessment of the impact of technological factors and management decisions on the welfare of productive animals in the context of industrial^[9,26,29,32] and alternative^[19,25,33,47] livestock technologies;

- the use of new (unconventional) fodder crops^[3,14,42], livestock and aquaculture objects^[28] as new sources for food security;

- maintaining the health of pets^[51] and productive^[49,55] animals;

- use of biological objects to evaluate the harmful effects of toxicants on the body^[4,13,23];

- conservation and effective use of genofund of domestic and foreign animal breeds^[6,7,10,12,16,20-22, 24,30,31,45-46,48,52];

- using of probiotic^[5,43-44,53], phytogetic^[54] and immunostimulating^[18,27,38,57] drugs to enhance the protective mechanisms of the animal body;

- the growing role of modern education and advisory services helping to solve current ecological problems^[34,41].

Conclusions. The problems, connected with global climate changes, affect all areas of human activity, and especially the agricultural production sector, as the most vulnerable sector of the economy. However, the world's agriculture is one of the

largest environmental pollutants with a significant «contribution» to global warming on the Planet. So, the attention of AWC GCC participants to the problems of the environment protection and animal welfare in the conditions of increasing technological and anthropogenic capacities is not accidental.

Keywords: ecological problems, monitoring, climate changes, animal welfare, adaptive strategies.

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