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## THE QUESTIONS OF BIOLOGY AND PHYSIOLOGY OF REPRODUCTION OF AGRICULTURAL ANIMALS IN SCIENTIFIC ACTIVITIES OF THE CENTRAL EXPEREMENTAL STATION OF ARTIFICIAL INSEMINATION

## Summary

The author has proved that the scientists of the Central Experemental Station of Artificial Insemination of farm animals have made a significant contribution to the formation and development of agricultural research work in the second half of the 50's – the first half of the 70's of the twentieth century.

Particularly significant achievements were obtained in determining the causes of infertility of cattle and working out effective methods of combating it; optimization of technology of artificial insemination of farm animals, introduction of modern methods of diagnosis and treatment of infertility of cattle.

Some directions of scientific activity of the Central Experimental Station of Artificial Insemination, in particular the achievements in the selection and breeding of farm animals, the development of the basics of feeding and keeping have been investigated by previous authors. However, the achievements of the research station on biology and physiology of reproduction of farm animals were not generalized.

The purpose of the article is to comprehensively evaluate the development of scientists of the experimental station of the methods of regularities of the generative function of cattle and improvement of existing methods for assessing the quality of sperm, prevention of sexually transmitted diseases.

The experimental station has studied the age patterns of formation and development of the generative function of the bulls, the causes of its excitation and premature excrement of farm animals. They have developed the minimum requirements for bulls' sperm production and substantiated the effectiveness of adding bio stimulants to the semen of the bulls in order to increase the survival rate and fertility of sperm. The author has summarized the ways of stimulating the reproductive function of dairy and combined cows, which developed by the experimental station. He has given an analysis of the studies of the effect of the specie and the quantitative composition of the sperm microflora, as well as against foot-and-mouth vaccination on the quality and fertility of sperm. The article highlights the importance of a set of measures for preventing diseases of the reproductive organs in the bulls. The research is based on the use of a complex of general scientific, structural-functional and historical methods.

**Key words**: history of agrarian experimental work, livestock breeding, biology of reproduction of farm animals, physiology.