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EVOLUTION OF THE METHODOLOGICAL APPROACHES TO REGULATION OF SEX IN ANIMAL HUSBANDRY

Summary

The general economic significance of the problem of regulating the sex of farm animals was proved. The purpose of the study is to characterize the preconditions and to identify the main stages and directions of development of the scientific basis for the regulation of the sex of farm animals, to summarize the achievements of domestic scientists in the context of the development of natural sciences.

The author has proved that directed breeding by sex in livestock breeding made it possible to intensify breeding processes in animal populations in all ways of transmission of hereditary information in generations. The genetic, paratypical, hormonal and biotechnological methods of sex regulation in livestock were generalized.

It was shown that at the stages of formation of commercial animal husbandry the advantage was given to the application of paratypical methods, namely, studying the influence of the level of feeding and diet chemistry; the age of the sires and the

maturity of their sex gametes; temperature regime and paternity mating season; animal productivity; inbreeding; linear affiliation, etc.

After the intensive development of genetics in the twentieth century the genetic methods for regulating the sex of farm animals have been developed: 1) the method of differentiation of X- and Y-sperm; 2) the method of non-separation of sex chromosomes; 3) the method of genogenesis and androgenesis; 4) a method for the creation of breeds and lines with germs marked by sex and others. They began also to apply more effective genetic and hormonal methods of sex regulation.

The author has showed that at the present stage the advantage is given to the use of biotechnological methods (sex semen, method of transplantation of embryos with defined sex). The contribution of domestic scientists to the problem of regulating the sex of farm animals was substantiated.

The research is based on the use of general scientific complex, structural and functional and historical methods.

Key words: *animal husbandry, farm animals, sex, genetics, biotechnology, hormones.*