

The importance of artificial insemination as the basic reproductive biotechnology in the pigs' reproduction

Summary

Artificial insemination belongs to the oldest animal reproduction biotechnologies. Her importance in pigs' reproduction results from numerous advantages in breeding and production. Scale of pigs' artificial insemination in Poland, is large at present, and her part in reproduction of this species exceed 40%. It make sure about large practical meaning of artificial insemination. The achievements in range of cryopreservative technologies of semen enabling the improvement of vitality of boars sperms after thawing create the perspective of development of artificial insemination of pigs. Boars' ejaculates show a large variability of physical and qualitative traits, which makes difficult effective semen utilization. Ejaculate variability is caused by genetic factors like: the breed, variant of crossing, or the genetic line as well as the non genetic factors such like the season. Ejaculate changes with the age of boars, considerably greater than until quite lately one supposed. The boars' individual predispositions are the unappreciated source of ejaculate variability. Some boars are particularly well adapted to artificial insemination. Ejaculates taken from this boars are susceptible to working preservation factors show small sensibility to negative factors working during the processing and turn of seed, and their sperms keep ability of fertilization for long time after dilution. Boars' predispositions to artificial insemination could be taken into account as essential selection criterion.