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# SPERM AND SPERMATOGENESIS BOARS BULLS OF DIFFERENT BREEDS

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*The article presents the results of a study of rock features spermatogenesis and sperm boars producers. Most amount of semen, such as sperm can be explained by increased division spermatohoniy processes, reducing the degeneration process during subsequent cycles of division on the one hand, and on the other - the greater mass of the testes. Established in quantitative and qualitative semen Duroc boars predominate and Red White-Belted boar-sires.*

***Boars fruitful, breed, sperm, testis, spermatogenesis, spermoproduktyvnist artificial insemination.***

Improving the efficiency of pig production at the present stage recovery industry should be based on rock potential and high biological reproductive capacity of pigs. Particular attention should be paid to artificial insemination of pigs, providing estimated boars highly fruitful of all farms of different ownership.

Progressive and science-based technologies play in pig developed by domestic scientists A.V. Kvasnytsky, V.F. Kovalenko, V.P. Rybalko, M.Z. Basovskyy etc. [1, 2, 3, 5, 6].

Objective. In terms of technology intensive pig production The issue of effective use of biological potential sires boars, getting them to sperm quality, long-term storage of sperm and the development of effective methods of insemination of sows.

Materials and methods research. Our study was carried out on a boar-sires four species: Large White, Ukrainian meat, Duroc, Red White-Belted.

Boars-sires used by natural mating and the stuffed animal by mode garden 4-5 a week. Sperm from male pigs treated with an artificial vagina in disposable plastic sperm receivers. From boars that have not been trained to give sperm

stuffed animal and manipulative, it received on front sow in mind, which clearly showed reflex estate by the end of ejaculation.

Research biomorphological features testes boars-sires performed by inspection, palpation and taking measurements calipers and ruler [4].

Native sperm filtered evaluated for color, smell, texture, determined volume of ejaculate, sperm motility, density and smears made for the calculation of abnormal sperm. The concentration of sperm in the ejaculate sperm and abnormal shapes calculated in biotechnology laboratory reproduction of farm animals and veterinary department zoohygiene University.

Measured each testis: length - along the longitudinal axis between the poles, width - on mediolateralniy axis and thickness - to craniocaudal axis. Differences between soundings length of the testes and scrotum skin thick skin in the lower part of the actual measured length and width and thickness of the testes - the difference between the thickness of the skin in the middle of the scrotum. Given that the boar testes shape close to the shape of an ellipse, set their volume. We found that the proportion of the tissue of the testes in male pigs is - 1.10, that is, using this factor the amount transferred in testes mass.

Results. Quantitative and qualitative semen of boars, bulls of different breeds listed in the table.

The analysis of the data shows that the highest weight of the testes were grunts Red White-Belted and Duroc compared with the Large White and Ukrainian meat boar-sires. The difference is between 8-9%. The concentration of sperm in the ejaculate Duroc boars significantly exceed this figure than in Ukrainian meat and Large White breeds respectively 52.4 and 36.1 million. / Ml, which is also 8.9%. This indicates that Duroc boars and Red White-Belted have increased the intensity of spermatogenesis, which manifests itself in accordance with the allocation of more sperm in the ejaculate - 39,9 - 38,5 billion. Compared with the large white boars and Ukrainian meat .

Characteristics of the semen of boars-sires

| № | Species | Number of boars | Age | Weight of boars, kg | Number eyakulyatu | The weight of the testes, gr | Volume eyaku lyata, ml | Concentration sperm, million / ml | The number of sperm in the ejaculate, billion | Activity sperm, Ball | Pathological sperm,% |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Large White | 7 | 12,8 ±0,5 | 180,3 ±14,8 | 83 | 587,3 ±34,7 | 177,0 ±13,3 | 208,0 ±17,2 | 36,8 ±4,6 | 8,6 ±0,2 | 13,8 ±0,17 |
| 2 | Ukrainian meat | 6 | 13,2 ±0,3 | 189,4 ±5,2 | 54 | 554,4 ±45,4 | 180,8 ±19,6 | 191,7 ±13,5 | 34,7 ±2,7 | 7,9 ±0,2 | 14,5 ±0,9 |
| 3 | Duroc | 7 | 12,5 ±0,2 | 185,9 ±8,7 | 69 | 647,6 ±28,5 | 163,6 ±10,4 | 244,1 ±8,9 | 39,9 ±5,2 | 8,0 ±0,3 | 11,2 ±0,3 |
| 4 | Red White-Belted | 6 | 12,9 ±0,1 | 190,5 ±9,2 | 58 | 670,1 ±52,1 | 160,9 ±16,7 | 239,0 ±19,4 | 38,5 ±8,1 | 8,3 ±0,4 | 9,3 ±0,2 |

Cycle time spermatogenic epithelium in boars and was equal to 8.6 days, and 35-40 days spermatogenesis, sperm through the promotion appendage testis is 10 days, the level of daily sperm formation in adult boars is 13-16 billion. Therefore, more semen such as sperm can be explained by increased division spermatohoniy processes, reduce degeneration processes during subsequent cycles of division on the one hand, and on the other - the greater mass of the testes - ie the number and volume of crumpled tubules, where the spermatogenesis.

With the mobility of sperm significant interbreed difference was observed, but this figure was the highest in the Large White breed boars - 8.6 points, and the lowest - 7.9 points in boars Ukrainian meat breed. As the number of abnormal sperm forms marked boars and Duroc breeds Red White-Belted in the least amount of ejaculate there are abnormal sperm forms that ranged from 9.3 to 11.2%. The largest number of abnormal sperm forms found in boar meat breed Ukrainian - 14.5%, but the norm as directed abnormal sperm forms - 20%.

Conclusions and prospects for further research. Established that boars-sires different breeds have different features and spermatogenesis in quantitative and

qualitative semen. The greatest weight of the testes with Red White-Belted boars and Duroc breeds, respectively, and the concentration of sperm in the ejaculate was highest - 239.0 - 244.1 million / ml.

Therefore, the system must crossbreeding and hybridization greater use of boars and Duroc sires Red White-Belted that have high reproductive capacity.

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