THE PARAMETERS OF RAW SPERM COLLECTED FROM LANDRACE, LARGE WHITE AND DUROC BOARS

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SUMMARY

The main purpose of the current research was to establish the differences between three swine breeds (Landrace, Large White and Duroc) regarding the main parameters of raw sperm. The experiment was made during one calendar year, on 16 Landrace boars, 16 Large White boars and 9 Duroc boars. The raw sperm was manually collected under sterile conditions and transported under isothermal conditions to the laboratory, in order to determine the main parameters using the lab aparature. After collection, each boar ejaculate was individually analysed from the point of view of the sperm volume, sperm concentration in spermatozoa and sperm mobility. Semen volume and sperm concentration were determined using a balance and a sperm-counting device (hemocytometer). Sperm mobility has been visually estimated regarding the percentage of motile spermatozoa by light microscopy, by a skilled and experienced technician, which may have greatly influences about the relative accuracy of this research. During one calendar year, from 16 Landrace boars we had obtain 375 ejaculates and we had determined the following parameters: the average volume was 228,96 ml, the average sperm concentration determined was 365,17 miliards of spermatozoa and the mobility 66,32 %. From 16 Large White boars we had collected 385 ejaculates with an average volume of 201,90 ml, an average density of 332,28 miliards of spermatozoa and a sperm mobility of 67,80 %. 157 ejaculates were collected from 9 Duroc boars with an average volume of 252,97 ml, an average concentration of 297,04 miliards of spermatozoa and a sperm mobility around 67,04 %.  It can be noticed from these results, that the highest sperm volume collected from these three breeds is corresponding to ejaculates from Duroc boars. Among these, there were notes very significant differences (p<0,001) regarding sperm volume between Landrace and Large White boars, Landrace and Duroc boars and Large White and Duroc boars. The ejaculates with highest sperm concentration is corresponding with the ones collected from Landrace boars. There were also very significant differences (p<0,001) for sperm concentration between Landrace and Large White boars, Landrace and Duroc boars and Large White and Duroc boars. As for mobility, the sperm collected from Landrace boars was very significant different from the one collected from Large White boars (p<0,001); there were notes also significant difference between Large White and Duroc boars (p<0,05). No significant differences were notes between Landrace and Duroc boars regarding mobility.

BIBLIOGRAPHY

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