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A COMPARISON OF DIFFERENT FARROWING SYSTEMS WITH REGARD TO THE COLOSTRUM

SUPPLY OF PIGLETS

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Introduction

Especially after birth, the colostrum supply of newborn piglets is of particular importance for the survival and further development of the piglets. The aim of this study was to investigate in what way the farrowing system and thus the locomotion influences the colostrum supply of piglets.

Material & Methods

A total of 26 sows assigned randomly to commercial farrowing crates (system I), 24 sows were housed to a crate without fixation (system II) and 27 sows were assigned to a group farrowing pen system with six individual pens without fixation and a joint area (system III). Blood samples of two heavy and light piglets per litter were taken within the first two days after birth and before weaning to determine the immunocrit ratio according to the method first described by VALLET.

Results

The level of the immunocrit ratio of the piglets in system I was post natum (system I: 0.158 ± 0.031 ; system II: 0.156 ± 0.036 ; system III: 0.133 ± 0.039) as well as before weaning (system I: 0.050 ± 0.013 ; system II: 0.047 ± 0.015 ; system III: 0.044 ± 0.016) markedly higher than the immunocrit ratio of the piglets in system II + III. Especially the immunocrit ratio of the light piglets p.n. in system III was obviously lower than in system I + II. In analysed blood samples from piglets that didn't survive the lactation period the immunocrit ratio was significantly lower in system III than in the other systems.

Discussion & Conclusion

The significant lower immunocrit of the light piglets of system III p.n. argues for a problem with the colostrum supply especially in this system. In future it has to be investigated in greater details if there is a problem with the colostrum transfer or the sows have insufficient colostrum production.

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