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TITLE

DIFFERENCES IN RETURN TO ESTRUS RATE AND NUMBER OF TOTAL BORN PIGLETS CAUSED BY VARIATIONS IN PEOPLES' ARTIFICIAL INSEMINATION TECHNIQUE

Alexander Grahofer¹, Sara Joller¹, Heiko Nathues¹

¹ Clinic for Swine, Vetsuisse Faculty, University of Bern, Switzerland

CONTENT

Background

Artificial insemination technology is widely used in pig breeding herds. Few information is available about the impact of the variation in peoples' artificial insemination technique on the reproductive performance in sows.

Material & Methods

A herd with 240 sows suffered from a high variation in the return-to-estrus rate (RET) in the different batches (0-100 %). In the last year, the RTE of sows was on average 16.8 %. A herd examination was conducted. In addition, the insemination management of 22 sows was analysed by video-recording the procedure.

Results

The sows in the breeding unit were in good general health condition and body condition scores were between 2.5 and 3.5. During the insemination one teaser boar was present in front of a group of 22 sows and the insemination procedure for every single sow lasted approx. 15 seconds. No manual stimulation was performed except dry cleaning of the vulva. In the course of the analysis, three sows showed vocalization while inserting the insemination catheter. During insemination, three sows showed defecation and five sows urinated.

Retrospectively, the influence of the inseminator on RTE in eight batches was analysed. The farm worker observed during the analysis achieved a RTE of 22.8 %, while the owner had a significant lower RTE of 7.1 %. In addition, the number of live born piglets per litter (farm worker: 14.0; owner: 13.1) were compared between the two inseminator, revealing no significant difference.

Discussion & Conclusion

In this case, success of insemination was significantly different between two inseminators. Interestingly, amongst pregnant sows there was no significant variation in the reproductive performance eventually associated with the inseminators. Therefore, it can be concluded that the optimal timing for insemination seems to be more crucial for a pregnancy than for number of born piglets.