



REPRODUCTION

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PRACTICAL USE OF PROGESTERONE TEST IN GILTS

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Introduction

Progesterone level can be used to determine precise moment of the reproductive cycle in gilts/sows. Reproductive cycle has a follicular and luteal phase (high levels of progesterone). During luteal phase, progesterone level increases until day 12-14 when the luteal corpus (LC) become sensitive to PGF_{2α} and progesterone level decreases in 48h just until the next estrus. Prepuberty gilts just around heat, have very low progesterone levels; 24-48h post-heat progesterone levels are high and remain high for at least 15-18 days indicating LC presence; finally 24-48h prior to heat progesterone levels drop very quickly again. The objective of this study is to demonstrate under field conditions how a commercial kit Ovu-check® can help establish whether a group of gilts that have not manifested consistent heat symptoms had cycled or not.

Material & Methods

Sixty gilts older than 9 months of age were included in the study. These gilts were introduced to the breeding unit at 7 months of age and since then they were heat checked at least once a day through direct contact with boars. During this period, none of them demonstrated consistent signs of heat. Before sending them to slaughterhouse (due to absence of reproductive signs) serum samples were collected and ran with Ovu-check®, a commercial kit to determine progesterone levels in serum (colorimetric change).

Results

Thirty seven (37) out of 60 (61.7%) gilts showed high progesterone level and 18 out of 60 (30%) had very low progesterone level without heat signs. Therefore, 61.7% of gilts were not detected in heat by the farmer.

Discussion & Conclusion

Ovu-check® can be used in farms to establish the correct hormonal therapy as well as to detect management failures so that correct actions can be taken to improve reproductive performance and decrease economic loss due to non-productive days in gilts.