

ANALYSIS OF FACTORS AFFECTING SOW FERTILITY

Dainius Kertenis, Henrikas Žilinskas, Aloyzas Januškauskas

Department of Noninfectious diseases, Animal Reproduction Laboratory, Lithuanian Veterinary Academy (LVA), Tilzes 18, LT-47181 Kaunas, LITHUANIA Tel.: +370-37-363318; Fax: +370-37-362417; e-mail: kertenis@lva.lt

Summary. The present investigation was designed to assess whether factors of boar, semen qualitative traits, season and farm affect sow fertility in Lithuanian pig farms. Sow fertility data (over 10 thousand inseminations) was obtained from eight farms. In total, 61 boars of three breeds kept in one AI center were enrolled in the study. The fertility of sows in different farms ranged from 79.8 to 90.5%. Average number of born alive piglets in different farms ranged from 10.45 to 11.95 piglets. Seasonality ($p < 0.001$) and farm ($p < 0.01$) significantly influenced sow fertility outcome, while farm ($p < 0.001$), boar ($p < 0.001$), breed of the boar ($p < 0.001$) and boar \times farm interaction ($p < 0.01$) effects significantly influenced the litter size. The effect of season did not significantly affect the number of born alive piglets.

Key words: sow fertility, litter size, seasonal infertility.