

EFFECT OF REARING INTENSITY ON SOW'S LIFETIME PERFORMANCE

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Abstract

The objective of this study was to investigate the lifetime performance of overweight sows and evaluate the effects of rearing intensity in a multiplier population. Dataset included growth and farrowing information about 1423 crossbred Dutch Large White and Dutch Landrace sows belong to a Hungarian farm. Sows were divided into two categories (optimal and overweight) according to their body weight. Based on the results of the comparative examination, it was observed that the survival curves of two categories differed from each other and the overweight sows had significantly lower survival rate ($P < 0.001$) after the 4th parities. The estimation of the hazard ratio indicated that the probability of culling was 1.455 times higher in case of the overweight sows if the sows completed at least 5 parities. In addition, it was observed that the overweight sows had significantly weaker reproductive performance under the last 4 parities. On average, the overweight sows completed less parities ($P < 0.001$), farrowed 13 piglets less ($P < 0.001$) and weaned 8 piglets less ($P < 0.001$) than the optimal ones. Based on the results it can be said that the body condition have statistically significant effect for sow's lifetime performance. To support large litters, sows should be kept in proper body condition.

Key Words: Body condition, lifetime performance, sows, survival analysis