Case study: The effect of using ultrasonic scanning to reduce sow's feed cost in Taiwan black pig

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M. K. Yang, J. W. Shiau, and P. A. Tu
Hsinchu Branch, Livestock Research Institute, Council of Agriculture, Executive Yuan

This study was conducted to determine whether ultrasonic scanning could reduce sow feed costs in Taiwan black pigs. The farm raised around 2,000 Taoyuan * Duroc pigs, with 200 breeding sows located on a commercial farm in Eastern Taiwan. A pregnancy was previously diagnosed by determining whether an inseminated sow returned after being inseminated. Following the introduction of an ultrasound scan, a pregnancy test was conducted 25 to 35 days after breeding. A pregnancy test using ultrasound imaging resulted in 2.7 heads and 1.1 heads of non-conception sows being reduced after 42 and 63 days following breeding, respectively ($P < 0.05$). There was a significant decrease in non-conception sows detected after 42 and 63 days of breeding by 28.9% (5.4 vs. 34.3%, $P < 0.05$) and 11.6% (0.0 vs. 11.6%, $P < 0.05$), respectively. In the period of 21-42 days and 43-63 days, feeding costs for non-conception sows significantly decreased by 2,510 NTD (2,520 vs. 4,140 NTD, $P < 0.05$) and 3,595 NTD (6,641 vs. 10,236 NTD, $P < 0.05$). Overall feed costs for non-conception sows significantly decreased by 3,545 NTD (6,641 vs. 10,236 NTD, P 0.05). As a result, ultrasonic scanning for pregnancy tests could reduce feed costs for non-conception sows and assist in identifying non-conception multiparous sows.

Key words: Taiwan black pig, Ultrasonic scanning, Sows feed cost