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TITLE

THE VARIATION OF PLASMA LEVEL OF ALTRENOGEST AND THE HORMONE WITHDRAWAL TO ESTRUS INTERVAL OF GILT INFLUENCED FROM THE COMMERCIAL PRODUCTS IN THAILAND

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CONTENT

In Thailand, altrenogest is commonly used for adjusting the number of gilts for batch and weekly farrowing system. Nevertheless, two-third of gilts showed the estrous sign within 7 days after altrenogest withdrawal in some weeks. The variation of altrenogest withdrawal to estrus interval (WHEI) was speculated to be influenced by the variation of commercial hormonal products. The elimination study was conducted to investigate the plasma level of altregonest and WHEI in 15 Yorkshire×Landrace gilts. Age, weight and backfat depth (BF) were recorded. 20 ug altrenogest from product A, B, C were fed to 5 gilts per product for 18 days. Altrenogest concentration was measured at Day 0, 3, 18 and 20 from plasma collection by liquid chromotography-tandem mass spectrography. WHEI was recorded after altrenogest withdrawal. All gilts have no difference of age, weight and BF (P=0.4). WHEI of product B trend to be shorter than A and C (5.0±0.7 vs 7.2±1.9 vs 6.4±1.8 day, respectively; P=0.07). Altrenogest concentrations were maintain over 23 ng/mL from D3 to D18. At D20 the concentrations of product B was significantly lower than A and C (1.5±0.1 vs 2.4±0.4 vs 2.9±0.1 ng/mL, respectively; P=0.07). From the results, we found the difference of altrenogest concentrations and WHEI among the commercial products. This data may be used to design the starting day of feeding altrenogest in gilt of Thailand.