

## Association of Leptin Gene T3469C Polymorphism on Reproductive Performance of Purebred Sows

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**Abstract :** The study was conducted to associate genetic polymorphism of the leptin gene T3469C with reproductive performance in purebred sows. DNA were isolated from hair follicles of 29 Landrace and 24 Large White sows. Amplification of the leptin gene was done followed by Hinf1 digestion to determine the base at the T3469C site. Electrophoresis of the digestion products revealed that there were 25 Landrace and 15 Large White sows with the TT genotype while there were 3 Landrace and 6 Large White TC. There was 1 CC for Landrace and 3 for Large White. Significant genotype associations were observed for total litter size born and total born alive. Significant breed differences, on the other hand, was observed for gestation length and average birth weight. Significant breed by genotype interaction was observed in litter size total born and litter size born alive.

**Keywords :** genetic polymorphism, leptin, swine, T3469C

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