

## **Reproductive and productive traits of sows from Alentejano compared to sows Large-White x Landrace genotype**

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### **Abstract**

This study compared some reproductive (gestation and farrowing length; total born, born alive, stillbirths, mummified, post-natal mortality) and productive traits (piglet and litter weights at birth and at 21 days) between Alentejano swine breed (AL) and a conventional genotype (Large-White x Landrace - C). A total of 90 animals (45 per genotype) reared under 4 production environments were studied along farrowing and lactation (21 days) periods. The AL sows were managed under extensive outdoor whereas the C sows were managed under intensive indoor conditions. Alentejano sows had shorter gestations ( $P < 0.01$ ) and farrowings ( $P < 0.01$ ) compared with C sows. Conventional genotype sows farrowed more total and born alive piglets ( $P < 0.001$ ). Lighter weights were observed both in AL litters and individual AL piglets at birth and d 21 ( $P < 0.001$ ). Average daily gain from birth to 21 days, was higher in C piglets ( $P < 0.001$ ). Mortality rates of born alive piglets (total and during the first 24h) were higher in AL litters ( $P < 0.001$ , for both). The piglets that died during the nursing period were lighter and gained less weight during the first 24h than the survivor littermates ( $P < 0.001$ ). Overall the lower performance of the AL compared with the C genotype is due to its poorer reproductive and productive traits and a higher mortality rate during the nursing period. Possible explanations for the higher mortality in Al genotype are discussed.

Key words: Alentejano swine breed, Mortality, Piglets performance, Reproduction performance.