

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

R. Charneca¹, J. Nunes,¹ J. Le Dividich²

¹Universidade de Évora - Departamento de Medicina Veterinária, ICAAM - Instituto de Ciências Agrárias e Ambientais Mediterrânicas

²INRA UMR1079 Systèmes d'Élevage, Nutrition Animale et Humaine, F-35590 Saint-Gilles

Corresponding author: Eng^o Rui Charneca. Universidade de Évora, Departamento de Medicina Veterinária. Apartado 94, 7002-554 Évora – Portugal - Telephone: + 351 266760800- Fax: +351 266760913 - E-mail: rmcc@uevora.pt

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.