COMPARATIVE STUDY ON COLOSTRUM PRODUCTION AND COLOSTRUM COMPOSITION IN ALENTEJANO SWINE BREED AND LWxLR SOWS – PRELIMINARY RESULTS

Charneca, R.[1]; Tirapicos Nunes, J.[1] and Le Dividich, J.[2]

[1]Universidade de Évora – Departamento de Medicina Veterinária -ICAM – Instituto de Ciências Agrárias Mediterrânicas - Apartado 94 – 7002-554 Évora

[2]INRA, UMR-SENAH – Unité Mixte de Recherches – Systèmes d'Elevage, Nutrition Animale et Humaine - 35590 St- Gilles, France

SUMMARY- This study aimed at comparing the colostrum composition and production of Alentejano Swine Breed (AL) to modern sows (LW x LR) (LL). Ten sows from each genotype were used. All farrowings were attended. Colostrum samples were collected at birth of the first piglet and at regular intervals during 36 h after the onset of farrowing. One sample of milk was also collected at d 15 of lactation. Piglets were weighed at birth and at 24 h of age. AL sows had lower gestation length ($p < 0.001$) and litter size ($p < 0.05$). Piglets from AL sow were lighter at birth ($p < 0.001$), gained less weight ($p < 0.001$) and consumed less colostrum ($p < 0.001$) than LL piglets between birth and 24 h of age. AL sows produced less colostrum ($p < 0.001$) than LL sows. Within each genotype colostrum consumption of piglets was dependent on birth weight ($p < 0.001$). Production of colostrum was dependent on litter weight (piglets born alive) at birth but not on litter size. Mortality rate between birth and weaning averaged 24.3% for AL piglets and 14.3% for the LL piglets, with most of losses occurring within 3 days after birth. In both genotypes, piglets dying before weaning were lighter at birth and consumed less colostrum than survivors. Further studies are required to determine the respective role of birth weight and colostrum consumption in post-natal mortality and to determine the immune quality of colostrum.

Key words: alentejano swine breed, colostrum, piglets, mortality