**Effects of mean weight of uniform litters on sows and piglets performance**

R Charneca[1], A Freitas[1], JLT Nunes[1] and J Le Dividich[2]. [1] Instituto de Ciências Agrárias e Ambientais Mediterrânicas, Universidade de Évora, Apartado 94, 7002-554 Évora, Portugal, [2] 32, Avenue Kennedy, 35160 Breteil, France; rmcc@uevora.pt

This study aimed to determine the effects of uniform litters of different mean birth weights on colostrum production of sows and piglets performance. The study involved 78 multiparous sows from a commercial lean genotype and their piglets. Simultaneous farrowings were supervised and at birth each piglet was identified, weighed (±1g) and put in box under a heat lamp. After farrowings completion and depending on the measured weights, the piglets were then divided in experimental litters of 12 piglets each of uniform light (UL, CV=9.8%, n=27), uniform average (UA, CV=8.2%, n=23) or uniform heavy (UH, CV=8.6%, n=28) piglets and allowed to suckle. Piglets were re-weighed at 24h and 21d of life and deaths registered. Colostrum intake (CI) of the piglets was estimated using the Devillers *et al*. (2004) equation. Litter types were compared by ANOVA with batch as random factor. Mean weights of litters were all different (P<0.001), UL=1136±23g (SEM), UA=1415±25g and UH=1649±20g. Colostrum yield (CY) of sows was positively related to litter total weight at birth ($R^2$=0.30, P<0.001). The CY of UA and UH sows was similar (4.8±0.2kg and 5.2±0.1kg, respectively, P=0.32) and both higher (P<0.001) than CY of UL sows (3.9±0.1kg). The CI of UA and UH litters was similar (400±14g and 436±12g, respectively, P=0.31) and both higher (P<0.001) than on UL litters (335±13g). The intra-litter CV of CI was similar between groups averaging 24%. The mortality rate of piglets until 21d was not different between litter types averaging 9.15%. The piglets weights at 21d were similar (P=0.11) in UA (6.4±0.2kg) and UH (6.7±0.1kg) litters and both higher (P=0.01) than in UL litters (5.6±0.2kg). It was concluded that CY of sows is dependent on the total weight of the suckling litter and that the mean weight of piglets of uniform litters influences the CI and the weaning weight but not their survival.