

SP 63 Effect of slaughter weight on the weight and meat yield of carcass cuts in pigs. **Oliveira E.A., Bertol, T.M., Santos Filho, J.I., Guimarães, A.K., Nascimento, H.G., Sterzelecki, R.J., Scandolera*, A.J. and Warpechowski, M.B.** Mestrados em Ciências Veterinárias – UFPR, Curitiba, PR. Pesquisadores da Empresa Brasileira de Pesquisa Agropecuária – EMBRAPA, Concórdia, SC. Graduando em Zootecnia – UFPR, Curitiba, PR. Instituto Paranaense de Assistência Técnica e Extensão Rural – Curitiba, PR. Docentes do Departamento de Zootecnia – Universidade Federal do Paraná, Curitiba, PR. *ajscandolera@ufpr.br

Efecto del peso al sacrificio en el peso y rendimiento de carne en los cortes de la canal en cerdos

This study was carried out to evaluate the effect of slaughter weight (SW) on the weight and amount of meat in the carcass cuts in pigs. It was used 35 females and 36 barrows from Agroceres PIC line, from 80 kg live weight, housed in two commercial farms, in pens separated by sex, with 10 or 11 animals. Food was restricted (2.8 kg / animal / day) until slaughter at 100, 115, 130 or 145 kg of live weight. Twenty-four hours after slaughter the weight of the following cuts was assessed: primal cuts ham, shoulder, loin, belly + rib and commercial cuts topside, sirloin, tenderloin and butt. The meat of the ham, shoulder and loin was separated from other tissues to calculate the amount of meat in each cut. Data were subjected to analysis of covariance, considering the effects of sex, SW (linear and quadratic) and their interactions. There was no interaction between sex and SW ($p > 0.05$). Females showed higher weights of loin ($p < 0.05$), ham ($p < 0.01$) and meat in the ham ($p < 0.05$). The weight and amount of meat in the ham, meat in the shoulder, weight and meat in the loin, topside, sirloin, tenderloin and butt increased linearly with the SW ($p < 0.05$). The weight of ham, loin, topside, sirloin, tenderloin and butt and the amount of meat in the ham, shoulder and loin increased linearly ($p < 0.05$) with the SW. In the presence of the factor sex, it was observed a strong positive effect of SW on the weight of primal cuts (r^2 between 81 and 91%) and on the amount of meat in the cuts (r^2 between 65 and 87%), and a less robust effect on the commercial cuts (r^2 between 27 and 55%). It was concluded that the elevation of SW above 100 kg in pigs is strongly positive with respect to weight and quantity of meat of the primal cuts and has a moderate effect on the weight of commercial cuts. This effect is similar for females and barrows, and the weight of cuts in females is similar or superior to barrows.

Table 1: Analysis of variance and regression of the carcass cuts.

| | Effect of sex (estimated means at 100 kg SW) | | | | Effect of SW (coefficients, value/kg) | | Model | |
|--------------------------|---|---------|-------|--------------|--|------------|-------|------|
| | Barrows | Females | Means | Significance | Linear | Quadratic | r^2 | SEM |
| Ham, kg | 11.37 | 11.88 | - | ** | 0.130** | NS | 91.06 | 0.65 |
| Meat in the ham. kg | 8.51 | 8.92 | - | ** | 0.109** | NS | 87.65 | 0.65 |
| Shoulder. kg | - | - | 6.95 | NS | -0.112 | 0.00074* | 81.13 | 0.56 |
| Meat in the shoulder. kg | - | - | 4.39 | NS | 0.056** | NS | 71.15 | 0.56 |
| Loin. Kg | - | - | 6.58 | NS | 0.080** | NS | 83.92 | 0.55 |
| Meat in the loin. kg | - | - | 4.19 | NS | 0.048** | NS | 65.87 | 0.55 |
| Belly + rib. kg | - | - | 7.09 | NS | 0.320 | -0.00098** | 84.35 | 0.53 |
| Topside. kg | - | - | 1.28 | NS | 0.019** | NS | 27.68 | 0.50 |
| Tenderloin. kg | 2.29 | 2.50 | - | * | 0.024** | NS | 55.79 | 0.35 |
| Sirloin. Kg | - | - | 0.27 | NS | 0.002** | NS | 37.88 | 0.05 |
| Butt. Kg | - | - | 1.15 | NS | 0.010** | NS | 3077 | 24 |

NS=not significant; * $p < 0.05$; ** $p < 0.01$; SEM=standard error of the mean

Key words: feed restriction, heavy weight pigs, management.

Palabras clave: restricción de alimentación, cerdos pesados, manejo.