Determination of differences in the distribution of fat and meat in young boar and gilt half-carcasses

Summary

The aim of the study was to determine current differences in the fatness and muscling of young boar and gilt carcasses, taking into account the effect of breeding work on changes in the anatomical structure of boars and gilts and the effect of sex on the development of different tissues. A total of 62 young boars and 53 gilts of the Polish Landrace breed were investigated. Animals were fattened to similar body weights, averaging 108.7 kg in boars and 105.8 kg in gilts. Following slaughter and 24-hour carcass cooling at 4°C, linear measurements were made and half-carcass dissection was performed. The weight of leaf fat in half-carcasses was also determined. There were no significant differences in total carcass meat weight between Landrace gilts and young boars of comparable body weight. The muscling of most primal cuts was poorer in gilts compared to boars except ham and belly, which had a considerably greater percentage of meat. Considerable differences were found in carcass fatness. Gilts were characterized by thicker backfat, had more leaf fat and higher total weight of carcass fat. Greater amounts of fat in gilt carcasses were located mostly in the subcutaneous layer of neck, ham, loin and belly. For neck, ham and loin, the percentage of subcutaneous fat in relation to total carcass fat was higher in gilts compared to boars. The increased amount of subcutaneous fat in gilts and the greater proportion of this fat in most primal cuts of gilts compared to young boars was not reflected in the proportion of intermuscular fat, because for all primal cuts, gilts were characterized by a smaller proportion of intermuscular fat in relation to the total amount of fat in half-carcass.