

Comparative Studies of Meat Qualities of *longissimus dorsi* Muscles in Barrow, Gilt and Boar Pigs.

Cheon-Jei Kim, *Jae-Yun Shim, Eui-Soo Lee and Jong-Yon Jeong
Department of Animal Products Science, KonKuk University

This study was carried out to investigate carcass traits and meat qualities of *longissimus dorsi* Muscles in Barrow, Gilt and Boar Pigs. A total 330 porks were normally slaughtered. After muscles were stored for 24hr at $4 \pm 1^\circ\text{C}$ postmortem storage, carcass weight, backfat thickness, carcass length, 5th loin area were measured. Also *M. longissimus dorsi*(LD) muscle of the carcasses was selected based on sex and L*-value and meat quality measurements. Live weight means was $106 \pm 8.90\text{kg}$, each of backfat thickness, carcass weight, carcass length and 5th loin area was $2.89 \pm 0.66\text{cm}$, $82.57 \pm 6.93\text{kg}$, $86.76 \pm 5.79\text{cm}$ and $24.09 \pm 5.08\text{cm}^2$. There was no significant difference in backfat thickness and carcass weight by sex, but live weight and 5th loin area by boar were 110.30kg and 27.25cm^2 . These results were significantly different in gilt and barrow. The distribution between carcass weight and backfat thickness was 28.48% in 2.5~3.0cm of backfat thickness, between 75kg and 80kg of carcass weight showed 28.2% in total. Pork retail cut meats of boar in ham, boston butt and ribs seemed to be better than those of gilt and barrow. pH_{24} of barrow, gilt and boar in meat quality traits of pork loin muscles by sex were 5.54, 5.61 and 5.79, respectively in average.