

# Evaluation of selected meat traits in seven-week-old duck broilers

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### Abstract :

Investigated were three crossbred duck broiler groups: heavy Star 63, PP54, and Dworka (CaA15), 20 males (M) and 20 females (F) per group. The birds were kept in pens on rye straw, in a separate closed building with regulated environmental parameters, and fed ad libitum standard commercial feed mixtures. Body weight was recorded on day 1 and then on week 3 and 7 of birds' life, and feed consumption measured up to the end of rearing period (week 7). At the end of week 7 five M and five F birds selected from each group were slaughtered and their carcasses dissected. Immediately postslaughter the breast and leg muscle samples were taken for histological fibre identification. Breast and leg muscles pH was determined 15 min and 24 h post-slaughter. Body weight on week 7 of life was significantly highest in the Star 63 birds of both sexes. The lowest feed consumption up to the end of week 7 of life was found in CaA15 while the most desirable feed conversion ratio in males and females Star 63 broilers. The highest slaughter body weight and highest dressing percentage were both found in Star 63 (both sexes), while the lowest body weight was found in both sexes of Dworka broilers. No significant differences were identified in dressing percentage and in the content of carcass elements between the evaluated crossbreds as well as between the sexes. The breast muscle

content of carcass with neck was highest in PP54 males (13.7%) and in Star 63 females (14.5%), while the content of skin with fat occurred lowest in CaA15 group (26.5% in males and 27.8% in females). Heavy Star 63 broilers had the lowest white fibre (?W: 28.1 ?m in males and 27.4 ?m in females) and red fibre (?R: 15.1 ?m in males and 14.2 ?m in females) diameter of the surface breast muscle, while the light (CaA15) Dworka broilers showed the highest white fibre diameter (?W: 37.2 ?m in males and 36.3 ?m in females) and red fibre diameter (?R: 16.2 ?m in males and 15.6 ?m in females).

### Key Word :

broiler / carcass / duck / meat / muscle fibres / pH / slaughter quality

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