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[Italy]

### **Carcass yields and breast meat composition of male and female Italian slow-growing chicken breeds**

**Sihem Dabbou (1), Laura Gasco (2), Alberto Brugiapaglia (3), Stefano Sartore (4), Dominga Soglia (5), Francesco Gai (6) and Achille Schiavone (7)**

(1, 4, 5, 7) Department of Veterinary Science, University of Turin, Largo P. Braccini 2, 10095 Grugliasco (TO), Italy.; (2, 3) Department of Agricultural, Forest and Food Sciences, University of Turin, Largo P. Braccini 2, 10095 Grugliasco (TO), Italy.; (6) Institute of Science of Food Production, National Research Council, Largo P. Braccini 2, 10095 Grugliasco (TO), Italy

Corresponding author: [sihem.dabbou@unito.it](mailto:sihem.dabbou@unito.it)

Carcass yields and chemical composition on the breast meat of two autochthonous Italian poultry breed, namely Bionda Piemontese (BP; n=64) and Bianca di Saluzzo (BS; n=64), were evaluated by a two-way ANOVA considering breed, sex and their interaction during four consecutive slaughter ages (5, 6, 7 and 8 months of age). Data were analyzed by one way ANOVA and Duncan test to investigate the differences between slaughter ages. Males showed heavier final live weight (LW; 2626 g), carcass weight (CW; 1522 g) and thigh yield (39.95%) than females (1872 g, 1026 g and 32.40%, respectively). Females displayed greater breast yield (19.11% CW on average) during the different slaughter ages ( $P < 0.001$ ) than males (17.03% CW on average). Breeds significantly affect carcass yield at the first (60.25 vs 58.49% LW in BP and BS, respectively), third (59.56 vs 56.70% LW in BP and BS, respectively) and fourth slaughtering (57.85 vs 54.97% LW in BP and BS, respectively) ( $P < 0.05$ ). Carcass yield of BS females showed the highest value at 5 and 6 months of age (59.03 and 57.58 % LW, respectively). Breast yield of the two breeds was influenced by the slaughter age and showed the lowest value at 6 months of age (59.57 % CW in BP and 57.58% CW in BS). Breast moisture, protein, ether extract (EE) and ash contents were not affected by breeds, except for ash at 6 months of age (1.18% vs 1.15 % in BP and BS, respectively) and EE at 8 months of age (0.43 % vs 0.28% in BP and BS, respectively). Sex influenced mainly moisture (on average 74.26% for males and 73.35% for females) and EE (0.27% for males and 0.82% for females on average). Slaughter age influenced mainly moisture and EE of breast meat with the highest values at 5, 6 and 7 months of age, respectively. Considering carcass parameters, slaughtering age at 7 and 8 months showed the best results in males and females of BP and males of BS. Five and six months were the best slaughter age in females of BS for carcass yield.

Keywords: breed; sex, Bionda Piemontese; Bianca di Saluzzo; carcass yield; ether extract.