

Carcass and meat quality traits of Siciliana chickens, a native Italian breed

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The study aimed to characterize the slaughter performance and meat quality of Siciliana chickens, a native Italian chicken breed. At 180 d of age, 24 birds (12 birds/sex) were weighed and slaughtered. Carcass and the main cuts weight were recorded. On the right pectoral muscle (PM), pH and colour were recorded at 24 h post-mortem. The left PM was used for chemical analyses. Data were analyzed by one-way ANOVA. Compared to females, males had a higher ($p < 0.001$) slaughter weight (1511.83 ± 37.75 g vs 1214.17 ± 35.25 g), carcass weight and yield (+ 6.2%); while females had a higher breast yield (+ 2.9%; $p < 0.01$) than males. Legs yield and pH were not affected by sex ($p > 0.05$). Higher lightness ($p < 0.01$) was observed in females; while males showed higher ($p < 0.01$) redness and yellowness. Females showed higher ($p < 0.01$) breast moisture, total lipid and ash ($p < 0.05$) contents than males, while a higher protein content was found in males ($p < 0.001$). Males showed a higher content of total saturated fatty acids ($p < 0.05$) and a lower content of monounsaturated fatty acids ($p < 0.01$) than females. No differences were found for total polyunsaturated fatty acids (PUFA) and n-6 PUFA; while, the n-3 PUFA content was higher ($p < 0.01$) in males than in females, leading to a favourable lower n-6/n-3 ($p < 0.05$). As a part of a conservation program for the Siciliana breed, this study was the first contribution to the characterization of carcass and meat quality of Siciliana chickens.

Project TuBavi-2 funded by the Italian Ministry of Agriculture, MIPAAF-TNRDP 2014-2020-Measure 10.2 Biodiversity-Poultry sector (DG DISR-DISR07-Prot. n. 0162350-09.04.2021).