

17 CARCASS TRAITS OF PURE ALENTEJANO BREED MALES REARED OUTDOORS AND SUBJECTED TO DIFFERENT IMMUNOCASTRATION PROTOCOLS

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Rearing intact male pigs may lead to an off-odor and flavor in meat and fat known as boar taint, especially in animals slaughtered at older ages and high body weights (BW). This is a particular issue for a portuguese local breed, the Alentejano (AL) pig. To address this, males from this breed are generally physically castrated. However, with the potential prohibition of this surgical procedure in the European Union, alternative methods such as immunocastration (IMC) must be explored. In the absence of validated IMC protocols for AL pigs reared outdoors until older ages, a study was conducted under the SUMO (Sustainability of the “Montado”) project to assess the effectiveness and effects of immunocastration on male AL pig carcasses. Thirty males were reared from 5 to 14 months of age (approximately 52 to 191 kg body weight) in three experimental groups (n=10 each): C group – control group with surgically castrated animals; IMCP group – animals subjected to an early IMC protocol with four Improvac® administrations starting at 5 months of age; and IMCT group – animals following a late IMC protocol, with three Improvac® administrations starting at 10 months. The pigs were reared in three outdoor parks with more than 100m² per animal. Each park had a collective shelter, and a battery of ten feeding stations with individual feeders and drinkers, allowing individual feeding and drinking. The feeding regimen, based on commercial diets, was similar to those used on farms for the production of animals destined for the “Montanha” (outdoor fattening with pasture and acorns), including a feed restriction period before fattening.

AL pigs, slaughtered at an average weight of 190.6 kg BW, showed no significant differences in hot carcass weight between groups. However, the C and IMCP groups had a higher carcass yield than IMCT pigs. Commercial yield, primal cuts (shoulder, ham and loin) and bone cuts (loin (bone-in, bladeless) and ribs) were similar across treatments. Fat cuts (belly and backfat) were higher in C and IMCP than in the IMCT group (34.1 and 33.3 vs. 29.9 %, respectively), with a similar trend observed in backfat thickness values (7.6, 7.7 and 6.9 cm, respectively). These results suggest that pigs subjected to the early IMC protocol presented similar carcass fat deposition to those that were castrated, but higher fat deposition when compared to those subjected to the late IMC protocol. This latter finding is likely due to the longer IMC effects in the former group. Finally the IMC effects on meat quality will be presented in a companion poster.

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