



Skin lesions monitoring on slaughtered pigs 👄

PLOS One

Mattia Bottacini¹, Annalisa Scollo², Sandra A. Edwards³, Barbara Contiero¹, Martina Veloci⁴, Vincenzo Pace⁵, Flaviana Gottardo¹

¹University of Padua, ²Swivet Research snc, ³University of Newcastle-upon-Tyne, ⁴Suivet snc, ⁵OPAS pig farmer association

dx.doi.org/10.17504/protocols.io.ugketuw



Mattia Bottacini



ABSTRACT

On a high speed slaughter line for pigs, skin scratches were separately scored in the posterior region (defined as the area including the hind legs and the tail) and the anterior one (as the remaining area), while the whole carcass was examined for external hematomas. Chronic ear and tail lesions referable to the rearing phase, and bursitis were recorded as retrospective welfare indicators.

EXTERNAL LINK

https://doi.org/10.1371/journal.pone.0207115

THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

Bottacini M, Scollo A, Edwards SA, Contiero B, Veloci M, Pace V, Gottardo F (2018) Skin lesion monitoring at slaughter on heavy pigs (170 kg): Welfare indicators and ham defects. PLoS ONE 13(11): e0207115. doi: 10.1371/journal.pone.0207115

PROTOCOL STATUS

Working

GUIDELINES

To score acute traumatic lesions (scratches) on slaughtered pigs, the carcass was divided into two parts: the "posterior" region, which included the hind legs and the tail, and the "anterior" region defined as the remaining area (starting from the loin up to the front limbs, the head and the ears). In order to easily scan the carcasses during their rapid passage on the dressing line (480 pigs/h), a 3 point scoring system for each of the two carcass regions was used: score 0, up to one scratch or bite; score 1, from two to five scratches or bites; score 2, more than five scratches or bites or any wound which penetrates the muscle. In addition, external hematomas were recorded as presence or absence (binary score).

The presence of lesions with a chronic onset such as notches, necrosis, bites and scars were evaluated on ears and tail as welfare indicators referable to the rearing cycle, as well as the presence of bursitis. Bursitis was only evaluated on the forelimbs, because hind legs were not completely visible to the observer since the carcass was hung upside down above the inspection area. These lesions were recorded as present or absent (binary score) regardless of the size, in accordance with the possibility to be detected in the few seconds allocated to the observer. For ear and tail lesions, only the older ones were recorded as retrospective welfare indicators, since the recent ones were already recorded with the scratches scoring system as pre-slaughter fighting or transport lesions, so that recent hyperaemic or fresh bleeding lesions were not recorded as retrospective indicators. Post-mortem artefacts due to the slaughtering process were excluded on the basis of the absence of pathological or physiological changes occurred in-vivo such as, for example, necrosis or scarring. In order to get a representative batch sample, about 100 carcasses per batch were recorded.

BEFORE START

Get the material to easily record the data (prepared paper sheet or tablet).

MATERIALS TEXT

Get a tablet with an Excel sheet or a paper one to rapidly record the lesions.

SAFETY WARNINGS

Pay attention to the slaughter line and to carcasses that can detach from the hook.

BEFORE STARTING



11/13/2018

Get the material to easily record the data (prepared paper sheet or tablet).

This is an open access protocol distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited