## Stun Practices in Swine in the Valle De Aburrá and Animal Welfare

Authors : Natalia Uribe Corrales, Carolina Cano Arroyave, Santiago Henao Villegas

Abstract: Introduction: Stunning is an important stage in the meat industry due to the repercussions on the characteristics of the carcass. It has been demonstrated that inadequate stun can lead to hematomas, fractures and promote the appearance of pale, soft and exudative meat due to the stress caused in animals. In Colombia, gas narcosis and electrical stunning are the two authorized methods in pigs. Objective: To describe the practices of stunning in the Valle de Aburrá and its relation with animal welfare. Methods: A descriptive cross - sectional study was carried out in Valle de Aburrá slaughterhouses, which were authorized by National Institute for Food and Medicine Surveillance (INVIMA). Variables such as stunning method, presence of vocalization, falls, slips, rhythmic breathing, corneal reflex and attempts to incorporate after stunning, stun time and time between stun and bleeding were analyzed. Results: 225 pigs were analyzed, finding that 50.2% had electrical stun, whose amperage and voltage were 1.23 (A) and 120 (V) respectively; 49.8% of the animals were stunned with CO2 chamber whose concentration was always above 95%, the mean desensitization time was 16.8 seconds (d.e.5.37); the mean time of stunning bleeding was 47.9 seconds (d.e.13.9); similarly, it was found that 27.1% had vocalizations after stunning; 12% had falls; 10.7% showed rhythmic breathing; 33.3% exhibited corneal reflex; and 10.7% had reincorporation attempts. Conclusions: The methods of stunning used in the Valle de Aburrá, although performed with those permitted by law, are shortcomings in relation to the amperage and voltage used for each type of pig, as well, it is found that welfare animal is being violated to find signology of an inadequate desensitization. It is necessary to promote compliance with the principles of stunning according to Animal Welfare, and keep in mind that in electrical desensitization, the calibration of the equipment must be guaranteed (pressure according to the type of animal or current applied and the position where the electrodes are) and in the narcosis the equipment should be calibrated to ensure proper gas concentration and exposure time.

Keywords : animal welfare, pigs, quality of meat, stun methods

Conference Title : ICAWCPR 2018 : International Conference on Animal Welfare, Care, Procedures and Regulations

Conference Location : Venice, Italy

Conference Dates : April 12-13, 2018

1