

Comparison of fattening performances of boars castrated or immunized against GnRF and evaluation of the vaccination efficiency

Wavreille J.<sup>1</sup>, Boudry C.<sup>2</sup>, Romnée J.M.<sup>1</sup>, Froidmont E.<sup>1</sup> and Barthaiux-Thill N.<sup>1</sup>, <sup>1</sup> Walloon Agricultural Research Centre, Rue de Liroux 9, 5030 Gembloux, Belgium, <sup>2</sup> ULg, Gembloux Agro-Bio Tech, Passage des Déportés 2, 5030 Gembloux, Belgium; [Froidmont@cra.wallonie.be](mailto:Froidmont@cra.wallonie.be)

The vaccination against boar taint with detection of unvaccinated pigs was studied at CRA-W in an animal husbandry-based approach. This research was conducted on 160 males, issued from a Piétrain x Belgian Landrace cross, fed *ad libitum* between 25 and 122 kg body weight and group-housed under the same conditions during the fattening period (6 pigs/pen). One group (82 pigs) was castrated (surgical castration) before 7 days of age, whereas the other group (78 pigs) was vaccinated against boar taint (Improvac<sup>®</sup>, Pfizer Animal Health). The growth performances and the behaviour of the pigs were observed during the fattening period. At slaughter, the testis size and the boar taint were evaluated. No effect was observed on growth performance between groups but feed conversion was slightly improved in the vaccinated pigs ( $P < 0.06$ ) resulting in a feed saving of about 15 kg per pig over the fattening period. The second vaccination, performed at 4-6 weeks before slaughter, was a turning point for growth performance: vaccinated pigs grew faster than castrated ones. After the second vaccination, pigs spent more time at the feeder (12.6 % vs. 8.5 % of time). In our trial, the vaccination was totally effective in preventing boar taint. Reduction in testis size was clearly visible from the second week after the recall vaccination. Average testis weight at slaughter was 330g, whereas other observations showed an average weight over 800 g in uncastrated males. Moreover, upon 78 vaccinated males, only one had testis weight exceeding the 600 g threshold. Sensory assessment of fat (by human nose) did not reveal any boar taint. Further work will be undertaken to update results and extend comparison of production performance, animal behaviour and boar taint.