Altering the timing of Improvac to reduce its impact on performance

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The issue

Entire male pigs have a better feed conversion ratio (FCR) and a leaner carcass than do surgical castrates, but the presence of boar taint makes them unsuitable as a source of high quality pork. Vaccination of boars with a GnRH vaccine (Improvac®) can eliminate boar taint, and it allows pigs to retain all of the performance attributes of entire males up until the time they receive the 2nd vaccination, normally 4 to 5 weeks pre-slaughter (Dunshea et al, 2001). However, the increase in depth of backfat (P2) and FCR compared to entire males has limited uptake of this technology. If it was possible to give the 2nd vaccination closer to the time of slaughter while still eliminating boar taint then this could be far more attractive to producers.

Approach

Entire male pigs were allocated to one of five treatments (7 pigs/pen, 5 pens/treatment) at 16 wks of age (59 kg LW). Pigs were vaccinated with Improvac® 6, 4, 3 or 2 wks pre-slaughter and compared to a control group that was not vaccinated (0 wks). All pigs received the initial vaccination at 10 wks of age and all pigs were fed the same diet (13.2 MJ DE/kg, 0.55 g Av lysine/MJ DE.

Results

As the time between 2nd vaccination and slaughter increased there was a significant linear increase in P2, feed intake and FCR (Figure 1). Results for analysis of boar taint are not yet available so **we can not recommend** giving the 2nd vaccination 2 wks pre-slaughter because this may not allow enough time for boar taint to be eliminated.

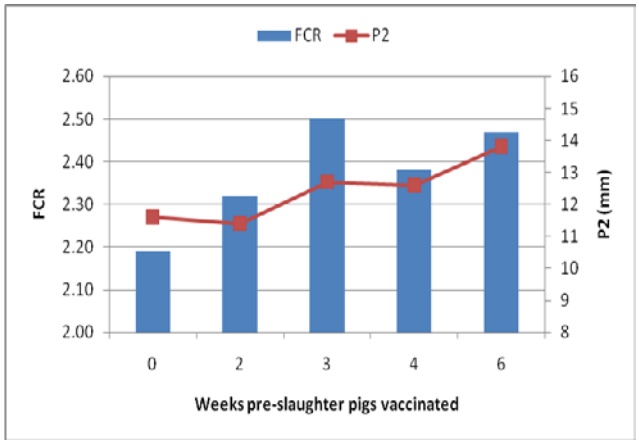

Figure 1. Effect of time between 2nd vaccination and slaughter on FCR and P2

Implications

If results show that boar taint was controlled when pigs were vaccinated 2 wks pre-slaughter then this is a way to use this technology without the adverse impact on performance. The results also demonstrate the impact on P2 and FCR if vaccination is given too soon before slaughter (i.e. 6 week treatment).

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