

OVERVIEW - ACTIVITIES WITH MALE PIGS IN DENMARK

H. Maribo¹

¹ Pig Research Centre, Danish Agriculture and Food Council

1. Reducing skatole in back fat by feeding pure grain pellets 2 days prior to slaughter
 - A practical method for pig producers as they can move the male pigs to the pick-up facility and only feed pure grain to male pigs that are ready for slaughter and not reduce the growth of the rest of the pigs in the pen. This method is particularly relevant for organic pig producers as they have more pigs per pen, have a greater variation in weight and deliver pigs over several rounds.
2. Levels of skatole and androstenone at increasing weight and age
 - The purpose of this trial is to investigate how androstenone and skatole develop with increasing age and weight.
 - In one group, all male pigs are marked individually from birth. From approx. 60 kg neck fat biopsies and blood samples are taken with an interval of 10 kg up to 120 kg live weight. HPLC analyses of skatole, androstenone on biopsies as well as on blood samples are planned.
 - In the other group, male pigs are slaughtered at 80 kg up to 120 kg live weight. Biopsies and blood samples are taken the day before slaughter. Measurement of skatole equivalents and human nose are performed on neck fat samples at the slaughterhouse. Furthermore, it is planned to analyse skatole, indole and androstenone in both fat and blood samples with the HPLC method.
3. Increasing growth of male pigs and reducing boar taint by increasing the level of protein and amino acids in the diet by 10% and feeding pure grain 2 or 4 days before slaughter.
4. Feeding pigs with different fibre sources before slaughter in order to reduce skatole level. For the first three treatments, productivity and production economy are also recorded. Feeding strategies tested:
 - Control diet (30 pens of 8-9 pigs)
 - 15% chicory 4 days prior to slaughter (30 pens of 8-9 pigs)
 - Feeding pure grain 2 or 4 days prior to slaughter (30 pens of 8-9 pigs)
 - Feeding 10% Jerusalem artichoke 4 days prior to slaughter (100 pigs)
 - Feeding 10% sugar beet pellets 14 days prior to slaughter (100 pigs)
 - Feeding 10% palm cake 14 days prior to slaughter (100 pigs)
5. Testing concepts in an organic herd. The purpose is to determine how the management and feeding strategies tested can be used in an organic herd and the effect of these on boar taint (skatole and androstenone). In one herd, 250 male pigs are divided randomly into two treatments. All pigs are marked individually. Treatment 1 (control): traditional diet and slaughter weight (115 kg). Treatment 2 (trial): reduced slaughter weight and fed grain the last 2-4 days prior to slaughter.