



POSSIBLE FUTURE PRODUCTION OF MALE PIGS IN DK

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Background

Large-scale production of male pigs in Denmark is possible if:

- Rejection rates due to boar taint is maximum 5 %
- A cheap on-line analysis method for skatole and androstenone is available
- Analysis methods and limits for rejection are accepted internationally.

However reaching a rejection rate below 5% can be difficult.

Objective

The overriding objective of the studies is to find methods to reduce the number of rejected male pigs.

Results

Screening of 9 farms:

Production of male pigs will not be profitable as: 38 % based on skatole eq. (>0,25ppm) and androstenone (>1,00ppm).

Screening of 6 organic farms:

Production of organic male pigs will not be profitable due to unrealistic high rejection rates: 68 % based on skatole eq. (>0,25ppm) and androstenone (>1,00ppm).

Effect on Skatole

Recent research shows that skatole in fat could be lowered through feeding. Feeding either pure grain or 15 % chicory or 10 % Jerusalem artichoke for 4 days prior to slaughter reduces the skatole level in fat by 20-25 %. No effect of 15 % palm cake or lupines in the diet or carcass weight (75 or 95 kg).



Jerusalem artichoke and chicory reduces boar taint.

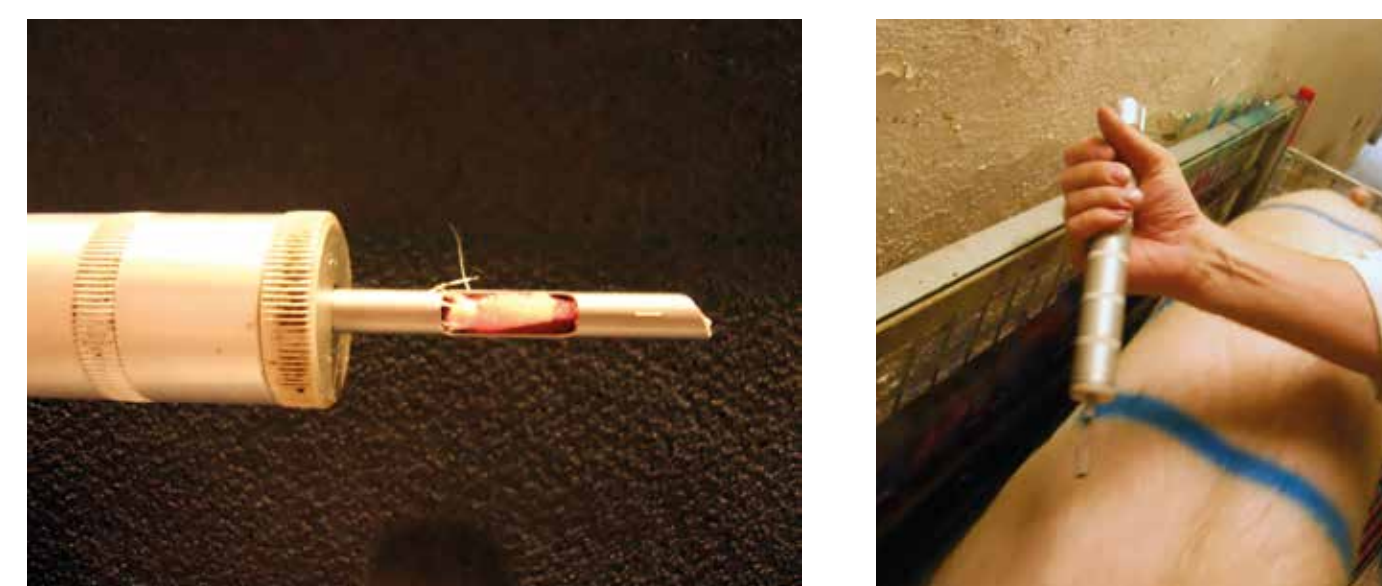
Effect on Androstenone

Feeding has no effect on the level of androstenone in fat. However, an increase in carcass weight from 75 to 95 kg increased the level of androstenone by 38 %. The percentage of male pigs above 1.00 ppm androstenone rose by 18 %.

TABLE 1. BOAR TAINT AND SLAUGHTERWEIGHT

Carcass weight	75 kg	95 kg
Skatole (abattoir) ppm	0.06	0.07
Androstenone ppm	1.23 ^a	1.72 ^b

Results from a trial where biopsies were taken from 60 kg till 120 kg in 10 kg intervals showed a linear increase in androstenone and a good correlation of androstenone at 60 kg and at 120 kg, which gives an opportunity to detect male pigs with boar taint at an early stage or possibly settle a maximum weight.



Taking fat biopsies.

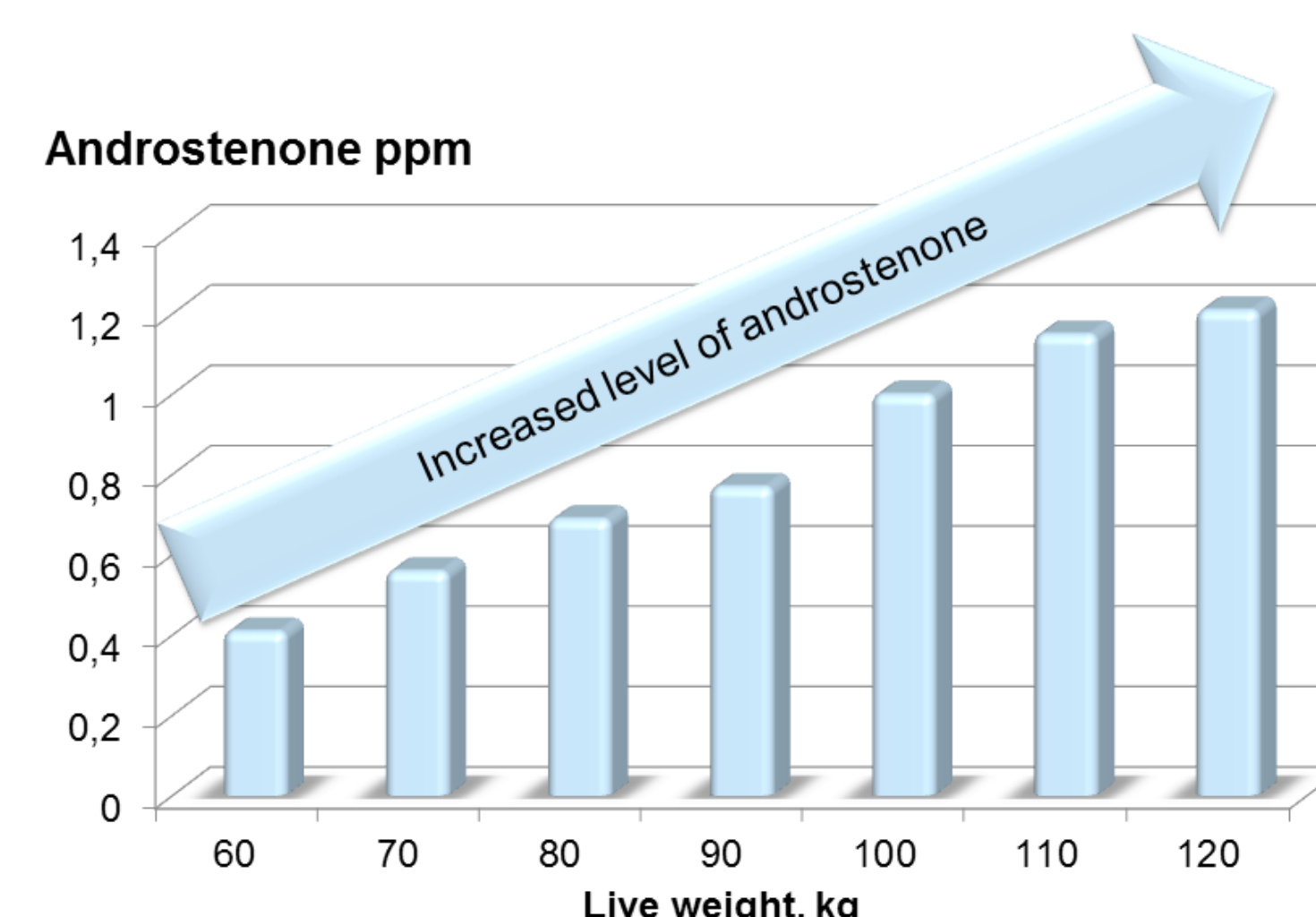


FIGURE 1. ANDROSTENONE IN RELATION TO LIVE WEIGHT

Acknowledgements

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