



Growing  
**ideas**  
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# Level of boar taint in young fattening boars as related to health and rearing conditions

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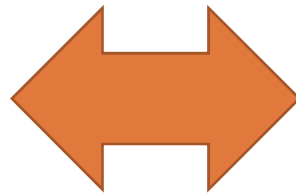


## Background

- Androstenone:
  - Testicular steroid
  - Deposition largely under control of genetic factors
- Skatole
  - Indole-related compound (<tryptophan <bacteria)
  - Deposition affected by numerous factors
    - Intestinal production, absorption, hepatic metabolism
    - Nutrition, steroid hormones (androstenone)
    - Stress- and health-related factors

## Aim of the study

- Study the effect of rearing conditions and housing regime on androstenone (A) and skatole (S) accumulation in backfat.

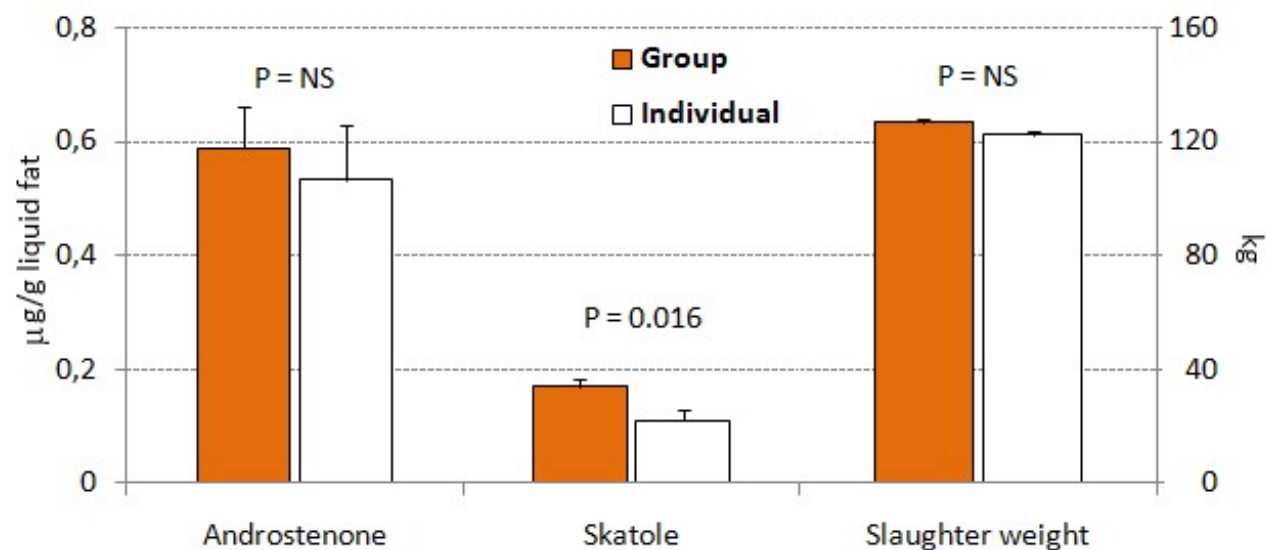


## Material and methods

- 102 EM pigs (LNxLW), fed the same commercial diet (13.1 MJ, 16% CP), assigned to **2 trials**:
- **Trial 1**: 29 pigs, individual housing (2.7 m<sup>2</sup> pens), slaughtered at 193 d, 122 kg.
- **Trial 2**: group housing, initial density 0.7 m<sup>2</sup>/pig
  - 22 pigs (ill, injured, slow growing) slaughtered at 74 kg and 169 d
  - 51 pigs slaughtered at 127 kg and 204 d (st. density = 1.0 m<sup>2</sup>/pig)
- Determination of S and A in subcutaneous fat by HPLC

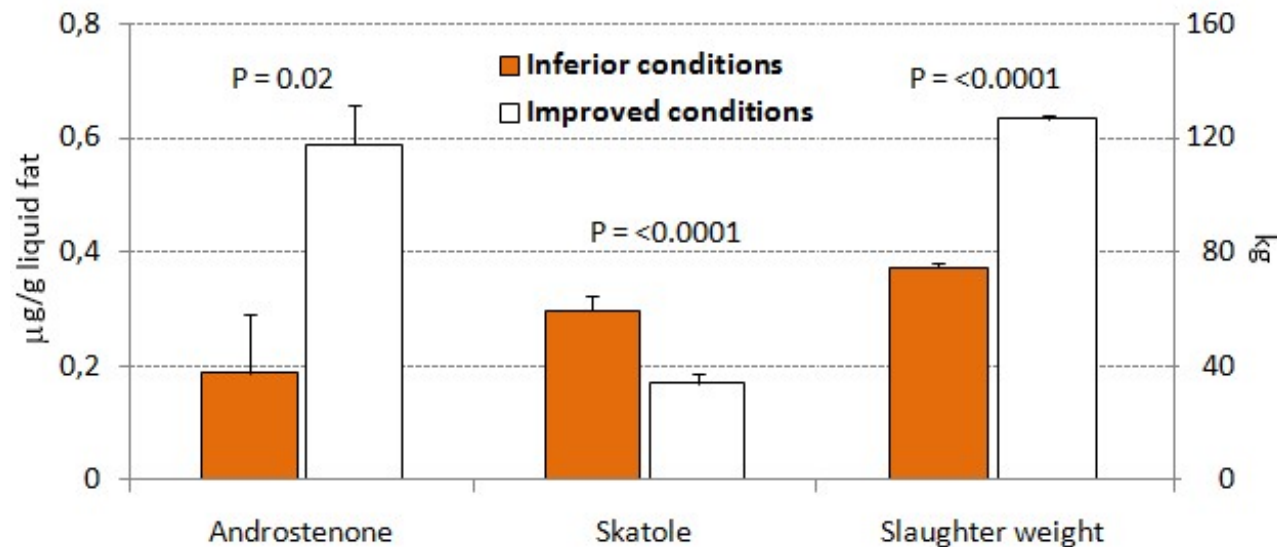
## Results: Group vs. individual housing

- Similar slaughter weight.
- Similar **A** level.
- Higher **S** level in group housed EM.
- In both cases **S** level was low (< sensory threshold).



# Results: Inferior vs. improved conditions

- Difference in slaughter weight ◀ lower age (35 d).
- Inferior living conditions:
  - Lower **A** (◀ early slaughter, sexually immature EM).
  - Higher **S** (despite low **A**).
  - **S** levels above sensory threshold.



# CONCLUSIONS

- **Inferior living conditions** (high stocking density, skin lesions, illness).



Significant rise in **skatole** independently of **androstenone**.



- Even if EM are slaughtered at younger age, **welfare** should be maintained to assure boar taint absence.



# Thank you for your attention

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