

Boar Taint: Threshold levels of skatole and androstenone

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Aims of the study

- To investigate the relationship between:
 - concentration of boar taint compounds in adipose tissue
 - sensory scores for pork and abnormal odours
- To determine if threshold levels currently used for assessing boar taint are valid

Introduction

- Use of boars in the pig industry
- Boar taint compounds and consumer acceptance of tainted pork meat
- Current threshold levels used
 - Androstenone: 0.5 – 1.0 $\mu\text{g/g}$
 - Skatole: 0.2 – 0.25 $\mu\text{g/g}$

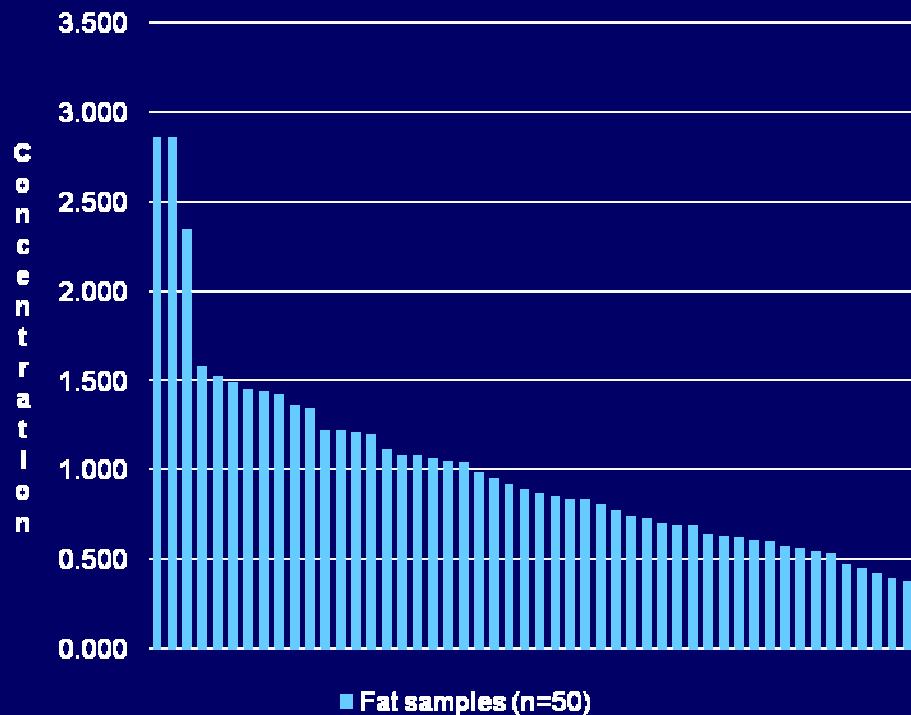
Materials and Methods

- Samples
 - 50 fat samples taken from entire male pigs belonging to a commercial farm
- Analytical Methods
 - Androstenone and skatole
- Sensory Analysis

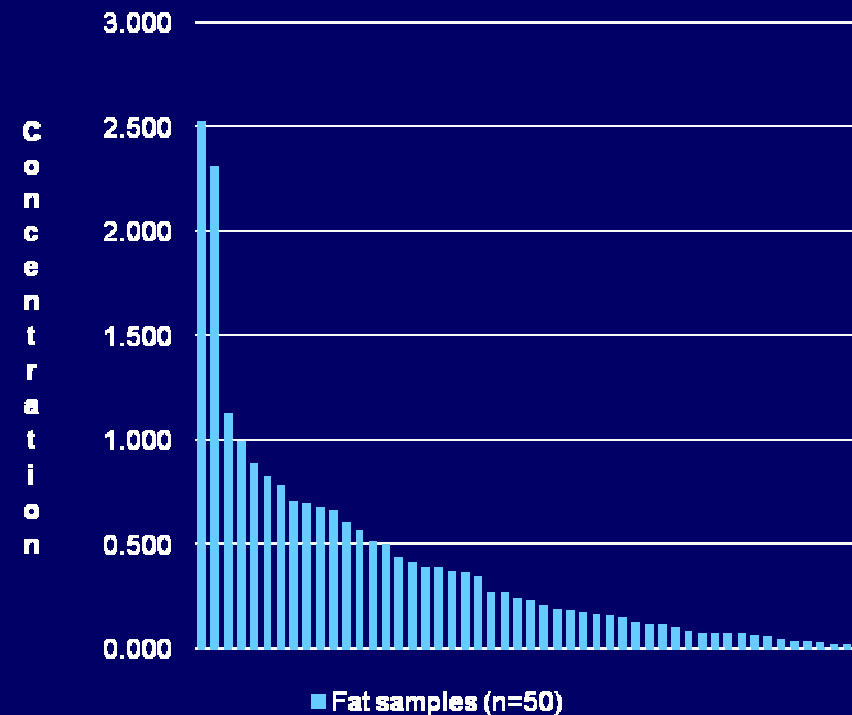
Results

Concentration levels of boar taint compounds in adipose tissue samples

Androstenone

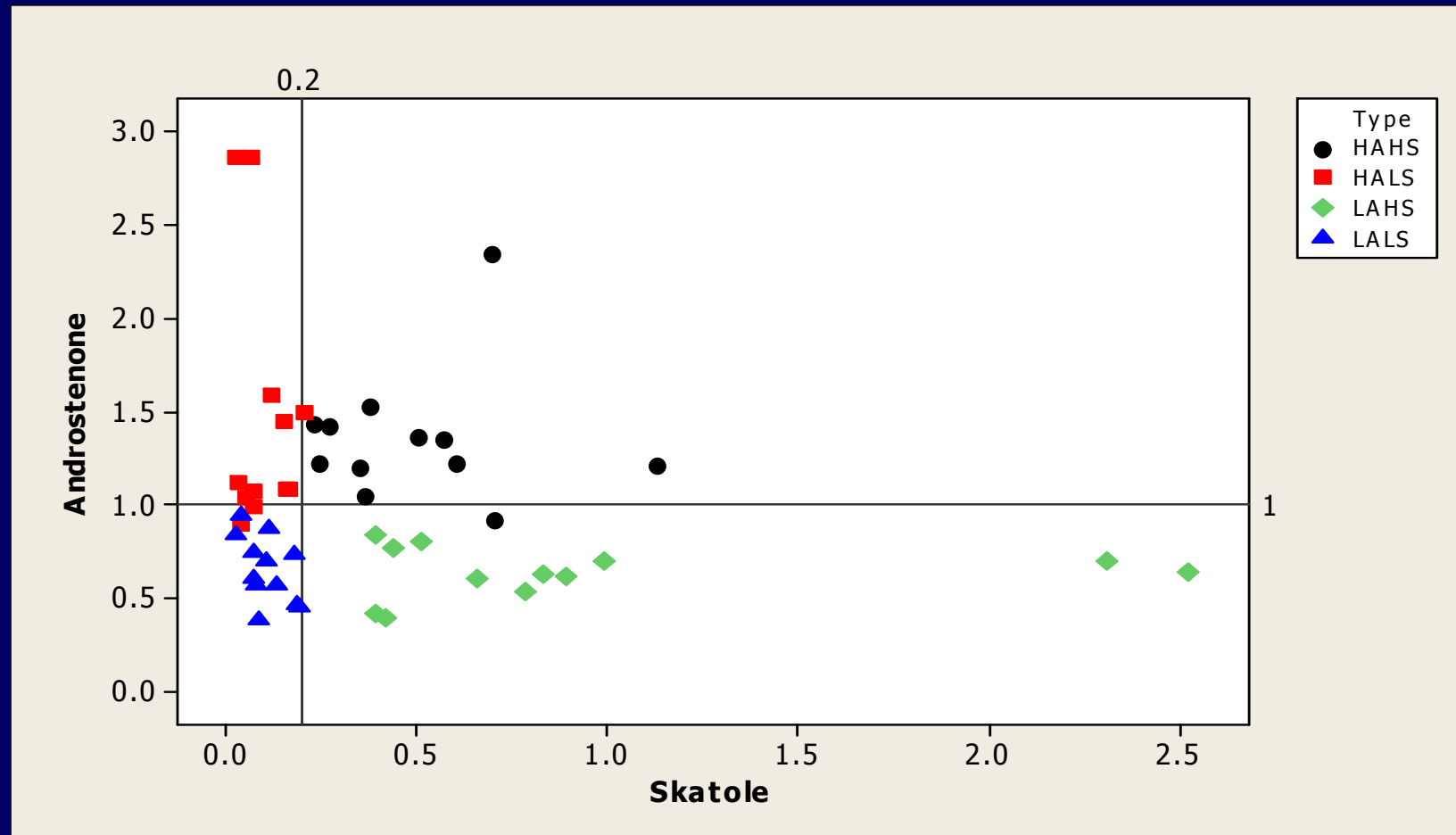


Skatole



Results (2)

Classification of fat samples according to concentration levels of androstenone and skatole

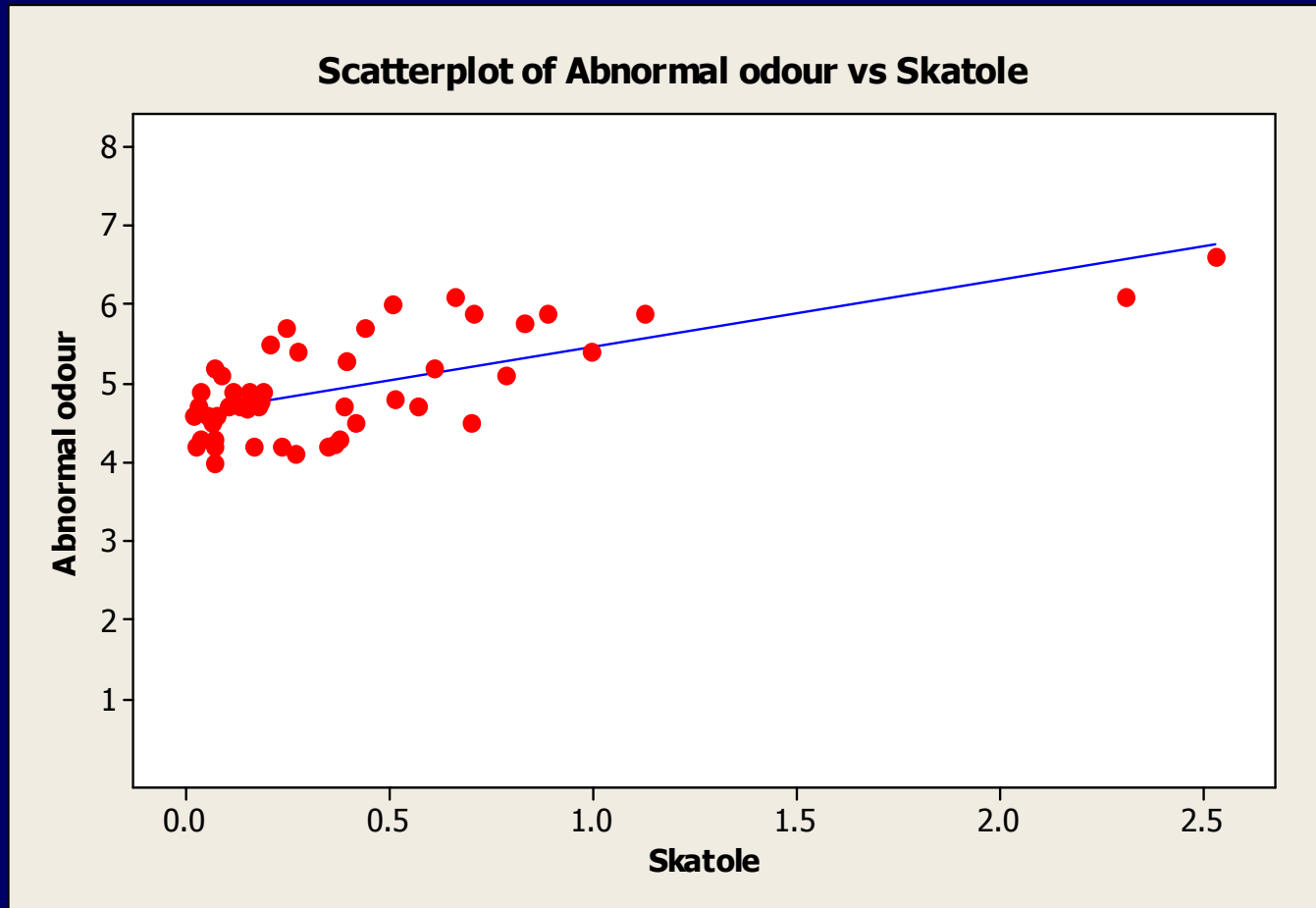


Results (3)

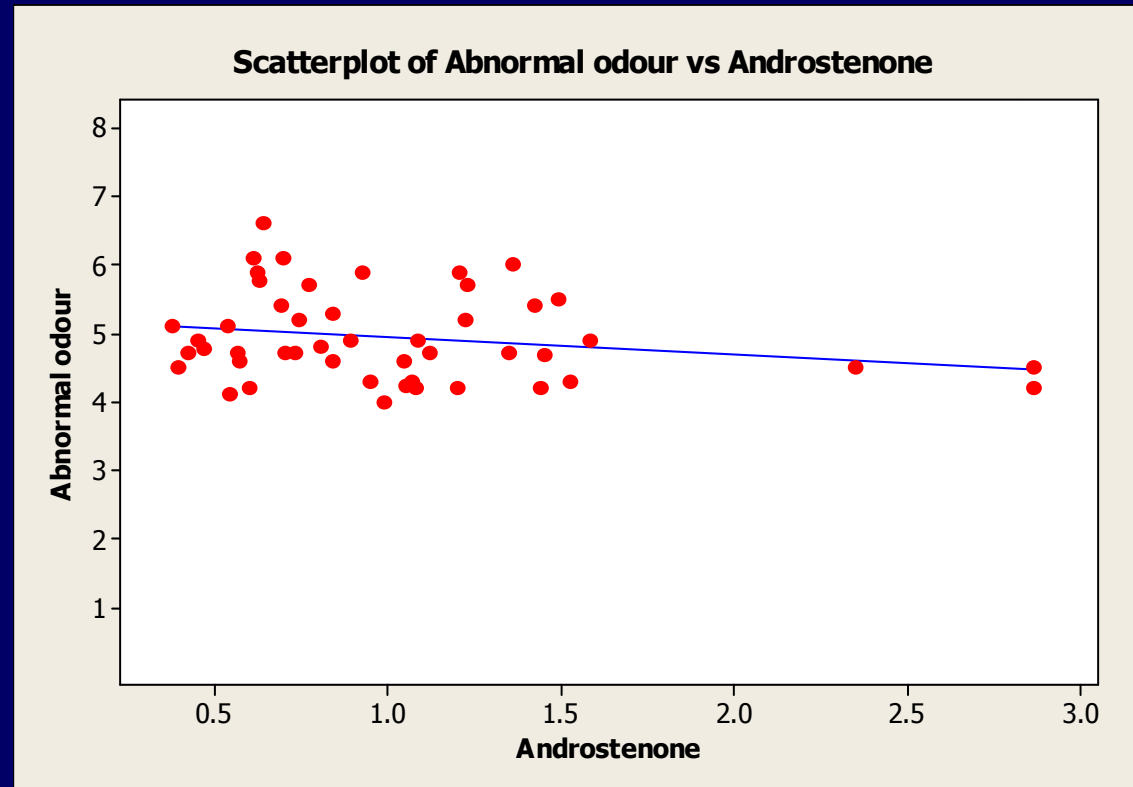
	<i>LA/LS</i>	<i>HA/HS</i>	<i>LA/HS</i>	<i>HA/LS</i>	<i>vr</i>	<i>Prob</i>	<i>Sig</i>	<i>Lsd</i>
<i>Pork odour</i>	3.53	3.46	3.42	3.58	0.77	0.5104	<i>ns</i>	<i>!</i>
<i>Abnormal odour</i>	4.65 ^c	5.02 ^b	5.50 ^a	4.61 ^c	13.62	<0.0001	***	0.31

Influence of type (*LA/LS*, *HA/HS*, *LA/LS* and *HA/LS*) on the odour of pork fat.

Results (4a)



Results (4b)



Conclusions

- High levels of androstenone and skatole
- Abnormal odour
 - Skatole: 46%
 - Androstenone: 6%
- Crude threshold value:
 - Score 5 (slightly strong) corresponds to approximately 0.5 $\mu\text{g/g}$ of skatole

Thank You

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