

Breed and feeding effects on boar taint under organic conditions

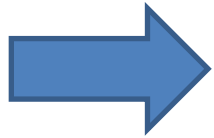
H. Brandt¹, K. Höinghaus², R. Bussemas² and F. Weißmann²

¹Institut für Tierzucht und Haustiergenetik, Universität Giessen, Germany

²Thünen-Institut für Ökologischen Landbau, Trenthorst, Germany

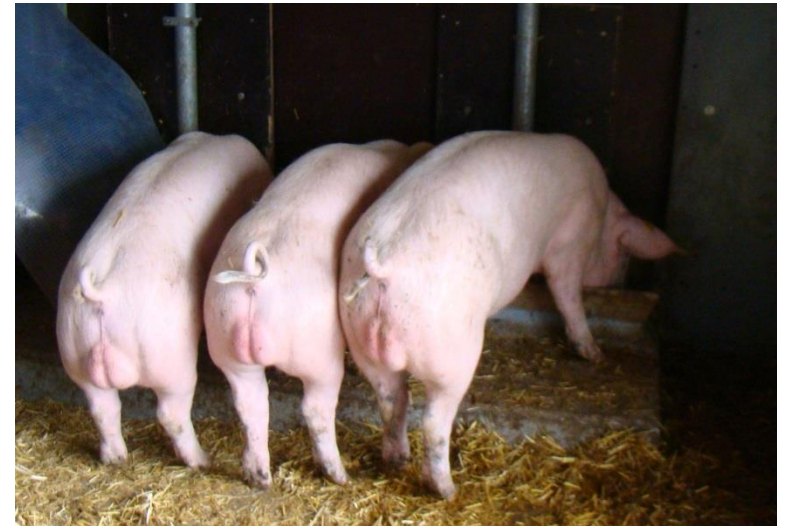
Introduction

2019 Ban of castration without anaesthesia



Alternative methods

- Castration with anaesthesia
- Sperm sexing
- Immunization against boar taint
- **Fattening of entire males**



Aim of the study

- **Study breed effects on boar taint under organic conditions**
- **Study feeding effects on skatole content**
- **Study practical implementation of fattening of entire males under organic conditions**

Experimental design research station Trenthorst

Dam breed

Large White x Landrace (DE x DL)

Sire breed

- **Pietrain (Pi)**
- **Duroc (Du)**

Feeding regime

- **normal 100 % organic feeding (K)**
- **feeding supplemented with 10% native potato starch for the last 30 days of fattening (T)**



Höinghaus 2013



Höinghaus 2013

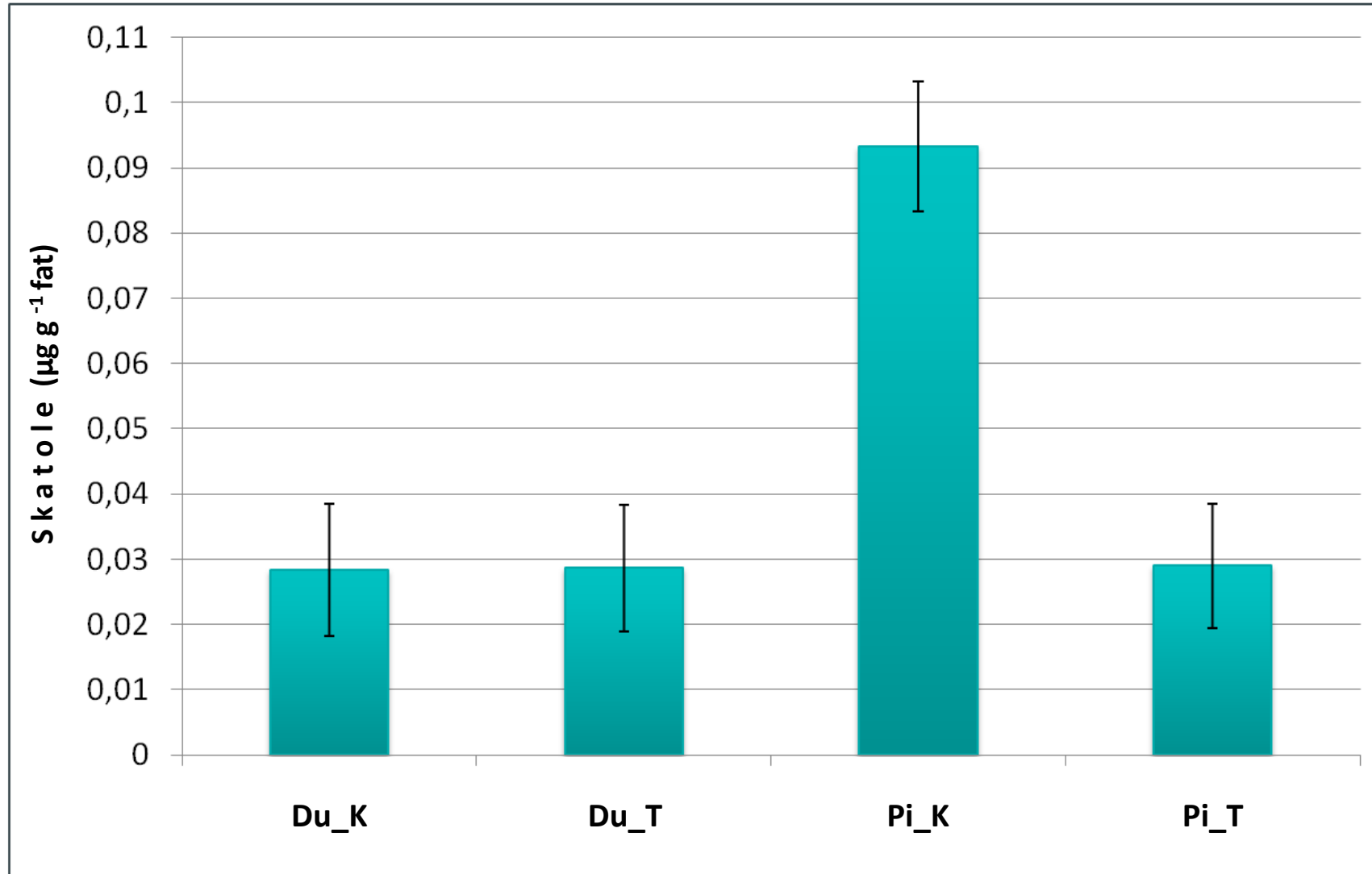
Results

Significance of effects on boar taint

	Fixed effects		Interaktion	Covariable
	Genotyp (G)	Feeding (F)	G*F	Slaughter weight
Androstenone	**	ns	ns	*
Skatole	**	**	**	ns
Indol	ns	**	ns	ns

** p < 0,01, * p < 0,05, ns not significant

Skatole for Genotype x Feeding

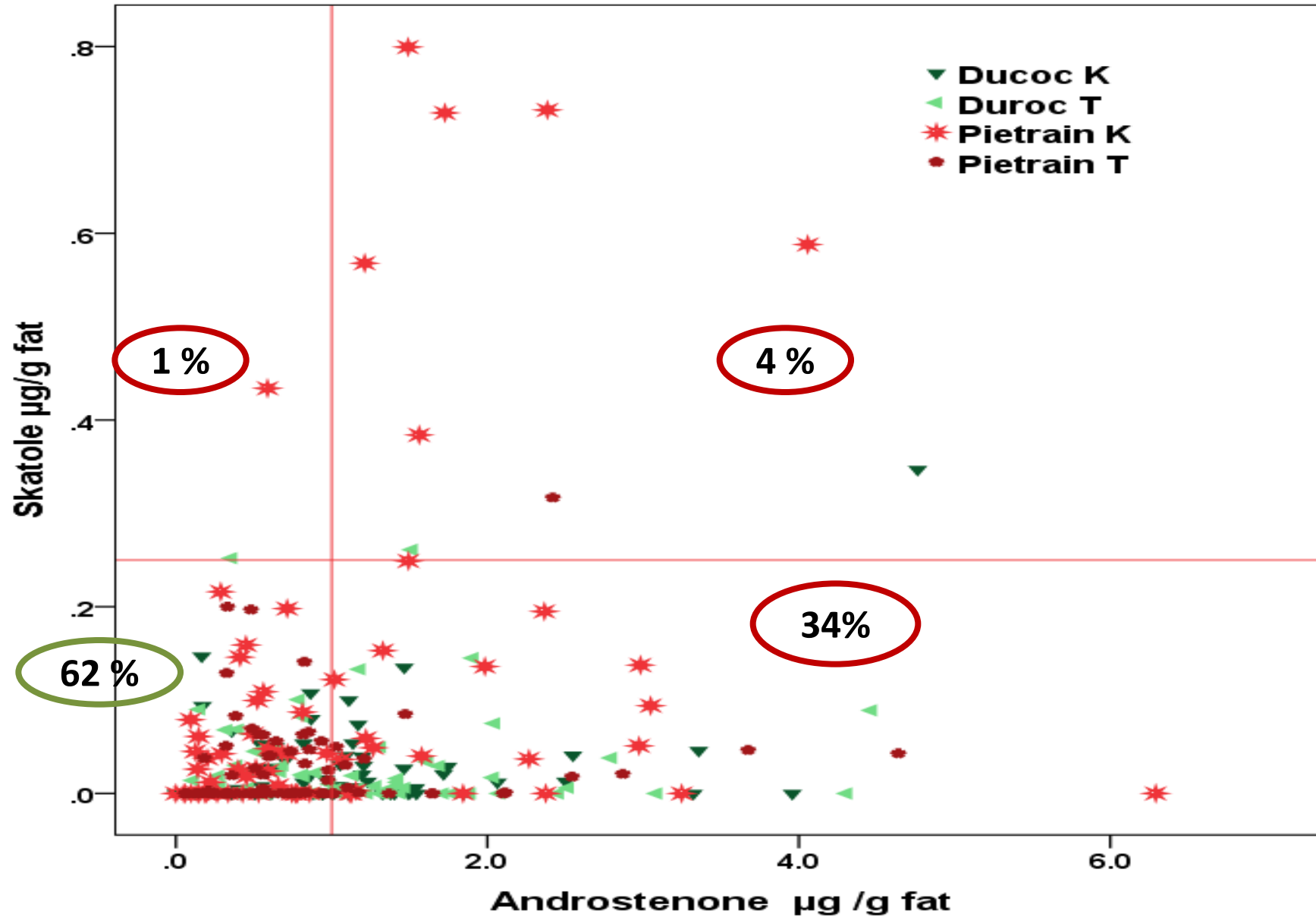


Androstenone and Indole ($\mu\text{g g}^{-1}$ fat) by Genotyp and Feeding

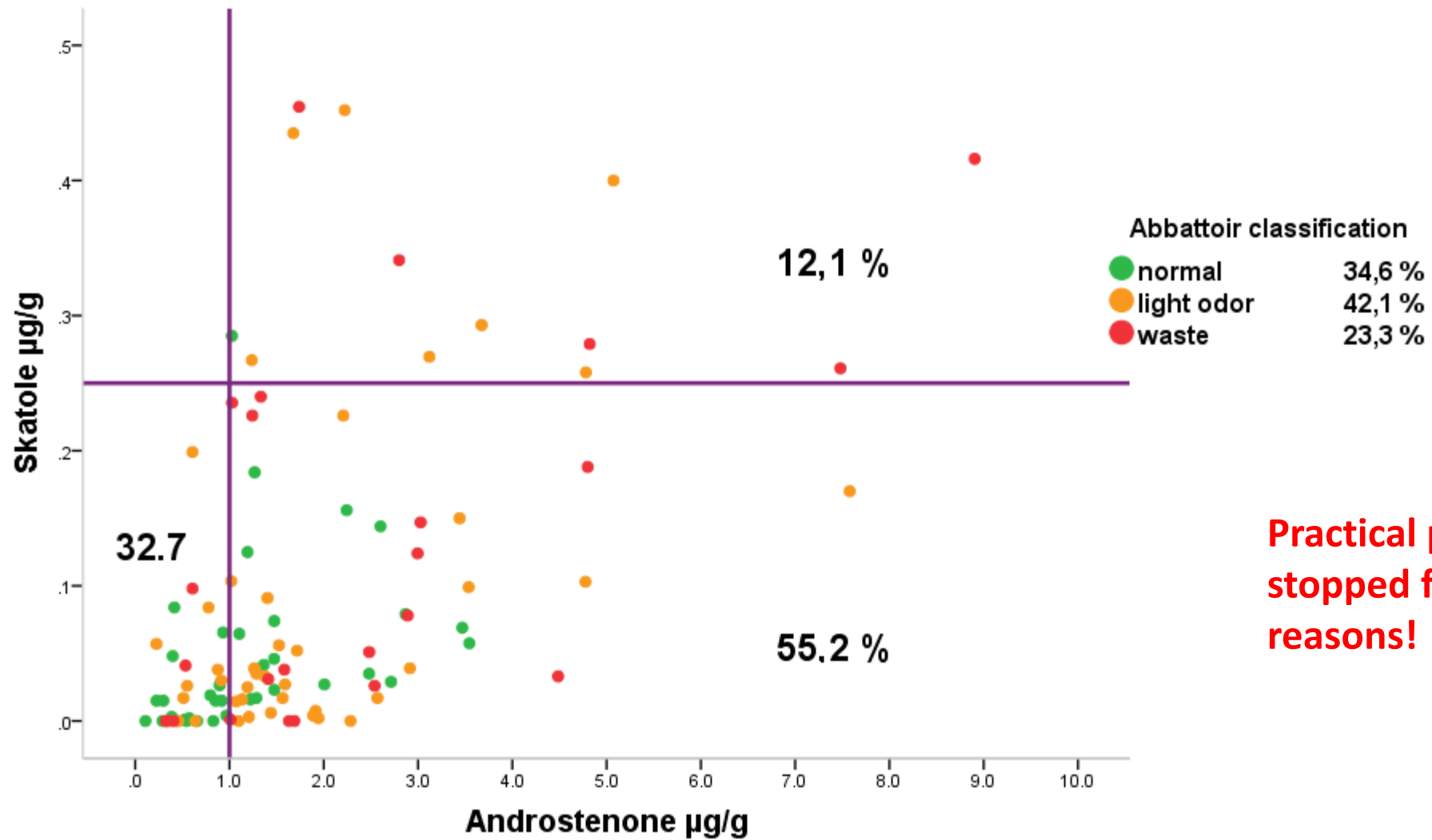
	Genotyp		Feeding	
	Duroc	Pietrain	K	T
Number (n)	138	142	133	147
Androstenone	0,92	0,68	0,82	0,77
Indol	0,0063	0,0051	0,0078	0,0036

significant differences

Skatole and Androstenone by Groups



Skatole, Androstenone and abattoir classification practical phase (n = 107 entire males)



Practical phase had to be stopped for economic reasons!

Conclusion

- higher daily gain for Duroc progeny
- higher lean meat percentage for Pietrain progeny
- feeding supplemented with 10% native potato starch for the last 30 days of fattening has a positive effect on skatole content only within Pietrain progeny
- in total very few integument lesion for all animals
- practical implementation of fattening of entire males impossible under existing regulations for abattoir classification