



69th Annual Meeting of the European Federation of Animal Science

Dubrovnik, Croatia - 27th to 31st of August 2018

Farmers' point of view towards the applicability of a guideline to assess animal welfare of pigs

Mareike Pfeifer, Alexandra Koch and Engel F. Hessel

Thünen Institute of Agricultural Technology

Introduction

Legal obligation to record animal welfare indicators in Germany (TierSchG 2014)

Supporting guideline „Animal Welfare Indicators: A Guideline for on-farm self-assessment – pigs“ (Schrader et al. 2016)

Success of the tool depends on a high applicability and the farmers' acceptance

KTBL guideline for fattening pigs



Animal welfare indicators:

Daily weight gains
Animal losses
Slaughter Checks
Treatment incidence with antibiotics
Water supply
Manure on body
Tail, Ear and Skin lesions
Evidence of ectoparasites
Tail length
Lameness
Runts



For each indicator:

Description with pictures
Recording method
Sample size of judged pigs
Timing and frequency of recording and evaluation

Example - recording of the indicator `tail length`

- Frequency: recording for each stabling and evaluation twice a year
- Sample size: all new pigs
- Scores:

0 = Original length

1 = > 2/3 of the original length

2 = < 2/3 of the original length

- Result: $\frac{\text{Amount of pigs with score 2}}{\text{Amount of pigs judged}} \times 100$
= Amount of short tails (%)



Schrader et al. 2016

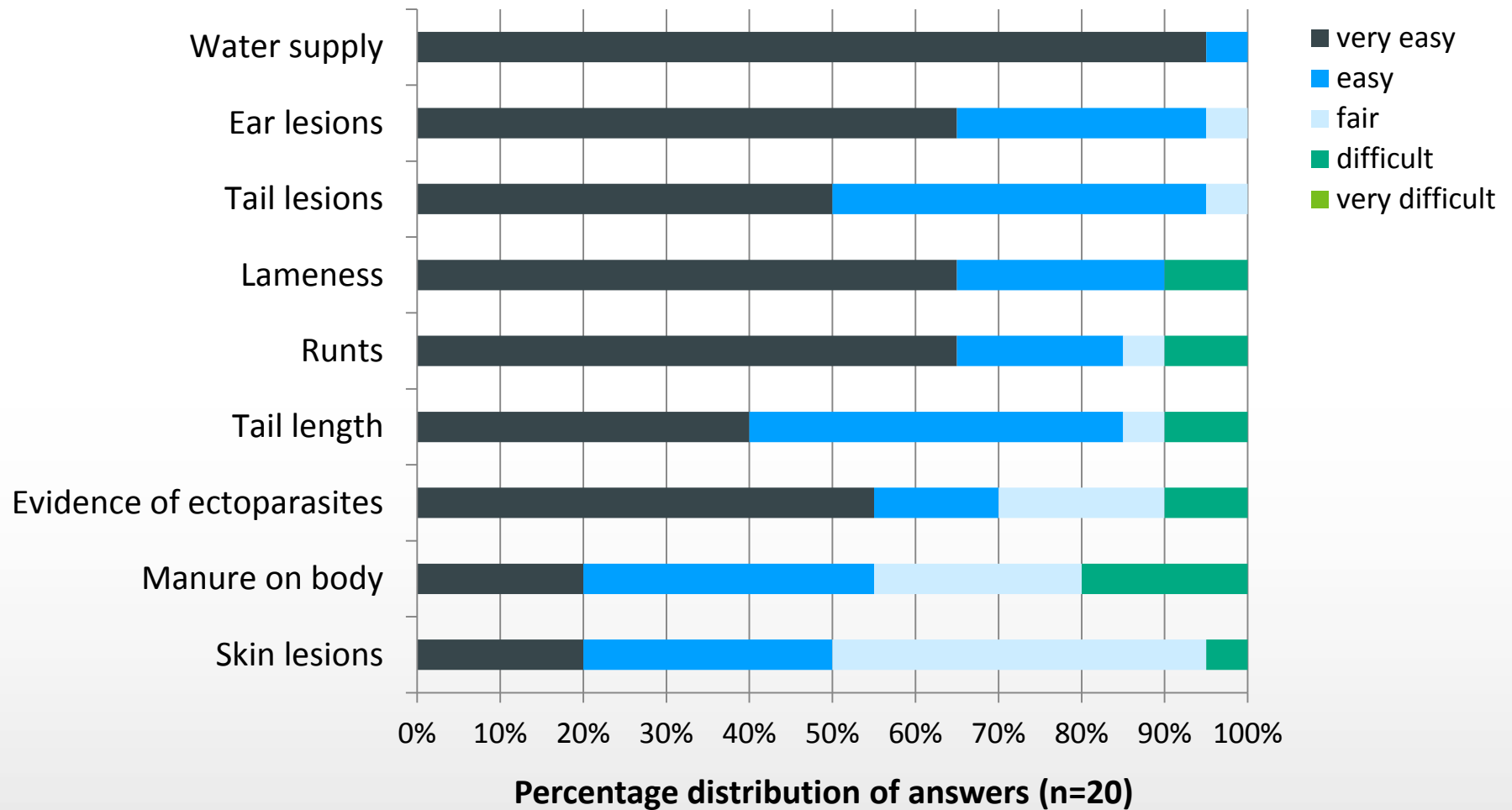
Details of the KTBL guideline

Indicators	Timing and frequency of recording	Number of jugded growing pigs
Tail length	each stabling	all new pigs
Animal losses Treatment incidence antibiotics Daily weight gains Slaughter checks	consecutively	all pigs
Runts Manure on body Skin, Ear and Tail lesions Evidence of ectoparasites Lameness Water supply	every six month to the middle of the summer and the winter half-year	Livestock < 150 pigs: all pigs Livestock > 150 pigs: different suggestions for the indicators (± 150 jugded pigs proposed)

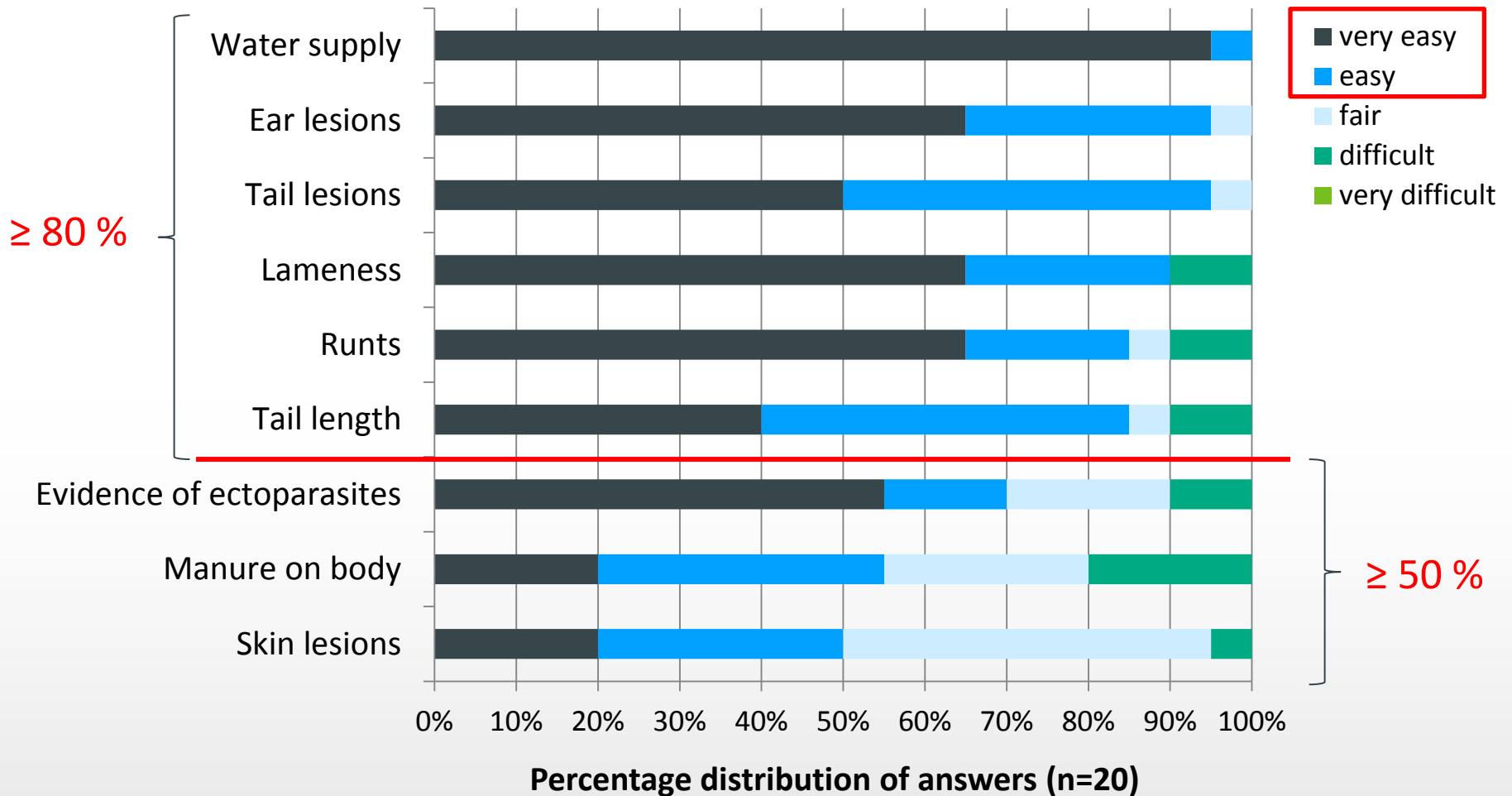
Materials and Methods

- Interviews with 20 fattening pig breeders
- Interview-guideline with 28 questions
- Farm visits for the collection of data consisting of two parts:
 1. Farmer records the KTBL indicators on their pigs
 2. Farmers' opinion is recorded
- Transcription of the interviews
- Descriptive evaluation of the closed questions
- Qualitative Content Analysis by Mayring (2002) to evaluate the open questions

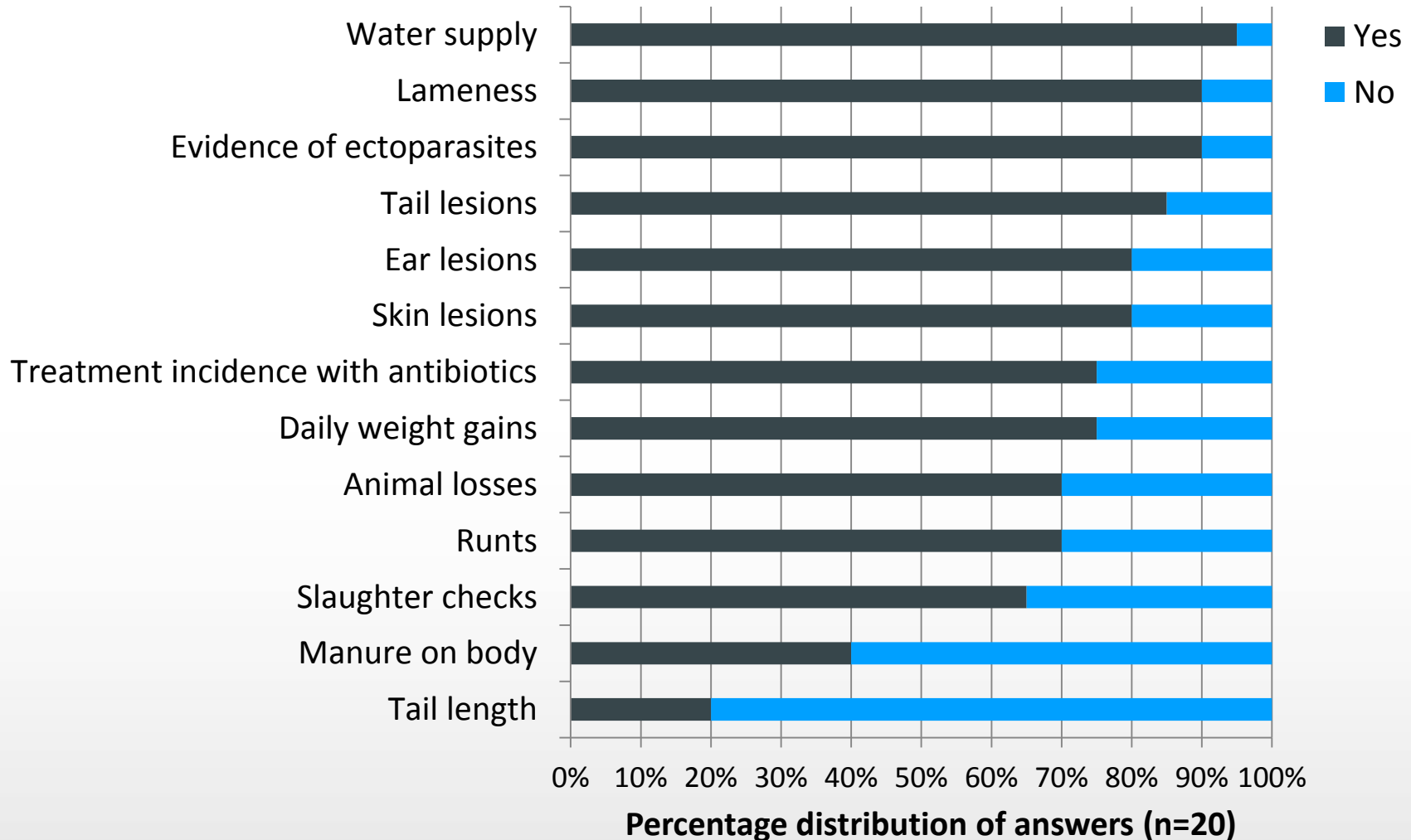
Results and Discussion – feasibility of the recording



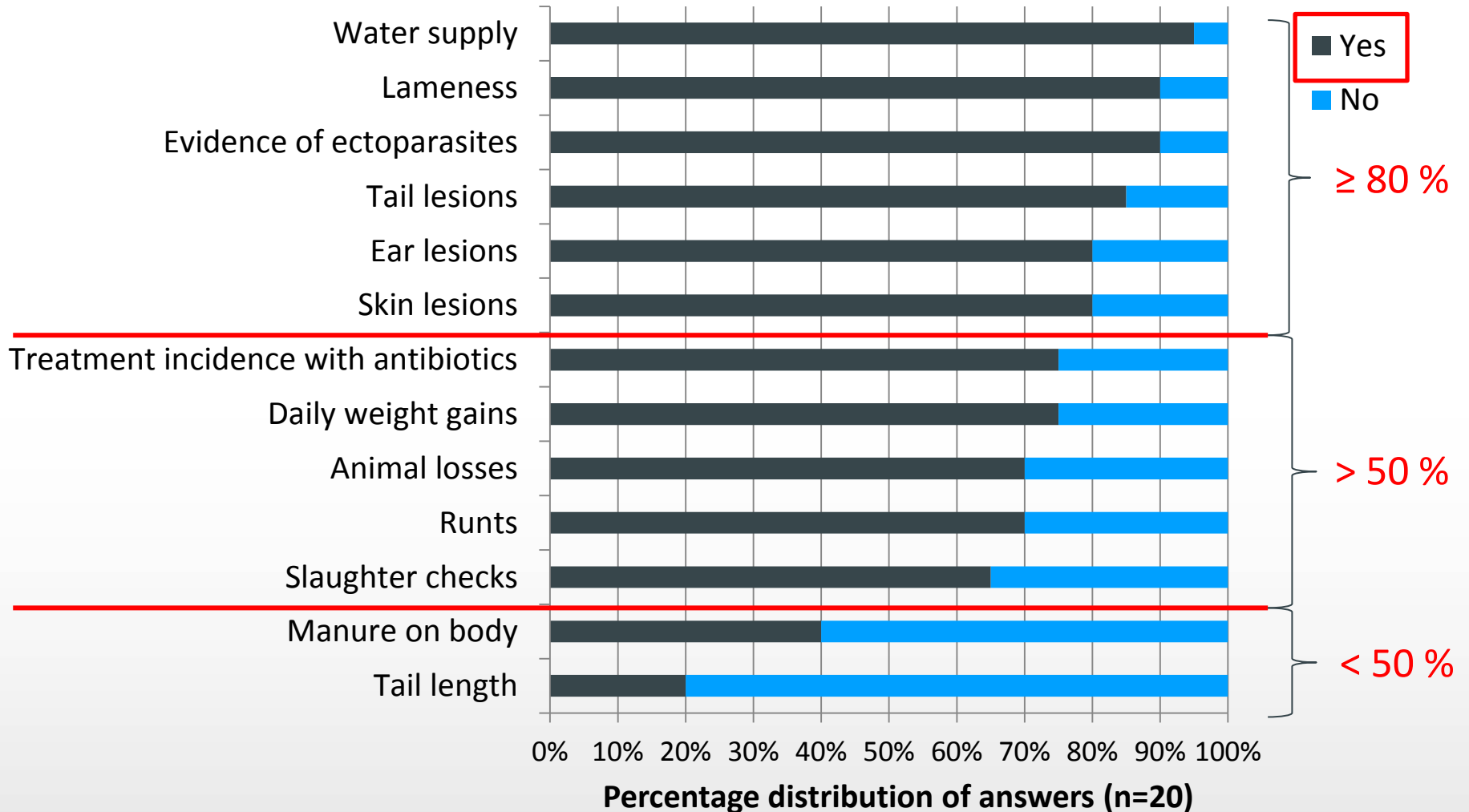
Results and Discussion – feasibility of the recording



Results and Discussion – statement about animal welfare

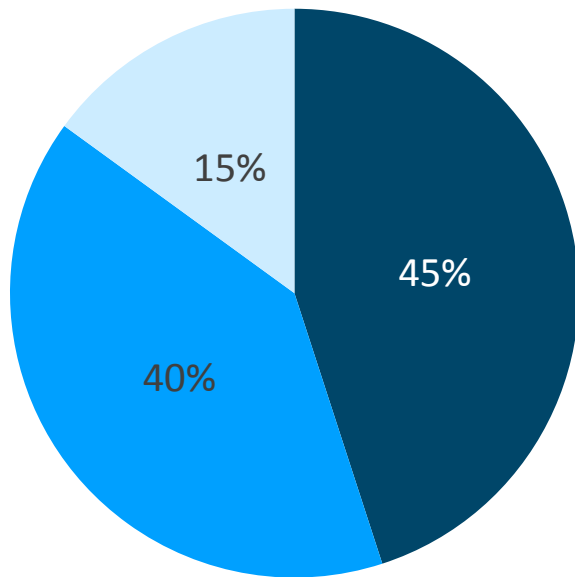


Results and Discussion – statement about animal welfare



Results and Discussion – opinions about...

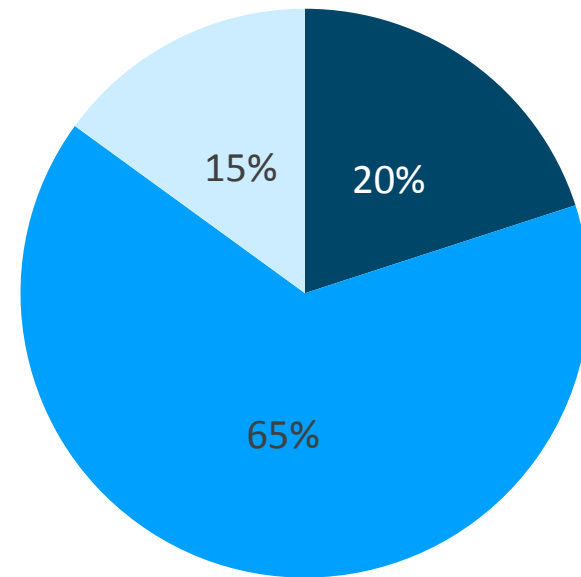
Suggested sample size



■ too high ■ adequate ■ too low

(n=20)

Suggested frequency of recording

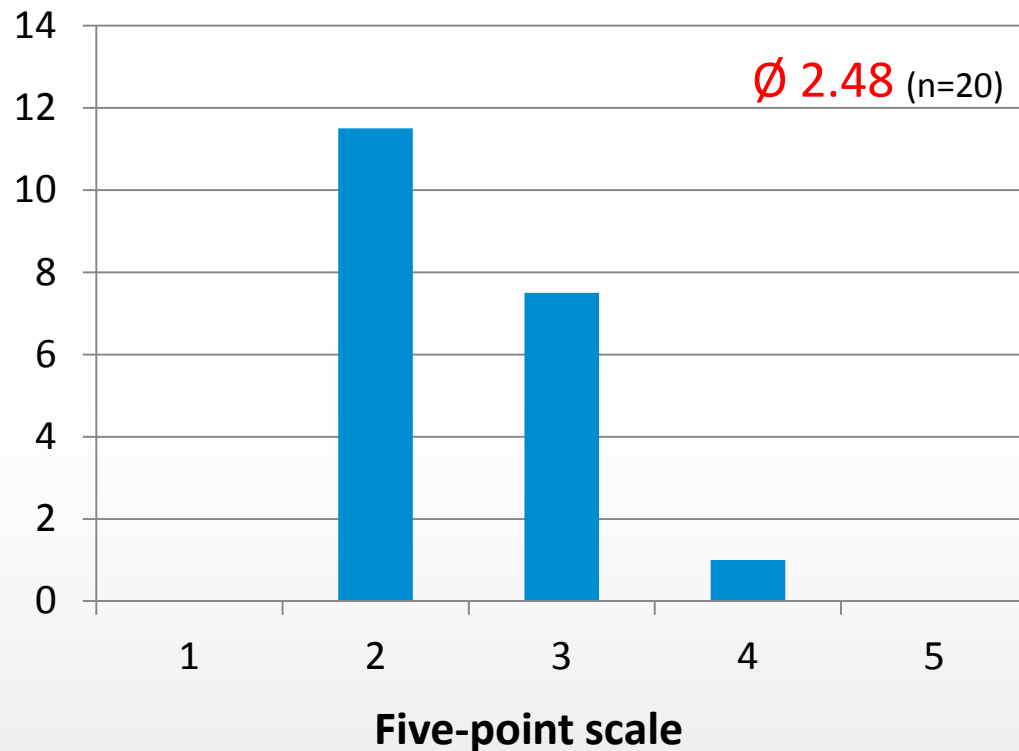


■ too often ■ properly ■ too seldom

(n=20)

Results and Discussion – overall feasibility of the guideline

Number of entries (n=20)



1 = very good
2 = good
3 = fair
4 = bad
5 = very bad

Conclusions

- Representativeness rather low
 - Results are of high quality due to farm visits
 - Summary after 20 interviewed farmers:
 - KTBL-Guideline is rated to be mostly practicable by the farmers
 - Most farmers are open minded towards the topic
 - Not all KTBL indicators fulfill the desired purpose for the pig breeders
 - The implementation is sometimes perceived as too complicated
 - There are concrete and plausible suggestions for improvement
- Interviews are continued to raise sample size

Thank you for your attention!

Thünen Institute of Agricultural Technology

mareike.pfeifer@thuenen.de; alexandra.koch@thuenen.de; engel.hessel@thuenen.de



References

TierSchG (2014): Animal welfare regulations for the husbandry of agricultural livestock and other animals used in the production of animal products. Version published on 22nd August 2006 , last amended by Article 1 of the Regulations of 5th Februar 2014. <http://www.gesetze-im-internet.de/tierschnutztv/BJNR275800001.html>; accessed 20 December, 2016.

Schrader L, Czycholl I, Krieter J, Leeb C, Zapf R and Ziron M 2016. Tierschutzindikatoren: Leitfaden für die Praxis - Schwein. Vorschläge für die Produktionsrichtungen Sauen, Saugferkel, Aufzuchtferkel und Mastschweine, 1. Auflage. KTBL, Darmstadt.

Representativeness regarding animal welfare

Most representative		Minor representativ	
Indicator	Number of entries	Indicator	Number of entries
Tail lesions	6	Manure on body	7
Runts	5	Tail length	7
Daily weight gains	4	Daily weight gains	3
Slaughter checks	3	Evidence of ectoparasites	2
Treatment incidence antibiotics	2	Skin lesions	2
Water supply	2	Runts	1
Animal losses	2	Lameness	1
Lameness	2		
Ear lesions	2		
Evidence of ectoparasites	1		
Skin lesions	1		

Multiple entries possible

Characteristics of the interviewed farmers

Number of fattening places	Ø 1 977 ± 1 426
Workforce (AK)	Ø 2.0 ± 0.9
Age of stable (years)	Ø 12.6 ± 7.3
Group size	
- small (< 20 pigs)	9 farms
- tall (20-60 pigs)	8 farms
- mega (> 60 pigs)	3 farms
Origin	
- Lower Saxony	3 farms
- North Rhine - Westphalia	17 farms