European Commission

EURCAW-Pigs: Regional Meeting Mediterranean

View and input to discussion on tail biting

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1. Threshold tail lesions

- Prevalence of tail lesions above which farmer can get exemption and is allowed to tail dock
- 2% threshold that is suggested by several MS, e.g. Portugal, Spain, Italy, Germany, Denmark

  → Scientific basis? ~ Epidemiological studies (e.g. Harley et al. 2012, vom Brocke et al. 2018)

  → Spain: Feedback from farmers "what is acceptable for you?"

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1. Threshold tail lesions

- What is "evidence" (= proof that tail biting is occurring)?
- How to continue when prevalence <2%?

  → "start small" (= trials)

  → progress needs to be visible
- What is failure when starting with pigs with intact tails?

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1. Assessment of tail lesions

On farm

At the slaughterhouse

→ see Q3

- Length of tail
- Characteristics of intact tail
- Tail lesions (minor/severe)

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1. On farm: intact tail

- Hair at tail tip
- Flat tip

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1. On farm: lesions

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2. Assessment protocol

- How to verify compliance?
- Need of a standardized protocol → EURCAW
  - Feasible
  - Focus on extremes
- Suggestions for potential indicators to assess compliance
  - Competition for resources
  - Diet

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2. Competition over resources

- Indicators selected from existing welfare indicator schemes
- Animal based indicators

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2. Legal requirements: competition over resources

Directive 2008/120/EC

Access to food:

- feeding at least 1×/day
- access at the same time as others
  (except if ad lib or individually fed by automatic system)

Access to water:

- Permanent access to a sufficient quantity of fresh water (pigs ≥ 2 weeks)

2. Legal requirements: competition over resources

Escape opportunities:

- As little mixing as possible
- When mixed, pigs need to be provided with opportunities to escape and hide from other pigs

Minimum legal floor area

2. Indicators: competition over resources

- Skin lesions

- Decision on suitable assessment scheme (feasible, focus on extremes)

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2. Legal requirements: diet

Directive 98/58/EC

Wholesome diet, appropriate to age and species

Sufficient quantity

Nutritional needs

Intervals appropriate to physiological needs

Constructed to minimise contamination and effects of competition

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2. Legal requirements: diet

Directive 2008/120/EC

Access to water:

- Permanent access to a sufficient quantity of fresh water (pigs ≥ 2 weeks)

2. Indicators: diet

- BCS
- Diarrhoea
- Permanent water supply

- Difficult: reliability, validity
- Decision on suitable assessment scheme (feasible, focus on extremes)

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2. Potential indicators: suggestions

Enrichment: Enrichment use

Cleanliness: Manure on the body

Thermal comfort & air quality: Panting, huddling, shivering

Health status: Mortality, lameness, diarrhoea

Competition: Skin lesions

Diet: BCS, diarrhoea, permanent water supply

3. Monitoring of tail lesions at the abattoir

- Opportunity: Conducting risk based farm inspections

  → use of quality assurance schemes

- EURCAW:

  → Compile information on prevalence of tail lesions (docked tails) to derive threshold. Potential sources of information:

  - trials conducted in practice
  - epidemiological studies

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3. Assessment of lesions

- No routinely usable scheme/method available yet
- Example from scientific study: 'Tailception': using neural networks for assessing tail lesions on pictures of pig carcasses (Brünger et al. 2018)
- Pictures of carcasses after cleaning, scaling and singing & removal of anus

3. Assessment of lesions

Tail lesions were assessed using four scores (0 to 3). Tail loss was assessed as yes or no (score 1 or 0).

Score	Tail lesions	Total tail loss
0	No visible lesion (skin looks intact). No reddish / violet / brownish discolorations the size of a pinhead (under intact looking skin). Scar(s) without loss of substance / without change of shape.	No loss or partial loss with more than a "stump" longer than approximately 3 cm left.
1	Lesion [a] < tail diameter at respective location, with or without loss of tail substance.	Total loss: only a "stump" protruding from tail base (≤ 3 cm, approx.).
2	Lesion [a] ≥ tail diameter at respective location, with or without loss of tail substance.	[not applied]
3	Tail tip with irregular outline (abrasion and / or elevations) in combination with dark reddish / brownish / blackish discoloration (necrosis).	[not applied]

[a] lesion = broken skin, or scar with loss of substance, or scar with change of tail shape

Brünger et al. 2018

Each tail scored for

- Tail lesions
- Total tail loss (yes/no)

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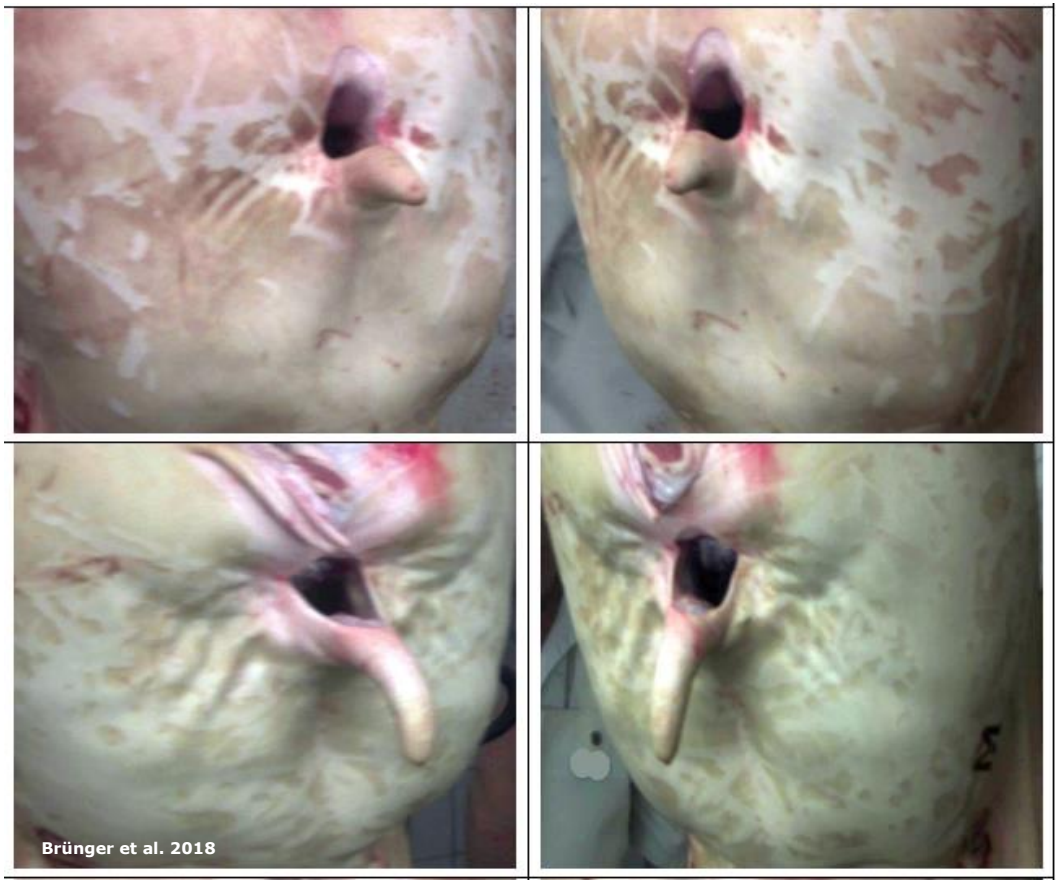
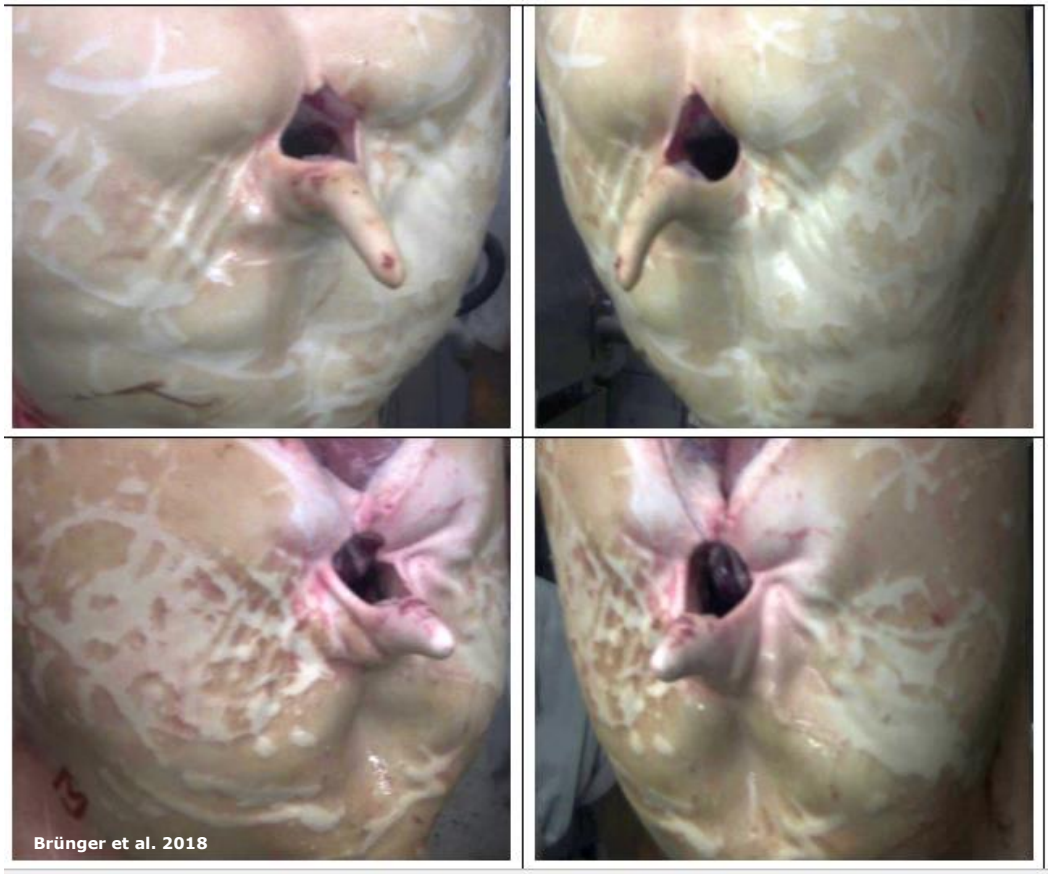
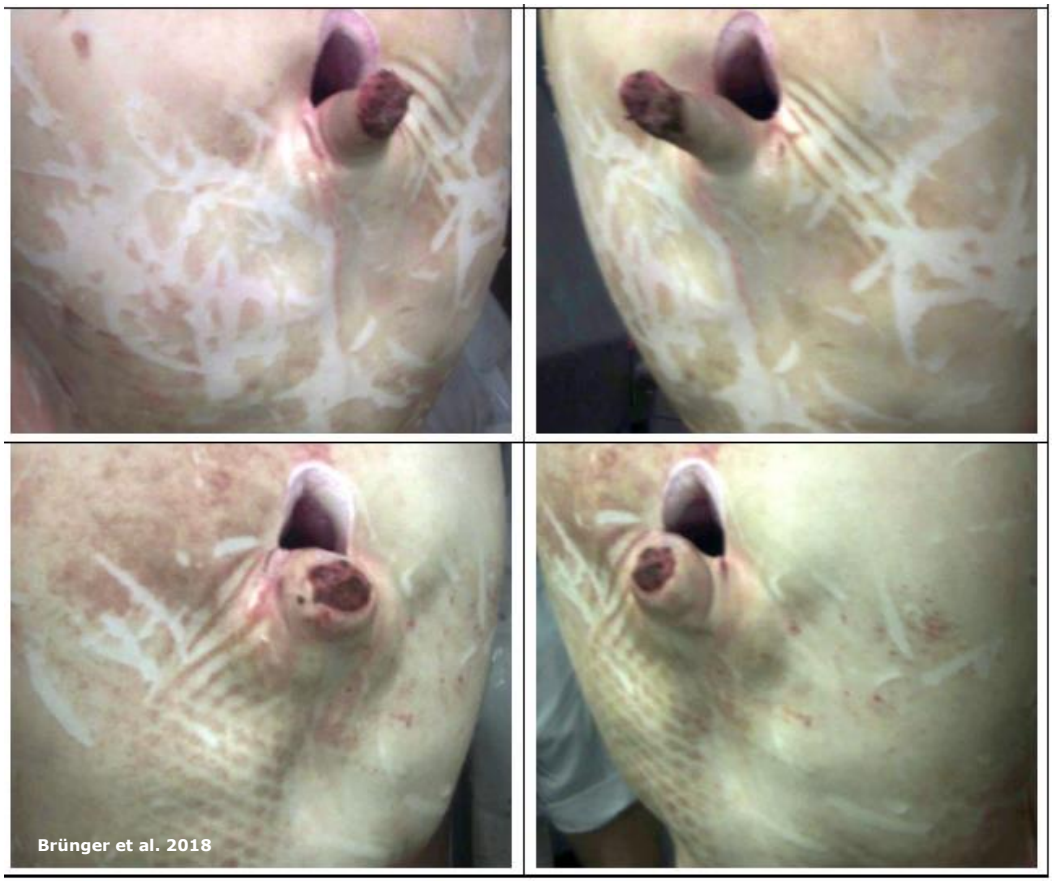


No loss, no lesions

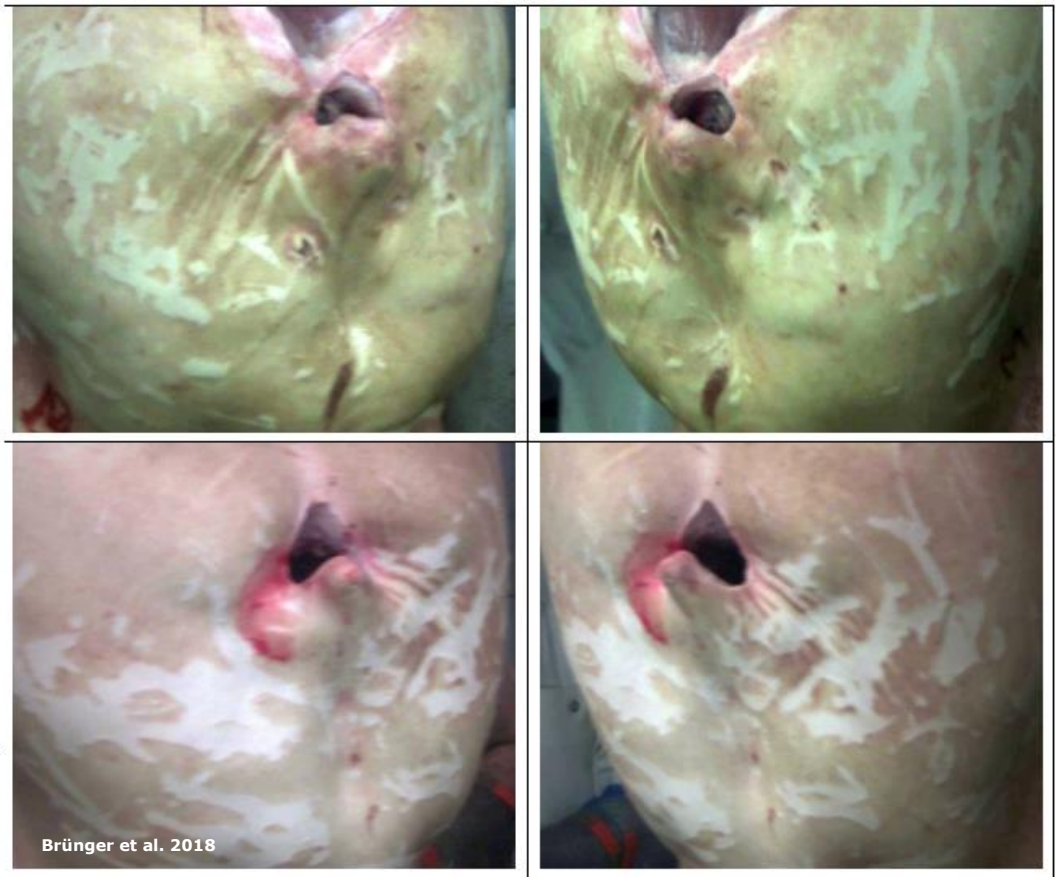


No loss, lesions score 1

No loss, lesions score 2



No loss, lesions score 3



Loss, no lesions

4. Importance of rearing

Occurrence of tail biting based on source of piglets (= farm effect)

→ Good practice not to mix piglets from multiple sources

→ Scientific evidence missing:

- epidemiological data linking piglets with fattening pigs
- information on intact piglets e.g. from Finland to identify risk factors

→ EURCAW: suitable enrichment material for piglets in farrowing unit