

PRODUCTION OF ENTIRE MALE PIGS – A MEANS TO AVOID SURGICAL CASTRATION

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PRODUCTION OF ENTIRE MALE PIGS

- ▶ Denmark:
 - ▶ Conventional production: 1.8% in 2014
 - ▶ Organic production: only in research
- ▶ Other countries:
 - ▶ UK, Ireland: > 90%
 - ▶ Cyprus, Portugal, Spain: 60-90%
 - ▶ The Netherlands: 50% in 2012



Fredriksen et al., 2009; van Wagenberg et al., 2013; Klassificeringskontrollen 2014; Bonde (pers. com.) 2014

ANIMAL WELFARE CONCERNS

- ▶ Behavioural changes of entire males:
- ▶ Increased aggression:
 - › Leads to fear, exhaustion, pain, stress, injuries and skin lesions
- ▶ Mounting behaviour:
 - › Induces high pitch vocalisations, disturbance, discomfort, leg injuries and pain



Rydhmer et al., 2006; Fredriksen et al., 2008; Fábrega et al., 2010; Hintze et al., 2013

MANAGEMENT APPROACHES

- ▶ Increased stocking density → increased aggression
- ▶ Occupational material:
 - > reduces behaviour directed at pen mates → decreased aggression (Olsen et al., 2001; Prunier et al., 2013)
 - > found to increase mounting behaviour (Salmon et al., 2008; Morrison et al., 2003)
- ▶ Group composition:
 - > Single-sex vs. mixed sex groups → males initiate more fights and mount more (Giersing et al., 2006; Rydhmer et al., 2006; Conte et al., 2010)
 - > Research results not unequivocal (Rydhmer et al., 2006; Boyle et al., 2007; Conte et al., 2010)



MANAGEMENT APPROACHES CONT.

- ▶ Grouping strategy:
 - > More aggression in mixed groups vs. intact groups, but the opposite or no effect for mounting (Fredriksen *et al.*, 2008; Rydhmer *et al.*, 2013)
 - > Socialisation prior to weaning modify the behavioural response later in life (D'Eath, 2005)
 - > Weight asymmetry decreases aggression levels (Andersen *et al.*, 2000)
- ▶ Group size
 - > Research results not unequivocal
 - > Large groups (Spoolder *et al.*, 1999) vs. small groups (Turner *et al.*, 2001)

ORGANIC PRODUCTION

- ▶ Straw bedding in resting area
- ▶ Space allowance min. 1.3m²/pig indoor and 1m²/pig outdoor
- ▶ Outdoor run
- ▶ Ad lib. feed and provision of roughage



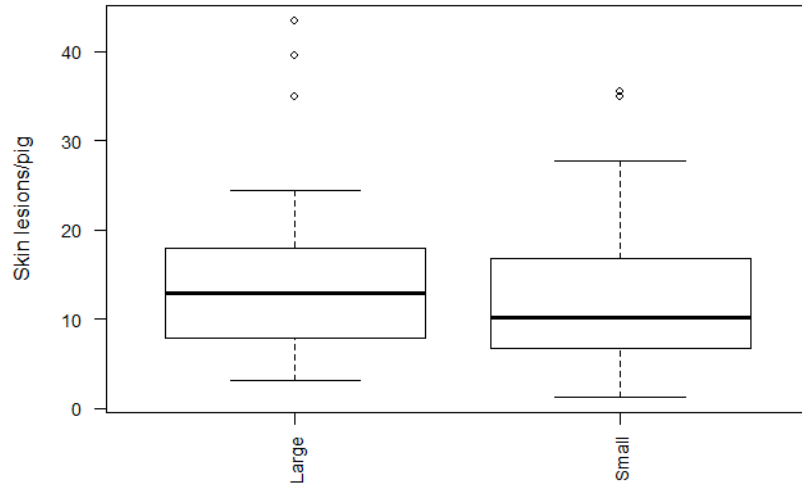
NO CAST

- ▶ Five commercial organic pig herds
- ▶ App. 1400 entire male pigs
- ▶ Group sizes of 15 and 30 pigs
- ▶ Socialisation prior to weaning and mixing at weaning
- ▶ Groups being regrouped (a second mixing) and groups being simply relocated

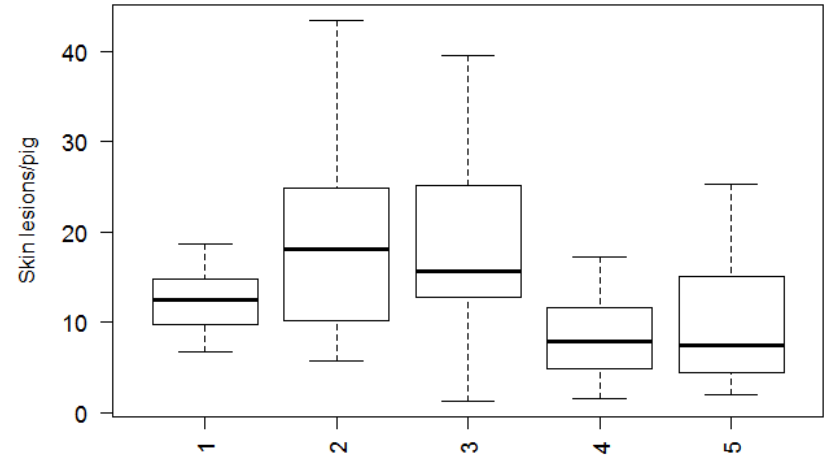


RESULTS – SKIN LESIONS

1st round

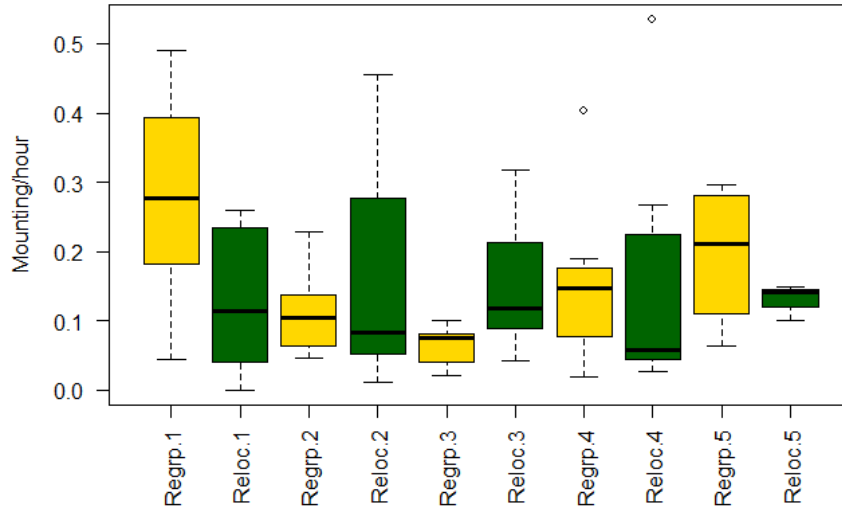


1st round

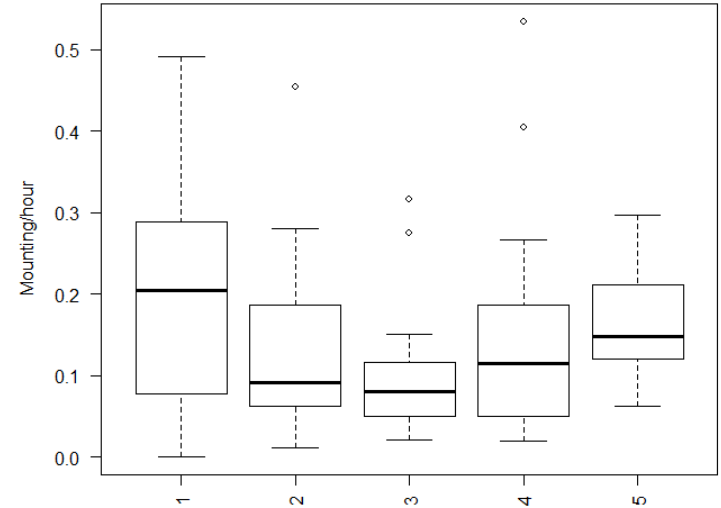


RESULTS - MOUNTING

1st round



1st round



THE WAY FORWARD – ENTIRE MALE PIGS

▶ In relation to animal welfare:



- > No clear recommendations as regards management → regrouping and group size → aggression and mounting
- > Organic system favourable → no detrimental levels of aggression and mounting
- > More research in welfare aspects of mounting behaviour

OTHER ASPECTS

- ▶ Boar taint...

