

# Effect of Mixing Entire Males with Females and Slaughter Strategy on Behaviour, Growth and Boar taint

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Agression and  
sexual behaviour

Boar taint



Animal Welfare / Carcass quality



Herd Management

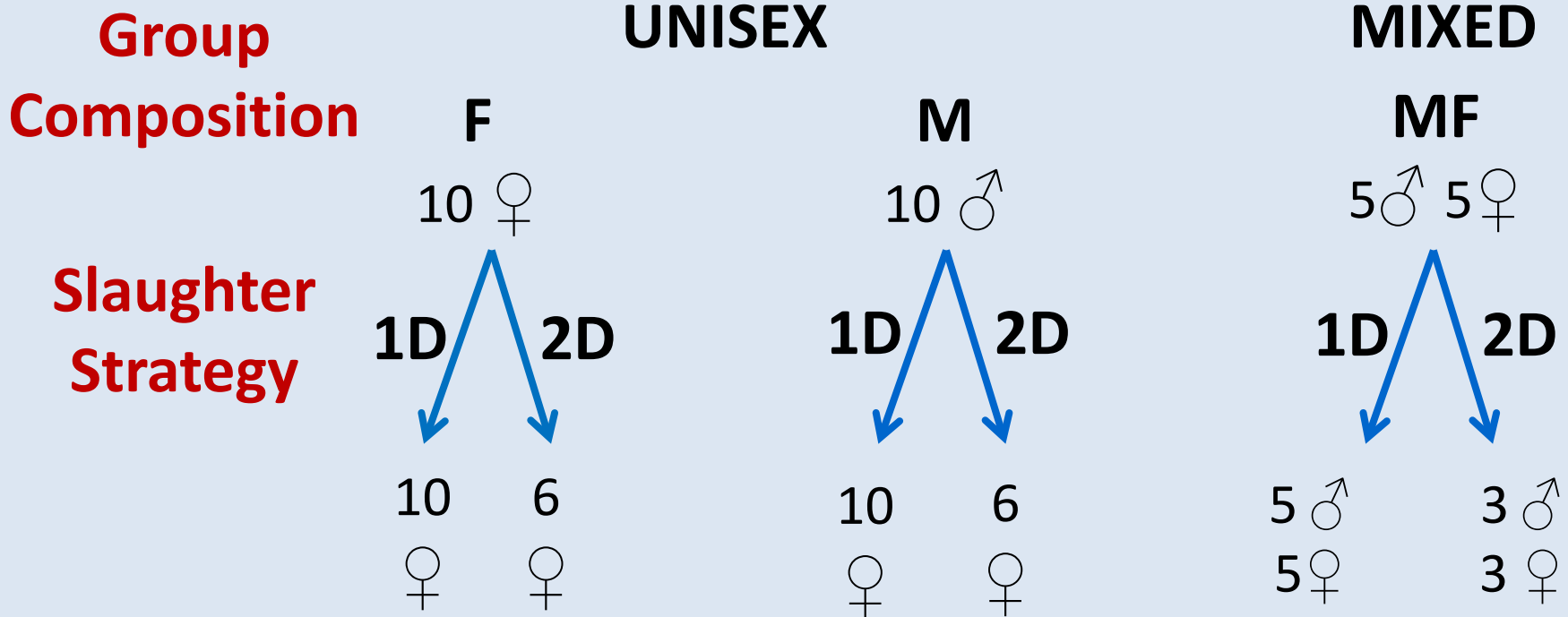


**2 strategies tested**

**Group composition**

**Splitting departures**

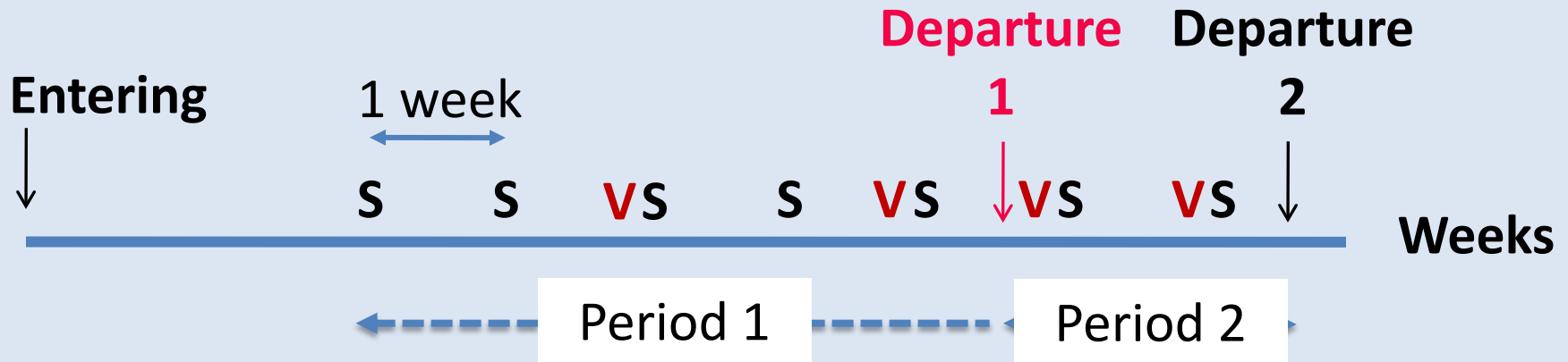
2 batches : 120 males and 120 females  
10 pigs / pen (9 weeks old)



## ■ Animal behaviour

S : Direct observation per scan sampling : length 2.5h, interval 10 min

V : Video observation : 12 h, 4 days



## Main Behaviour

Sexual

Mounting / attempts (sexual or not) : MTM

Social

Nosing/Licking : ano genital area – sheath : SOPM

Positive Behaviour : SOP

Negative Behaviour (agression AG) : SON

Feeding, Drinking, Urination, Defecation

Exploration / Locomotion

Rest

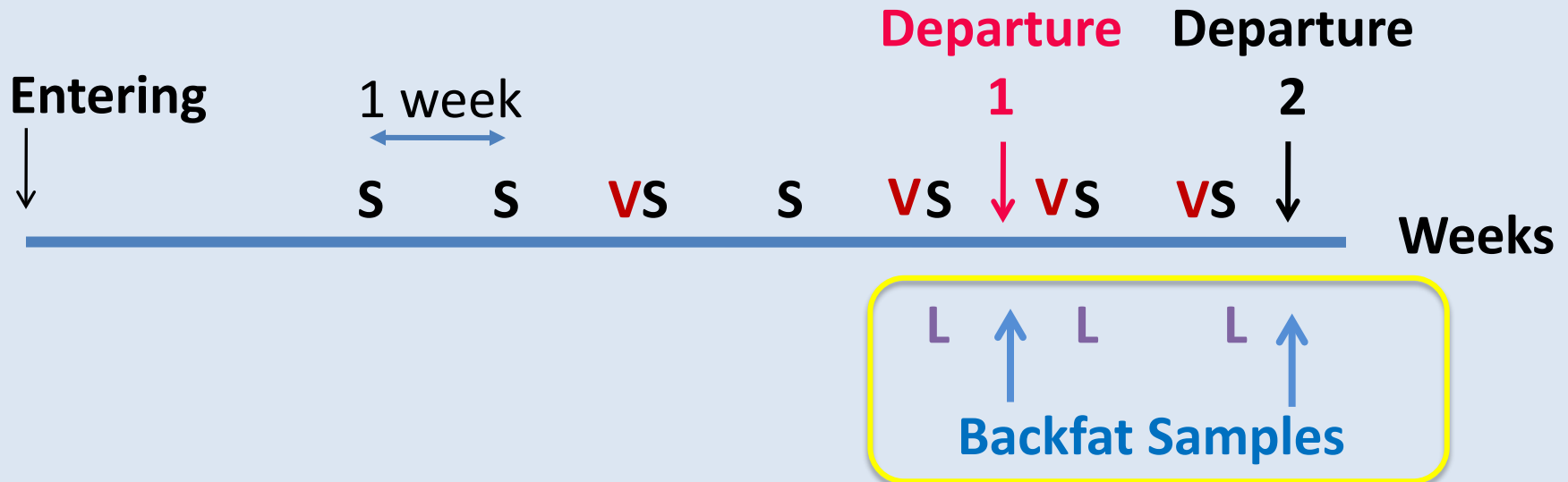
Other

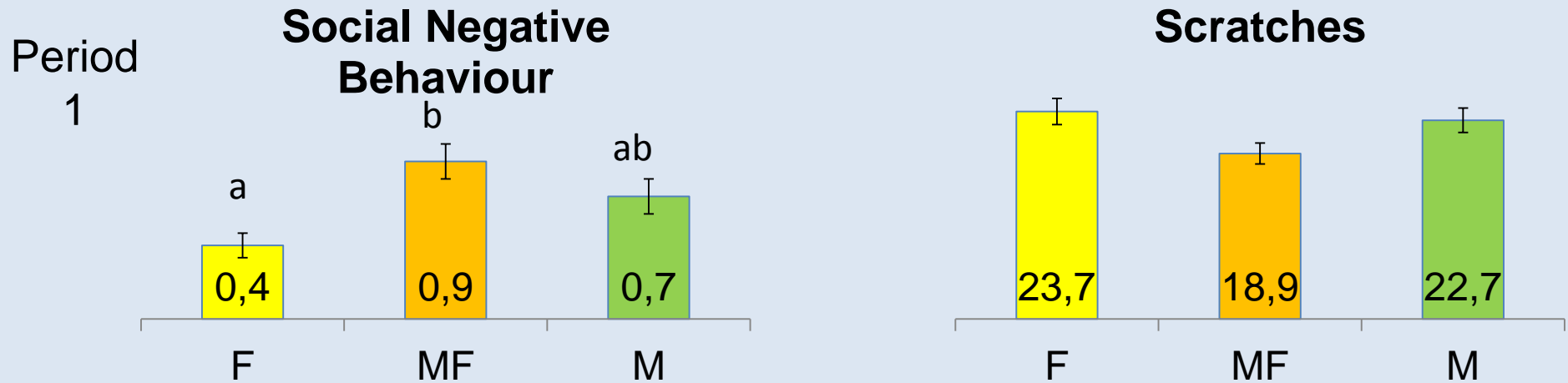
- Animal behaviour (S)

Direct observation per scan sampling :  
length 2.5h, interval 10 min

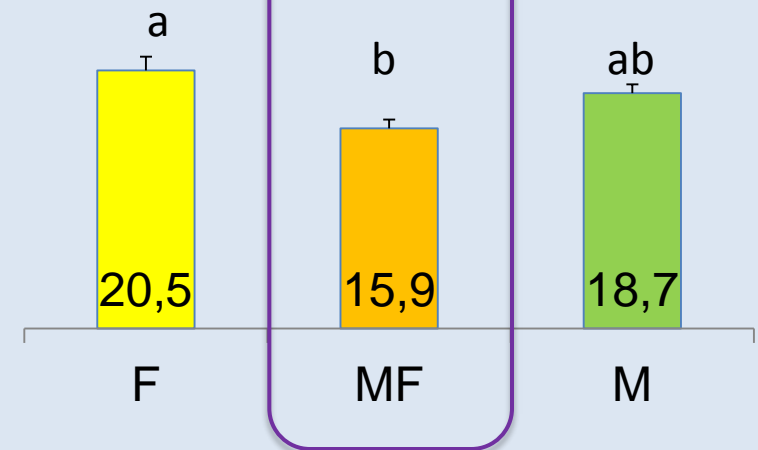
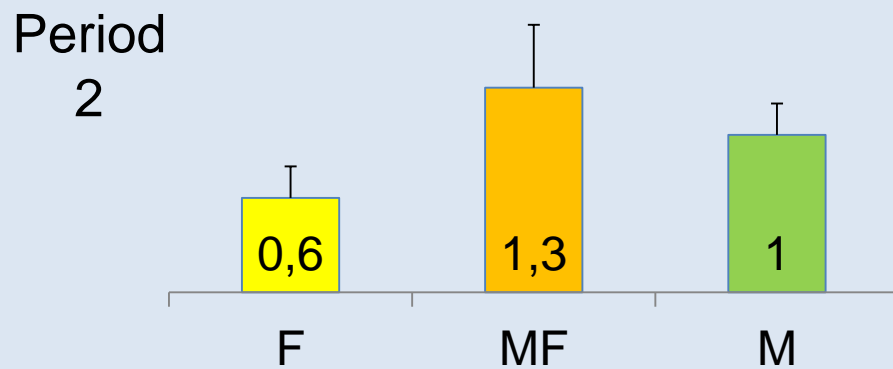
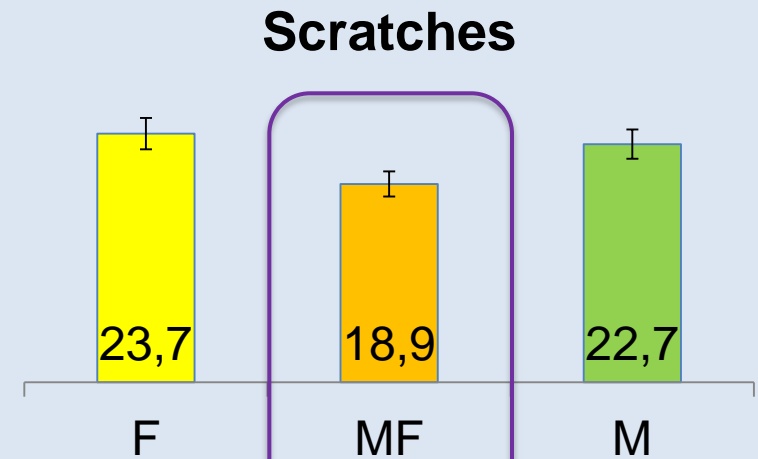
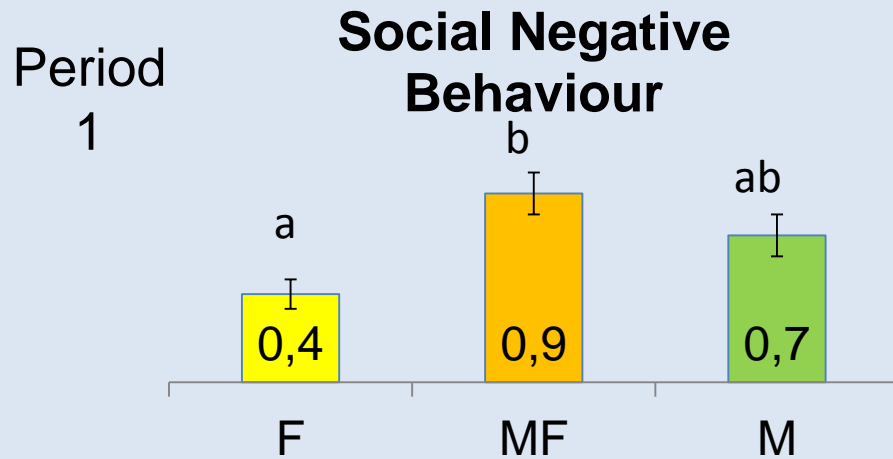
- Lesion scoring – lameness (L)

- Backfat sample : scatol / androstenone





\* % of all behaviour recorded per pen



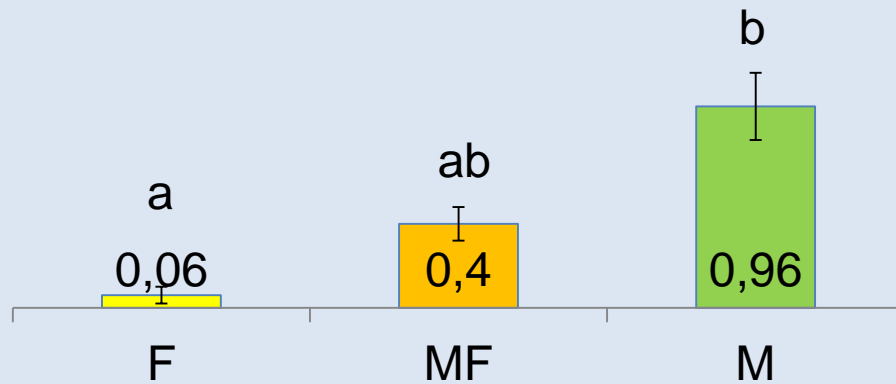
\* % of all behaviour recorded per pen



Period

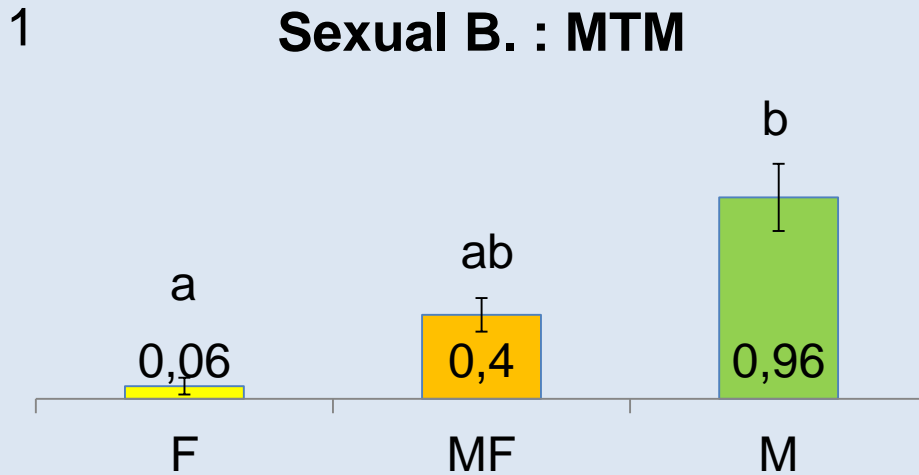
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## Sexual B. : MTM

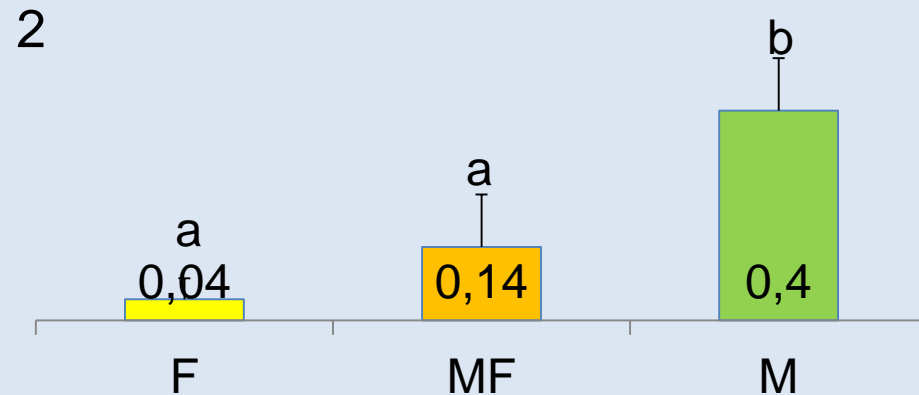


\* % of all behaviour recorded per pen

Period



Period



- More males, more sexual behaviour
- No impact of females on sexual behaviour

\* % of all behaviour recorded per pen

# Who does what ?

	Pig Pairs				KW test
	♂♂	♂♀	♀♂	♀♀	
Negative social B.	18,0 <sup>b</sup>	3,9 <sup>a</sup>	3,8 <sup>a</sup>	2,0 <sup>a</sup>	***
Agression	8,3 <sup>b</sup>	0,6 <sup>a</sup>	0 <sup>a</sup>	0 <sup>a</sup>	***
Positive social B.	55,7 <sup>a</sup>	83,6 <sup>c</sup>	73,2 <sup>b</sup>	94,4 <sup>d</sup>	***
Nosing sheath- ano/genital area	20.6 <sup>c</sup>	3.7 <sup>b</sup>	20,3 <sup>bc</sup>	2,4 <sup>a</sup>	***
Mouting - Attempts	5.6 <sup>b</sup>	9.0 <sup>b</sup>	0 <sup>a</sup>	0.4 <sup>a</sup>	***

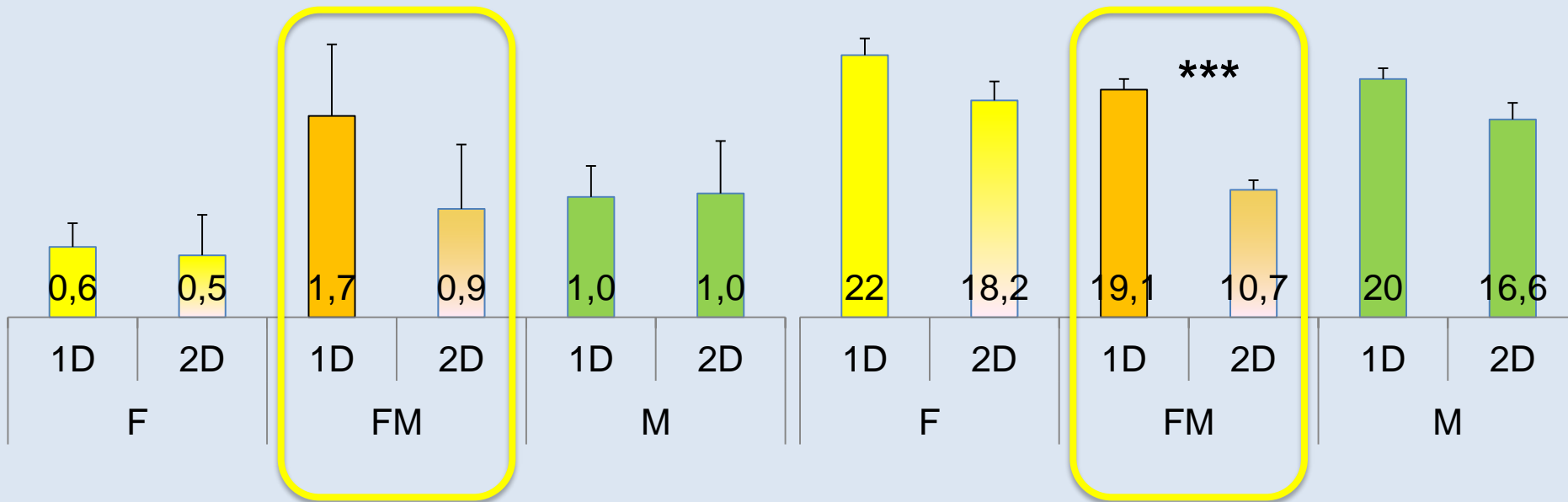
# Departure of the Heaviest Pigs : Impact on Social Behaviour and Lesions



# Departure of the Heaviest Pigs : Impact on Social Behaviour and Lesions

## Social Negative Behaviour

## Scratches

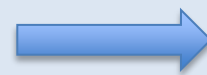
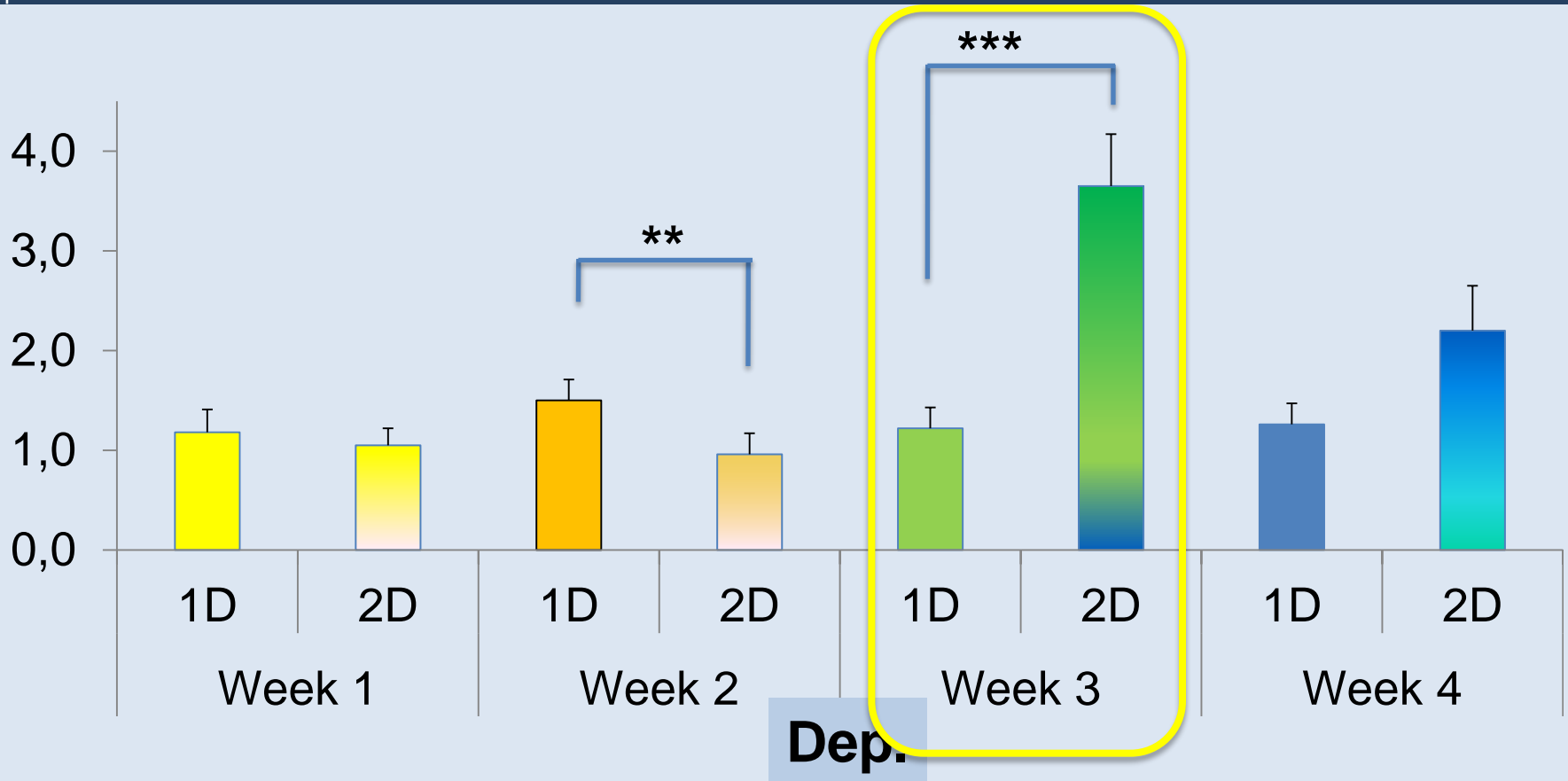


Departure of pigs :

No major effect on negative social behaviour

A decrease in lesion score

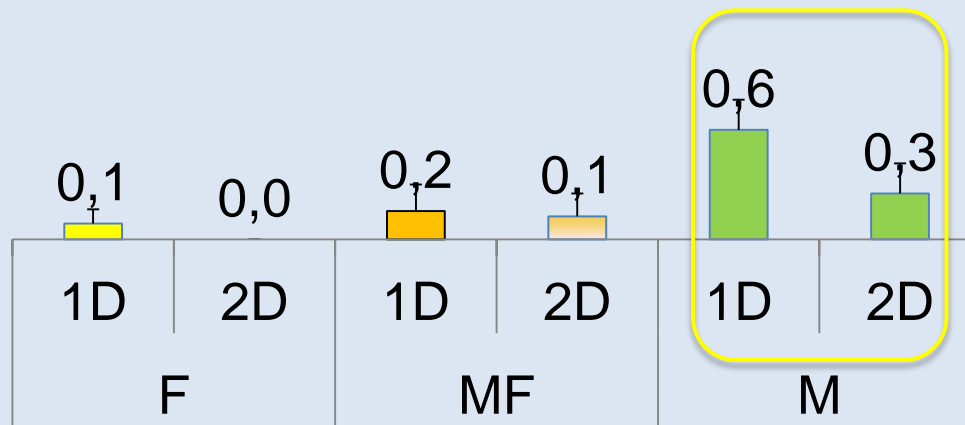
# Evolution in Agressive Behaviour



Short term agressions

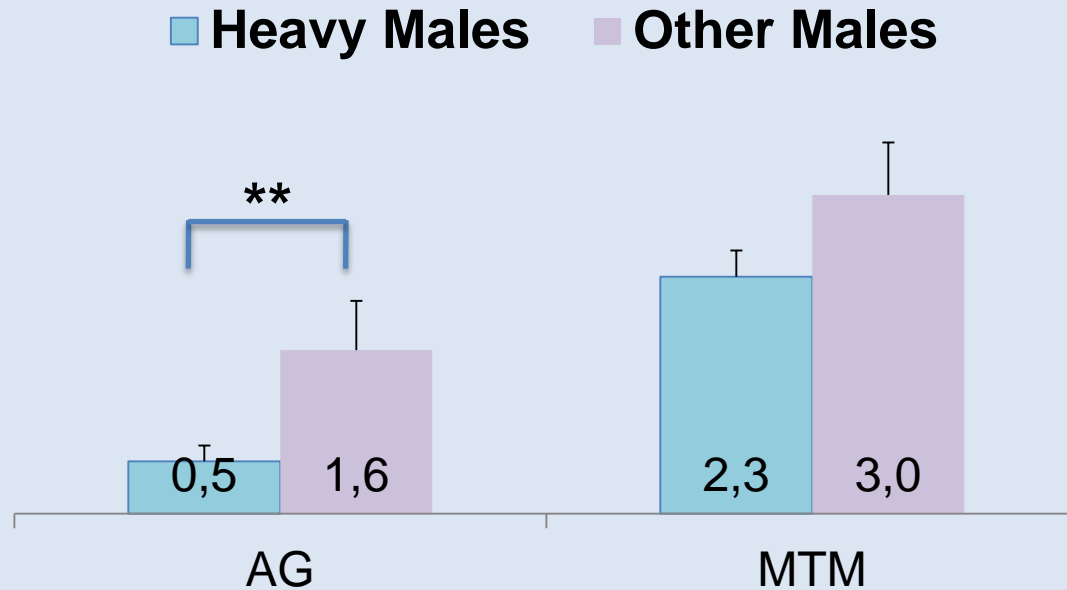
*Mean number of behaviour recorded per pig*

## Sexual Behaviour : MTM



Heavy Pigs : more Mounting Behaviour ?

# Agressive and Sexual Behaviour of the Heaviest Pigs in Period 1



« Heavy Males » : less active (AG, MTM)

*Mean number of behaviour recorded per pig*



# Effect of Mixing Strategy on Growth (ADG, g/d)

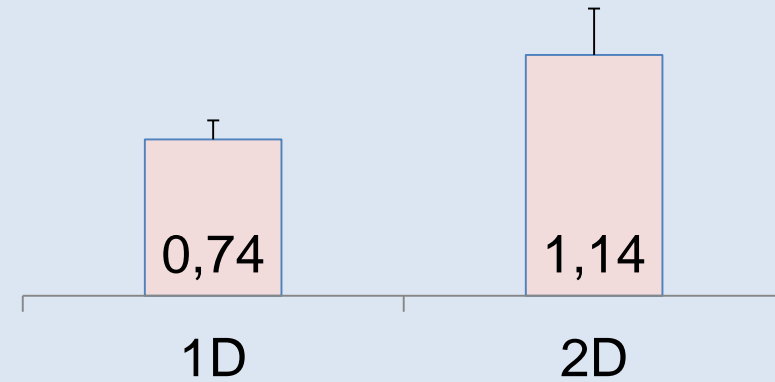
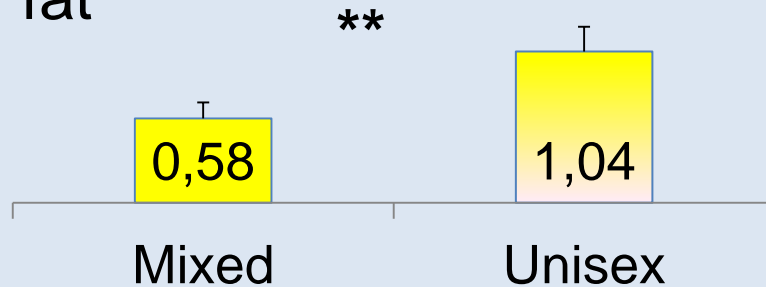
	Unisex		Mixed		
	♂	♀	♂	♀	
Batch 1	971 a	894 bc	948 ab	867 c	S <sup>0.001</sup> D <sup>0.001</sup>
Batch 2	855	820	788	787	G <sup>0.04</sup>

*G : unisex or mixed; S : sex ; D : nb of departures*

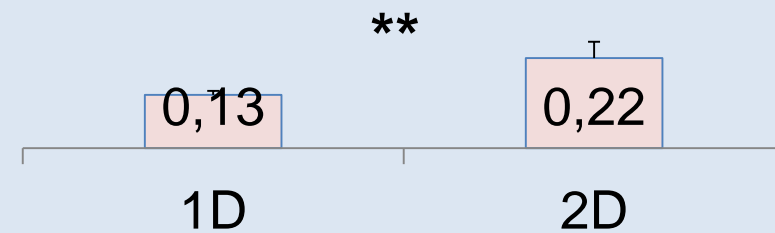
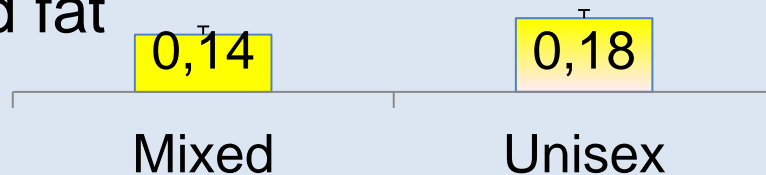
## Mixing strategy

## Slaughter Strategy

Androstenone  
 $\mu\text{g/g}$  liquid fat



Scatol,  
 $\mu\text{g/g}$  liquid fat



*Samples taken at the 2<sup>nd</sup> departure*

## ■ Mixing Males and Females

- No / positive effect on behaviour
- Lesion score, androstenone level: lower
- Growth : lower

## ■ Slaughter Strategy : 2D vs 1D

- A possible effect on scatol level



Adapt management strategy to the current situation in the farm

Thank you for your attention



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