

Practical experiences: Use of local anaesthesia at castration Production of entire males

SEGES Innovation


STØTTET AF
Svineafgiftsfonden



Must join course held by the veterinarian



2019

KURSUSBEVIS 

Har fuldført kursus i

**LOKALBEDØVELSE I FORBINDELSE
MED KASTRATION**



Kurset indeholde:

- Lovgivning om kastration og lokalbedøvelse
- Anatomi og fysiologi
- Udstyr og præparater i forbindelse med lokalbedøvelse
- Metode og teknik – lokalbedøvelse
- Metode og teknik – kastration
- Sikkerhed og hygiejne

Kursusdato for teori: / 20 Kursusdato for praktisk: / 20

Kursusdyrlæge (Teori): Kursusdyrlæge (Praktisk):

Dyrlæge xx.xxxx.xxx Dyrlæge xx.xxxx.xxx
Underskrift og dato Underskrift og dato

- 2 hours theory
 - Mostly pictures and videos
 - No preparation or homework
- Practical training by the vet
 - Local anaesthesia minimum 10 pigs
- Lifelong certificate

We use both local anaesthesia and analgesia



LOCAL ANAESTHESIA



ANALGESIA



Inspiration for work routines using local anaesthesia

- One litter at the time



- More litters
- Local anaesthesia before other routines
- Castration after other routines



Videos here www.svineproduktion.dk

Information at website in several languages

LOCAL ANAESTHESIA BEFORE CASTRATION

The pig must lie still

Max 0.5 ml per testicle

Wait min 5 minutes
before you initiate
the procedure



LIST OF MATERIALS AND TOOLS REMEMBER

- Castration bench
- Needle 25g (0.5 x 16 mm)
- Automatic injector or disposable syringe
- Procamidor Vet. or Pronestestic
- Nitrile gloves
- Container for discarded needles and scalpels
- Container for cut off testicles

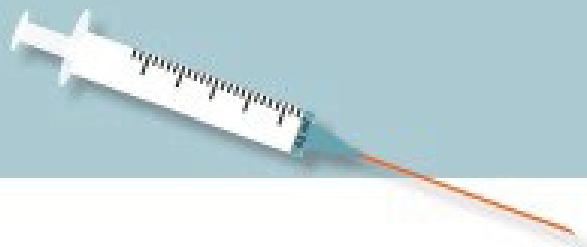
SELF INJECTION

– NOW WHAT?

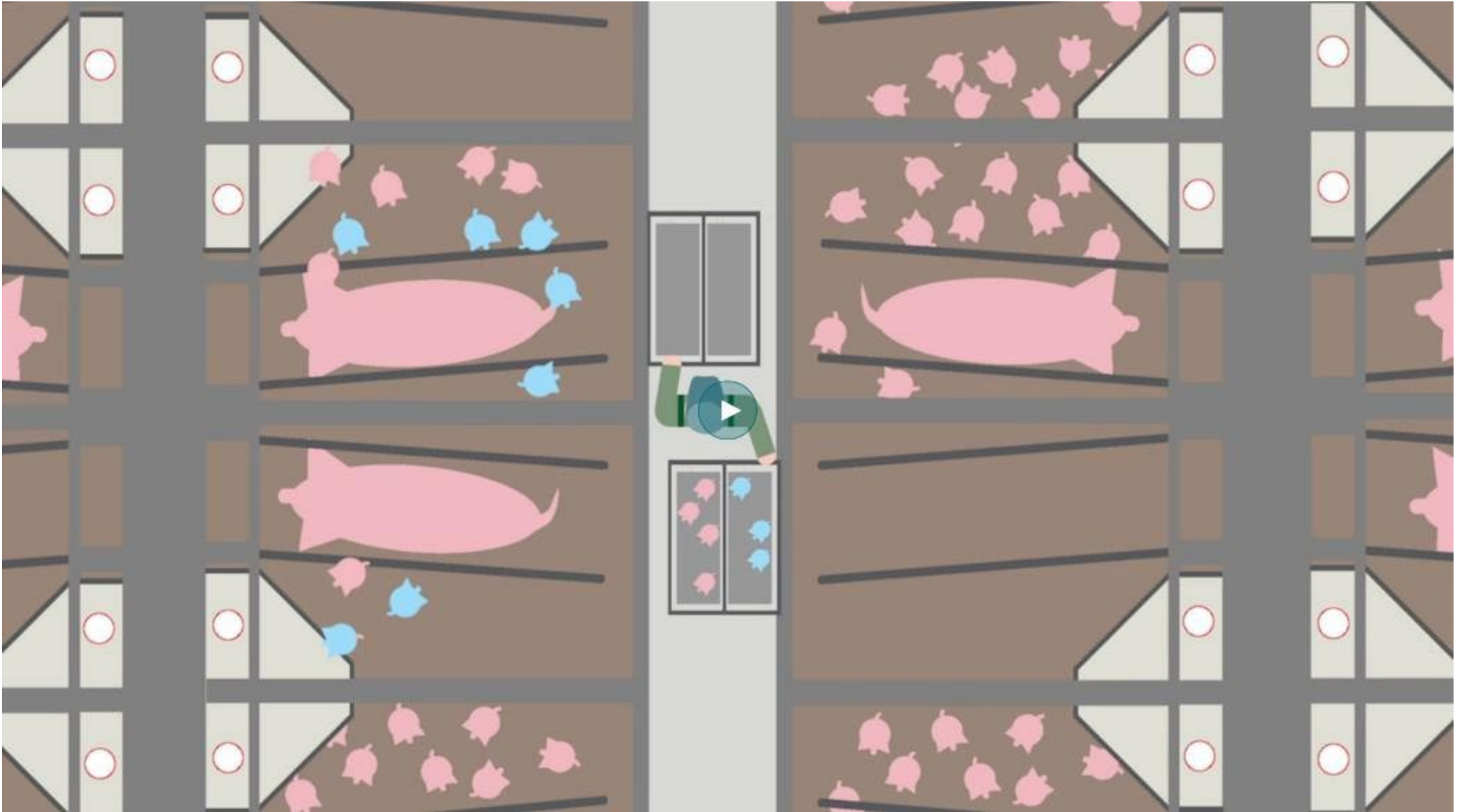
- Rinse with water in case of skin or eye contact
- Seek medical help if skin irritation occurs – or if you self-inject
- Show the package leaflet to your GP

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Information also made as short videos



[Kastration \(svineproduktion.dk\)](http://svineproduktion.dk)

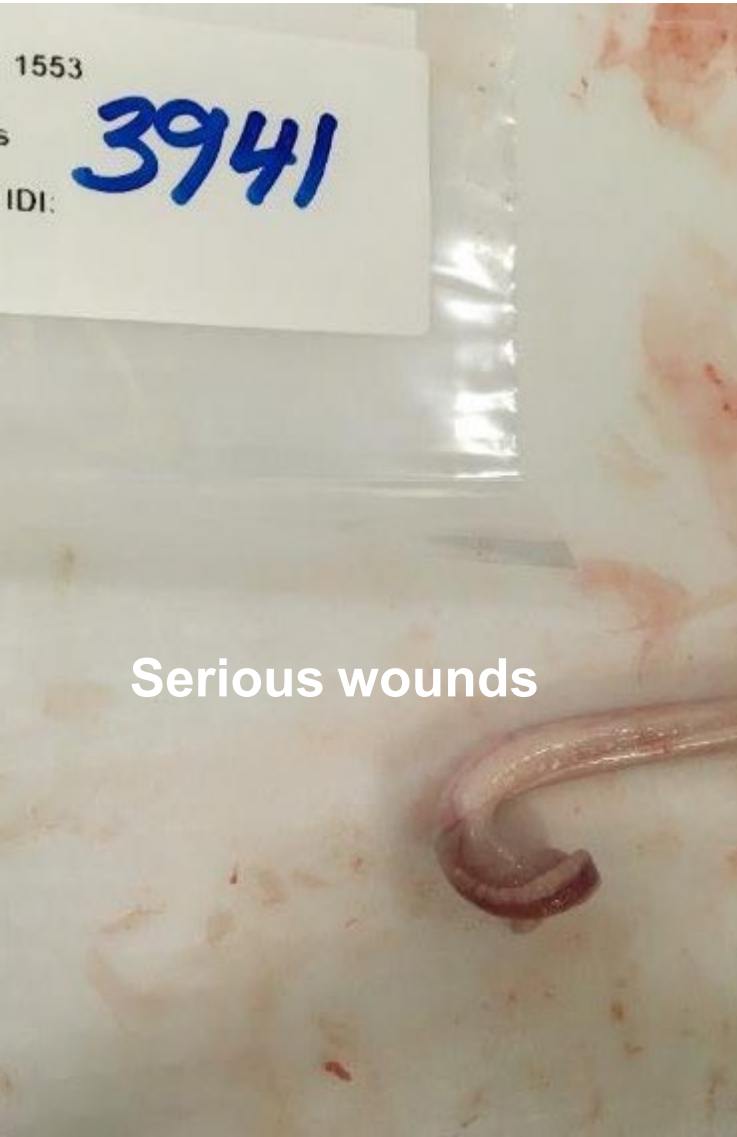
Future - loose housing of lactating sows – focus piglet survival

- Today - an important risk and frequent cause of piglet deaths
 - Hunger
 - Crushing/overlaying by the sow
- Very important – and will become even more so when sows are loose
 - Need to ensure piglet access to udder
 - So piglets cannot be separated from sows for long
 - Important piglets recover quickly
 - Piglets must not be affected by anesthesia for long
 - Therefore local anesthesia and analgesia
- Temporary confinement
 - We recommend sows to be confined until after castration – to reduce risk of crushing
- Zero-confinement
 -

Production of male pigs – welfare

- Male pigs do perform more aggression and sexual behaviours
 - Can cause scratches and leg-injuries
 - Mainly occurs in the final part of the growing period
 - Mounting behaviour can lead to leg injuries and increase in mortality
 - Important to be aware of indicators and reduce competition
 - Experience from three Danish herds
 - Split and mixed pens worked equally well

Penile injuries!



Penile injuries

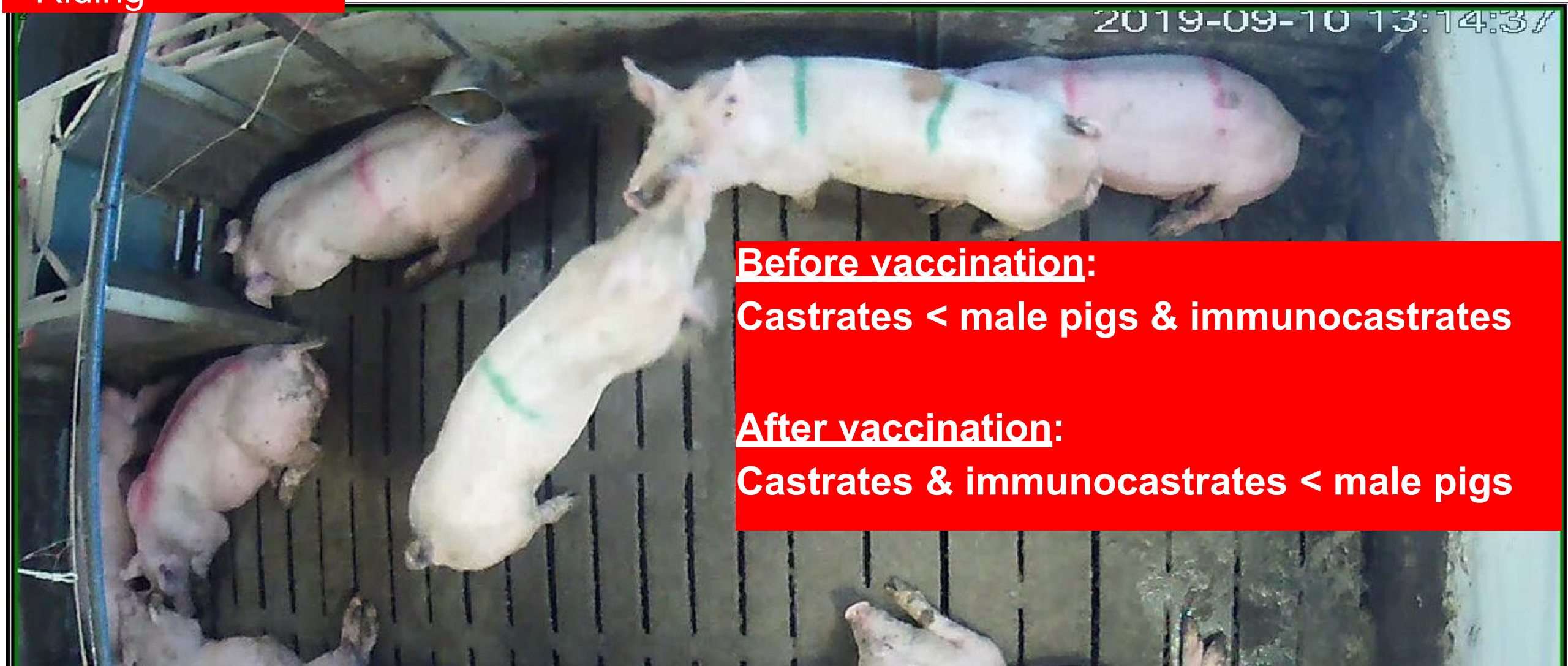
Sex	Castrate	Male pigs	Im - muno - <u>castr</u> ate
<u>No penile</u>	218	197	196
<u>No injuries (%)</u>	87	89	92
Not developed (%)	88	3	2

Behaviour

Aggression

Pushing

Riding



Before vaccination:

Castrates < male pigs & immunocastrates

After vaccination:

Castrates & immunocastrates < male pigs

Results productivity: castrates, male pigs and immunocastrates

DanBred DLY	Castrates	Male pigs	Immuno-castrates
g/day	1196 ^{ab}	1212 ^a	1180 ^b
FEsv/day	3.30 ^a	2.92 ^b	3.07 ^c
FEsv/kg	2.76 ^a	2.41 ^b	2.61 ^c

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Lean meat %	60.1 ^a	63.5 ^b	62.6 ^c
Slaughter loss	1.33 ^a	1.36 ^b	1.36 ^b

Economy – basis DKK/pig

Insertion & carcass weight (30-89 kg)
Price reduction male pigs DKK 0.31/kg
Rejected DKK 4.6/kg (April 2021)
Feed price DKK/1.57/FEsv (5 year)
Pork price (5 year)

Castration costs:
Analgesia DKK 0.72
Local anaesthesia DKK 2.93
Salary DKK 2.50
Lower mortality DKK 2.00
Total DKK 8.15

Improvac costs:
Salary: DKK 1.50
Vaccine: DKK 24.00

Economy

	Castrates	Male pigs	Improvac
Castration DKK/pig	-8.15	-	-
FEsv/kg	0	-0.35	-0.15
Gain g/day	0	+16	-16
Lean meat%	0	+3.4	+2.5
Economy, DKK/pig	-	59.1	8.2
MAX rejected	-	14.4%	1.6%

Without rejection

Without reduction of carcass value

Castration

- Local anaesthesia and analgesia **MUST** be used
 - Implement good work routines
 - Do not castrate before the anaesthesia has had time to work - this also makes castration easier!
 - Change scalpels and needles for each litter
 - Use nitril gloves

Producing male pigs

- Sorting boar semen does not work
- Sorting fathers (D boars) reduces boar taint – but not enough!
- Immunocastration
 - Reduces boar taint markedly
 - But does not remove boar taint
 - Reduces aggressive behaviour
 - Economy is equal to producing castrates
 - BUT OUR MAIN MARKETS WILL NOT BUY THEM.