

# WRC Round Table

## Slaughter condemnations

focus on abscesses

Karel de Greef – Wageningen Livestock Research - NL  
World Rabbit Congress 4-11-2021



# Round Table – free format!

## 1) **Share the problem** (all, share around table)

- Who's problem?
- Magnitude (percentage)
- Economy
- Other losses / disadvantages

■ Exploration in NL 2019 Karel, **optional (bit lengthy) info**

■ Experiences elsewhere (all, share around the table)

## 2) **Understand the problem: Causes?**

## 3) **Solutions for the problem: risk factors & tools?**

■ Wrap up

Afterwards: room for other **slaughter house matters**



# 1) Share the problem

- What is the problem? Condemnations.
  - For what causes?
- Who has a problem?
- How large is the problem?
- Further: focus on **subcutaneous abscesses**



# Exploration NL 2019 (optional info, 15pp, 10 minutes)



# Explorative study in NL-B 2019

- Interviews rabbit farmers
- Interviews slaughter house officials
- Visits slaughter houses + talk inspection officers
- Harry Arts
- Literature
- Data-analysis Lonki / Den Demer u.a.
- Farmers workshop

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# Conclusions from the explorative study:

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**We don't know.....**

But some info is relevant to draw lessons

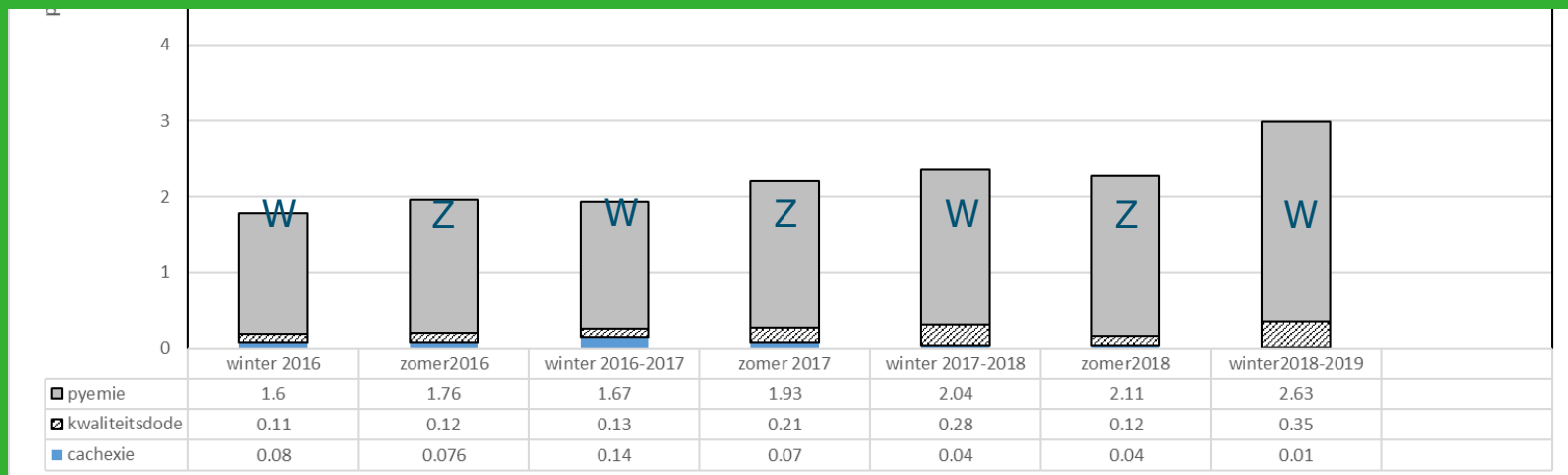
# Data of rabbit farmers (through Lonki & Den Demer)

## Data exploration Jorine

- Classification of reason for condemnation
- Seazonal patters (summer/winter)
- Production system (1/2/3/6wk)
- Parks vs welfare cages
- ...

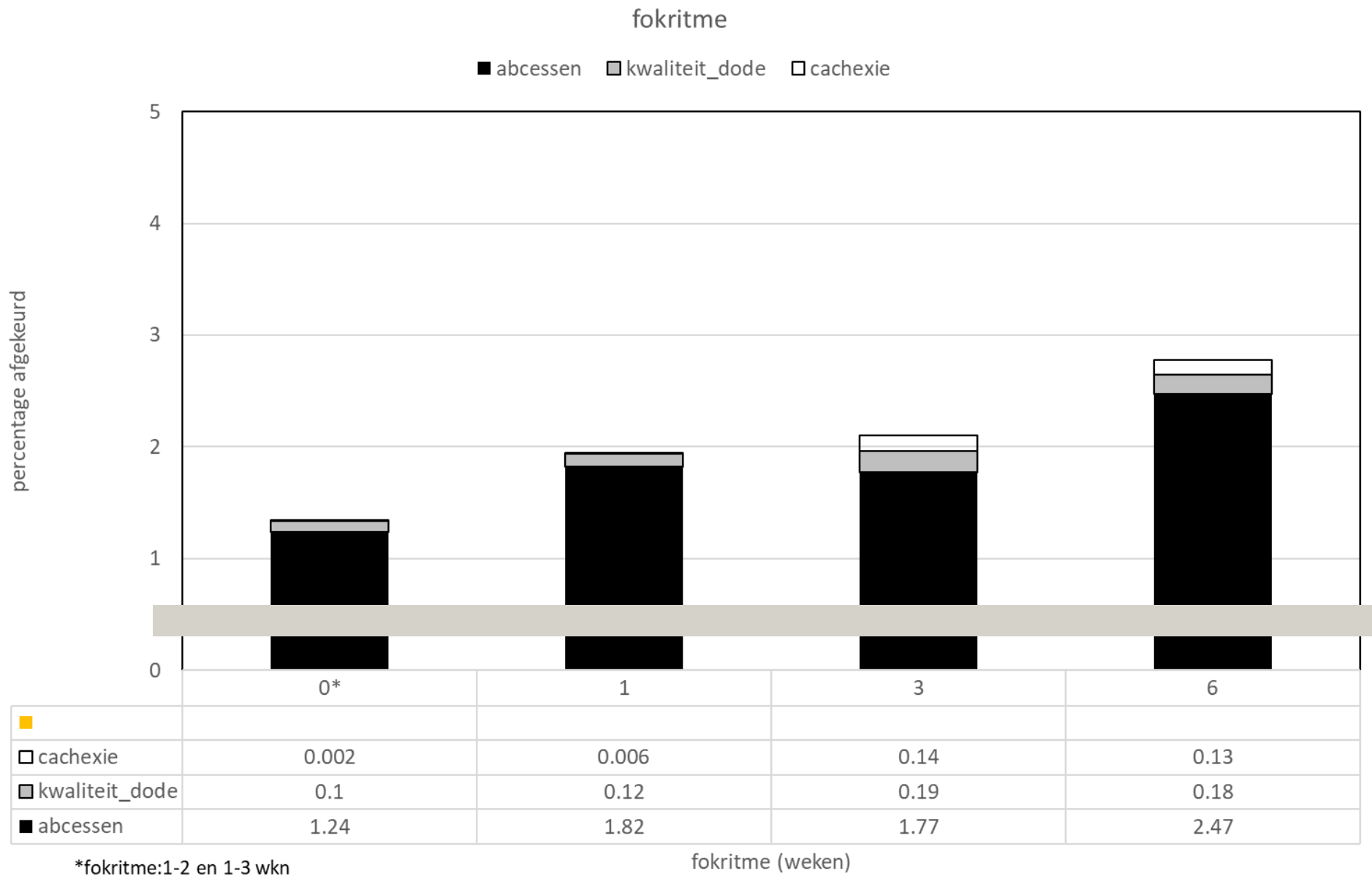
'Big Data exploration à la VION'

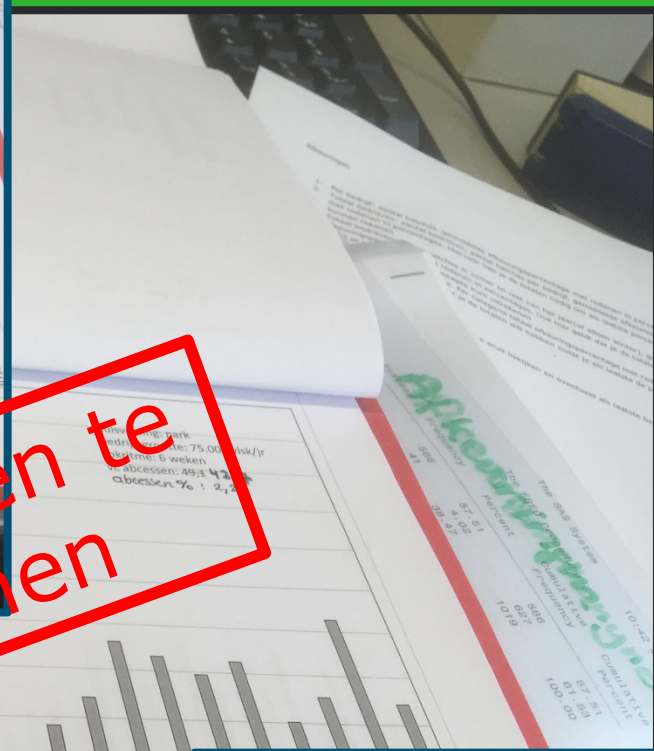
# Summer vs Winter





# Production system





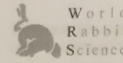
Geen onderscheid

Year	Deaths
201604	2.1
201610	1.9
201616	2.0
201622	1.7
201627	1.1
201627	1.1
201634	1.3
201640	1.8
201645	1.3
201651	1.3
201705	1.6
201712	2.3
201718	3.1
201724	2.8
201730	1.4
201736	1.9
201742	2.4
201748	3.0

# Slaughter house visit & talks

- Classification / disapproval system varies between slaughter houses
- Shared problem: considerable costs in the slaughter house too - shared problem
- Main observation: large abscesses on back and below chin  
Many small abscesses  
but also clear 'mayonaise-rabbits'

## ■ Ferreira, 2014



### THE IMPORTANCE OF SUBCUTANEOUS ABSCESS INFECTION BY *PASTEURELLA* SPP. AND *STAPHYLOCOCCUS AUREUS* AS A CAUSE OF MEAT CONDEMNATION IN SLAUGHTERED COMMERCIAL RABBITS

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**Abstract:** Subcutaneous abscesses are lesions frequently reported in commercial rabbits. Both at farm and slaughterhouse level, these lesions are responsible for economic losses and a potential decrease in meat quality. The present study was devised to identify the main causes of meat condemnation in slaughtered commercial rabbits and assess the importance of abscess lesions in this domain. For these purposes, 281423 rabbits were evaluated during meat inspection at the slaughterhouse. The results achieved showed that subcutaneous abscesses were the major cause of condemnation, being responsible for the rejection of 1355 (0.48%) rabbit carcasses. The main affected area was the hind limbs (31.37%), followed by the cervical area (23.10%). Microbiological analyses of 27 abscess samples indicated *Pasteurella* spp. as the bacteria mostly isolated (59.3%), followed by *Staphylococcus aureus* (25.9%). These results enable us to advise the industry on the significance of abscesses as an important cause of economic losses, due to meat condemnation during *post mortem* inspection, and highlight the importance of implementing monitoring plans as a way to control this pathological problem.

**Key Words:** abscess, rabbit, meat condemnation, *S. aureus*, *Pasteurella* spp.

#### INTRODUCTION

Consumption of rabbit meat has been encouraged by the medical community for its nutritional and dietary characteristics (Hernández, 2012). Portugal is responsible for about 3.5% of European production and 1.8% of world production, corresponding to the ninth place in the world ranking (EFSA, 2005; Xiccato e Trocino, 2007). In 2010, 6 million rabbits were slaughtered in Portugal and the consumption of rabbit meat was estimated to be 1.7 kg per person per year (INE, 2010). The consumers' increasing interest in this meat leads to increased attention to its quality, hygiene and safety. In this context, *post mortem* inspection at the slaughterhouse is a key tool to ensure the safety of the meat and the trust of consumers. Additionally, understanding and determining the causes of commercial rabbit meat condemnation during meat inspection is of extreme importance in order to control and effectively mitigate the etiological factors at the production level (Garcia, 2003).

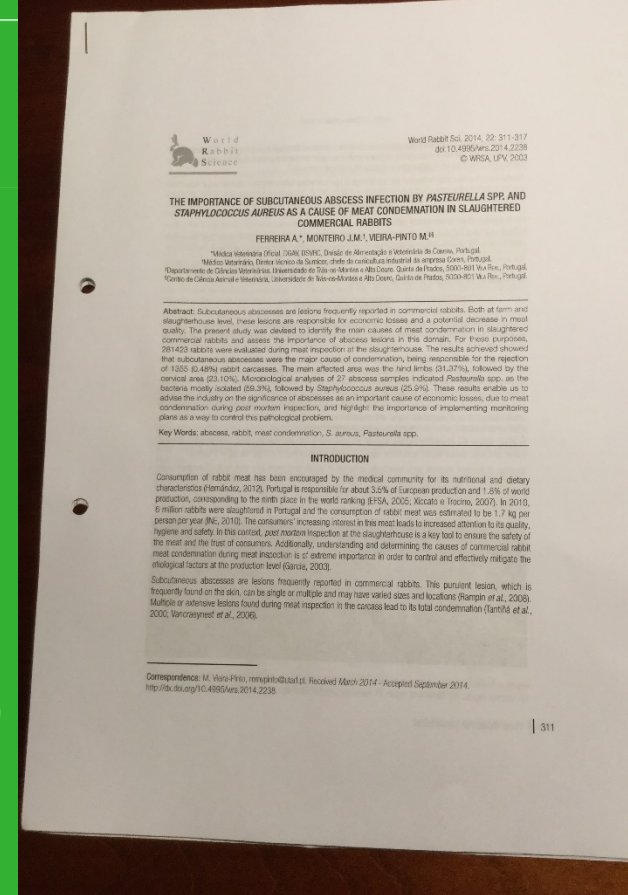
Subcutaneous abscesses are lesions frequently reported in commercial rabbits. This purulent lesion, which is frequently found on the skin, can be single or multiple and may have varied sizes and locations (Rampin *et al.*, 2008). Multiple or extensive lesions found during meat inspection in the carcass lead to its total condemnation (Tantiñá *et al.*, 2000; Vancraeynest *et al.*, 2006).

Correspondence: M. Vieira-Pinto, mmvpinto@utad.pt. Received March 2014 - Accepted September 2014.  
<http://dx.doi.org/10.4995/wrs.2014.2238>



# Literature (only 1 topper!)

- Ferreira, 2014
  - 280k rabbits
  - Subcutaneous abscesses (0.48%)
    - 30% hind limbs
    - 25% cervical area (ventral)
  - 27 lab monsters
    - 60% *Pasteurella* spp
    - 26% *Staph. Aureus*
  - Relevant economic loss



# Q to farmers in a work shop

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When forced:

- What can you do (better) to have less condemnations?

In an ideal situation:

- How would you raise a rabbit 'abcess-free'?

# Rabbit farmers views

Diverse:

- Hygiene
- Ventilation
- Stocking density
- AB-use
- Interactie among rabbits
- Parks
- ....

Please raise hand if you know....

# Lessons

- Considerable economic & labour & material loss
- Condemnations: especially abcesses
- Systematic variation between slaughter houses & farms
- Grillig verloop in de tijd / tussen rondes
- No clear 'main factor'
- Trend is upwards. More than 'park effect'

No grip on the problem





## 2) Understand the problem: identification of causes

- What are causes of subcutaneous abscesses



### 3) Solutions for the problem: risk factors & tools?

- How could we reduce abcesses?



# Wrap up

- 1) Shared the shared problem**
- 2) Understand the problem: Causes?**
- 3) Solutions for the problem: Risk factors & Tools?**

Initiatives needed or available elsewhere?



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# Anders verwoord

## ■ Te veel afkeuringen?

- Het ligt niet aan de konijnen,
- het ligt niet aan de keurmeester,
- het ligt niet aan het voer,
- Het ligt niet aan de dierenarts of AB-reductie
- ....

**Het ligt aan jou!**

*Ga desnoods een keer mee met je konijnen*



# Mijn persoonlijke visie

## ■ Klassieke benadering

- Het is een aandoening van een gebruikelijke stalgenoot (bacterie)
- Die hoort op de huid, niet er onder
  - kans er in te komen (porte d'entrée)
  - +
  - kans daar zich te handhaven en groeien

Blijkbaar hebben we die factoren niet op orde

