



Testing the effectiveness of cleaning and disinfection procedure in livestock transport trucks: a pilot study

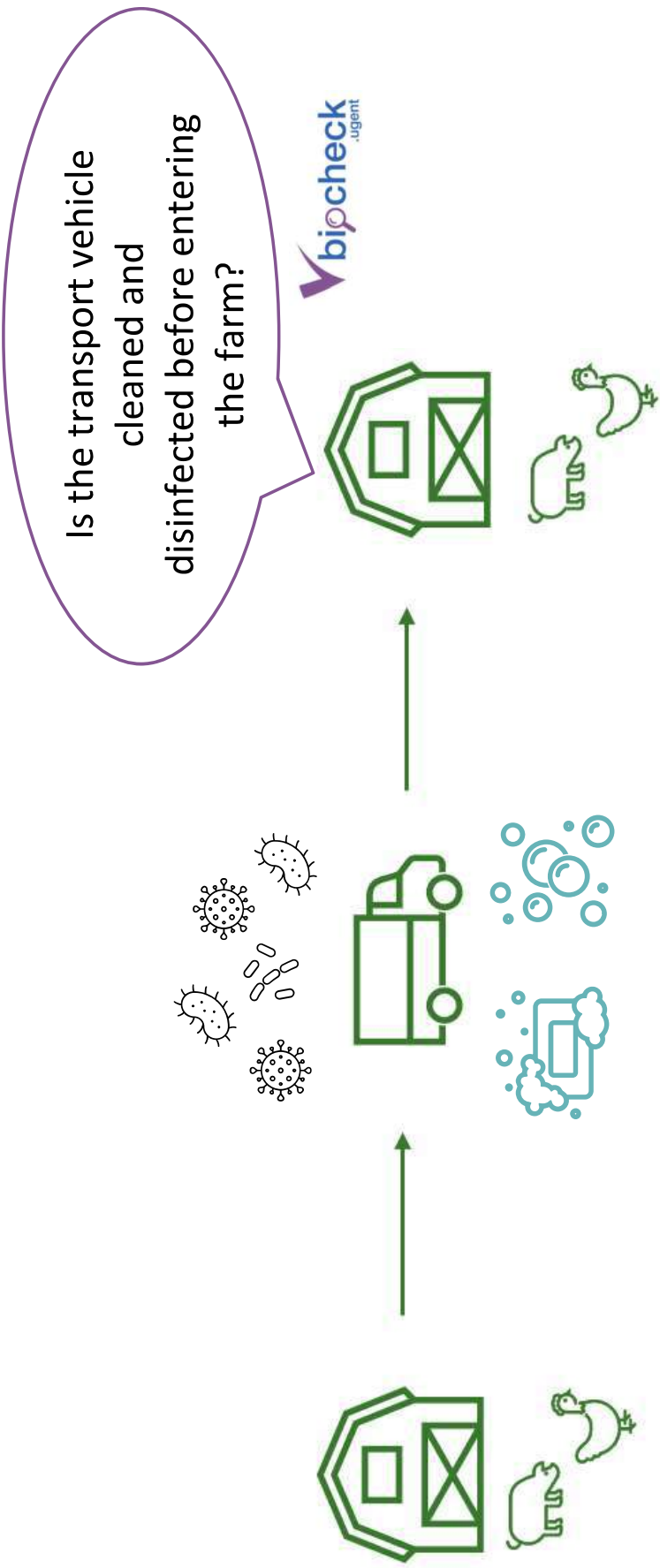
Courtens L., Biebaut E., Chantziaras I., Van Immerseel F., Dewulf J.



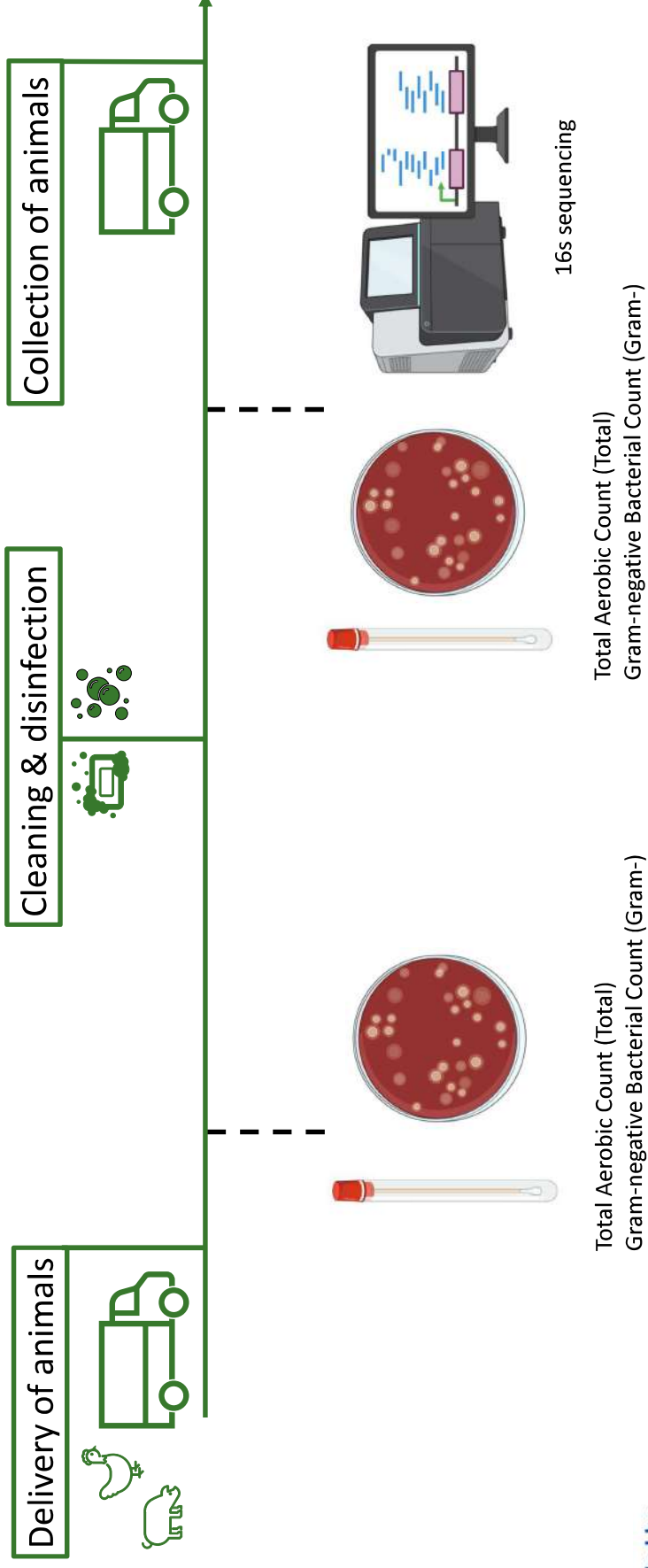
Funded by
the European Union

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or REA. Neither the European Union nor the granting authority can be held responsible for them.

Background and objectives



Protocol



Sample locations

➤ Cabin

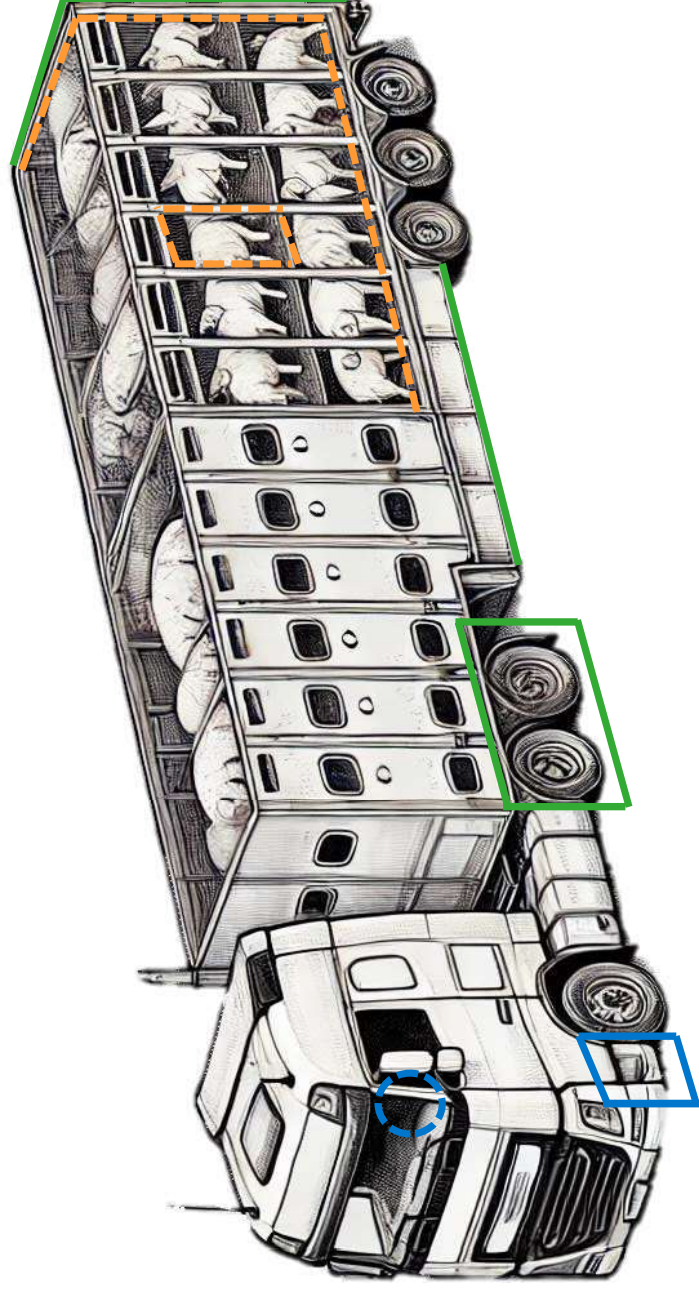
- Cabin
- Stair to cabin

➤ Outside of truck

- Wheel
- Underside
- Loading bridge (outside)

➤ Animal contact locations

- Walls
- Floor
- Loading bridge (inside)



Sample circumstances

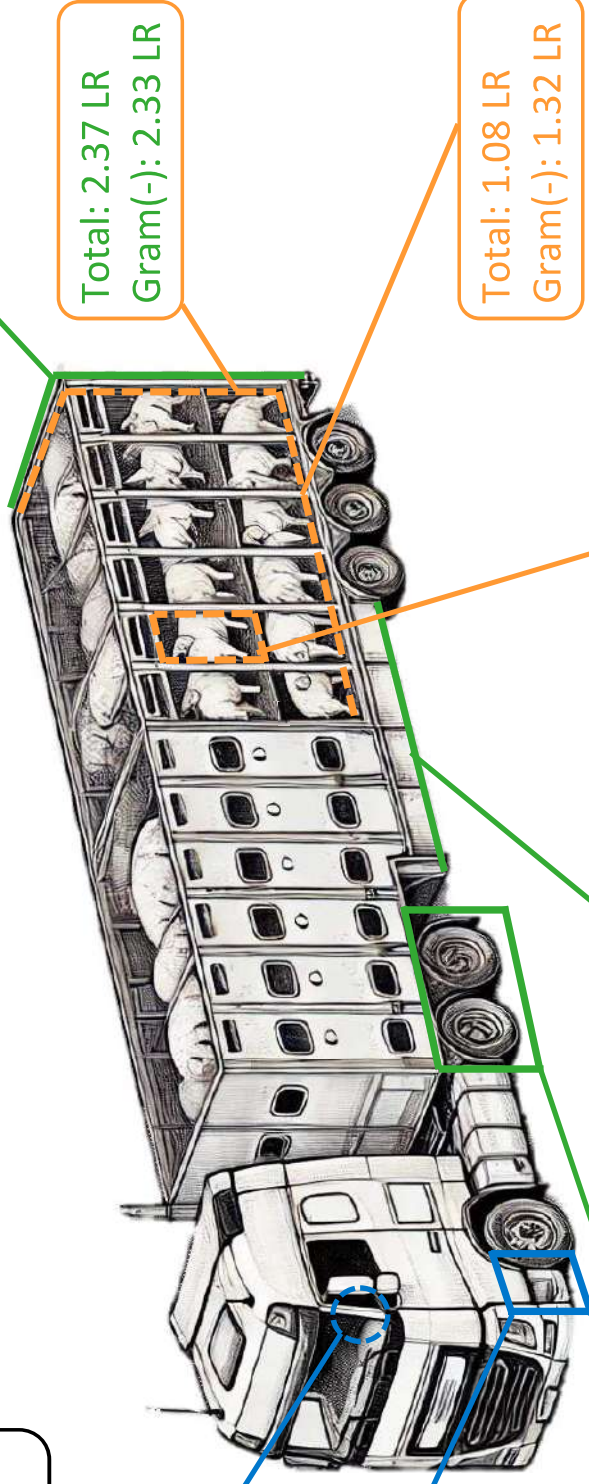
	Pig Slaughterhouse	Poultry Slaughterhouse
Temperature	10.8°C	4.7°C
Equipment	8°C Water hose (low pressure) Disinfection bow Disinfection hose Wheel disinfection bath	6.2°C Cleaning hose (adjustable pressure) Disinfection hose (adjustable pressure)
Cleaning detergent	No detergent	Cleanox (Pype)
Disinfection product	Virocid 0.5% (Cid lines)	Virocid (0.5%) (Cid lines)

Cleaning and disinfection procedure



Effectiveness of cleanings and disinfection of pig trucks (n=5) 🐷

☹️ < 0 log reduction (LR): noncompliant
😐 0-2 LR: suboptimal
😊 > 2 LR: compliant



Total: -0.18 LR
Gram(-): 0.07 LR

Total: -0.19 LR
Gram(-): -0.49 LR

Total: 1.14 LR
Gram(-): 0.67 LR

Total: 0.19 LR
Gram(-): 0.14 LR

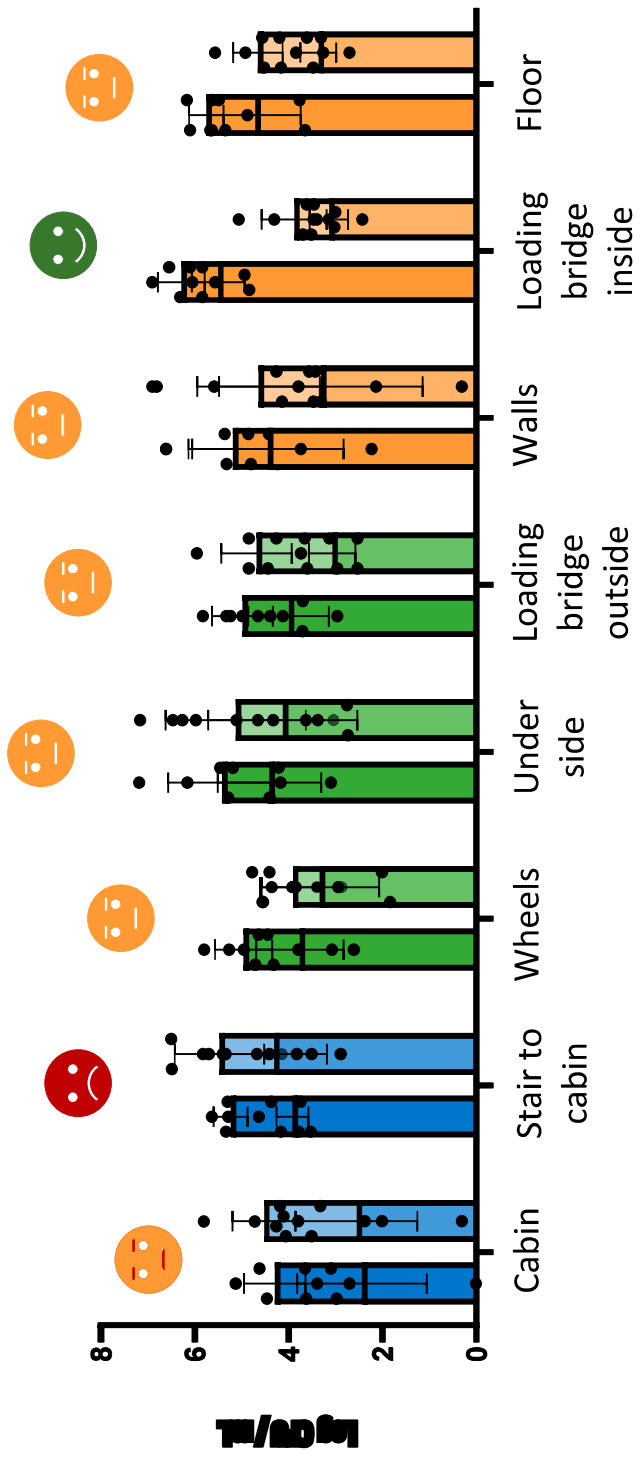
Total: 0.47 LR
Gram(-): 1.13 LR

Total: 1.08 LR
Gram(-): 1.32 LR

Total: 2.37 LR
Gram(-): 2.33 LR

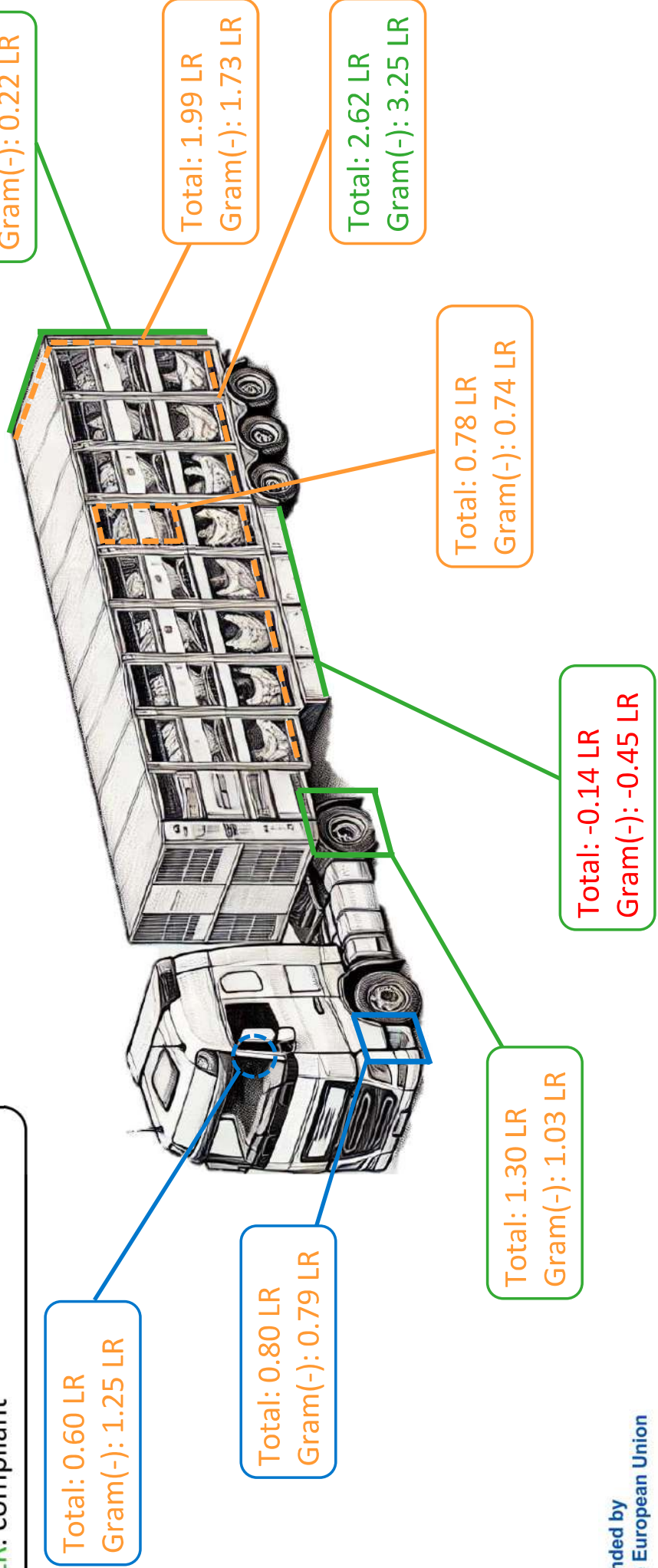
Total: 0.55 LR
Gram(-): 1.05 LR

Effectiveness of cleaning and disinfection of pig trucks (n=5)

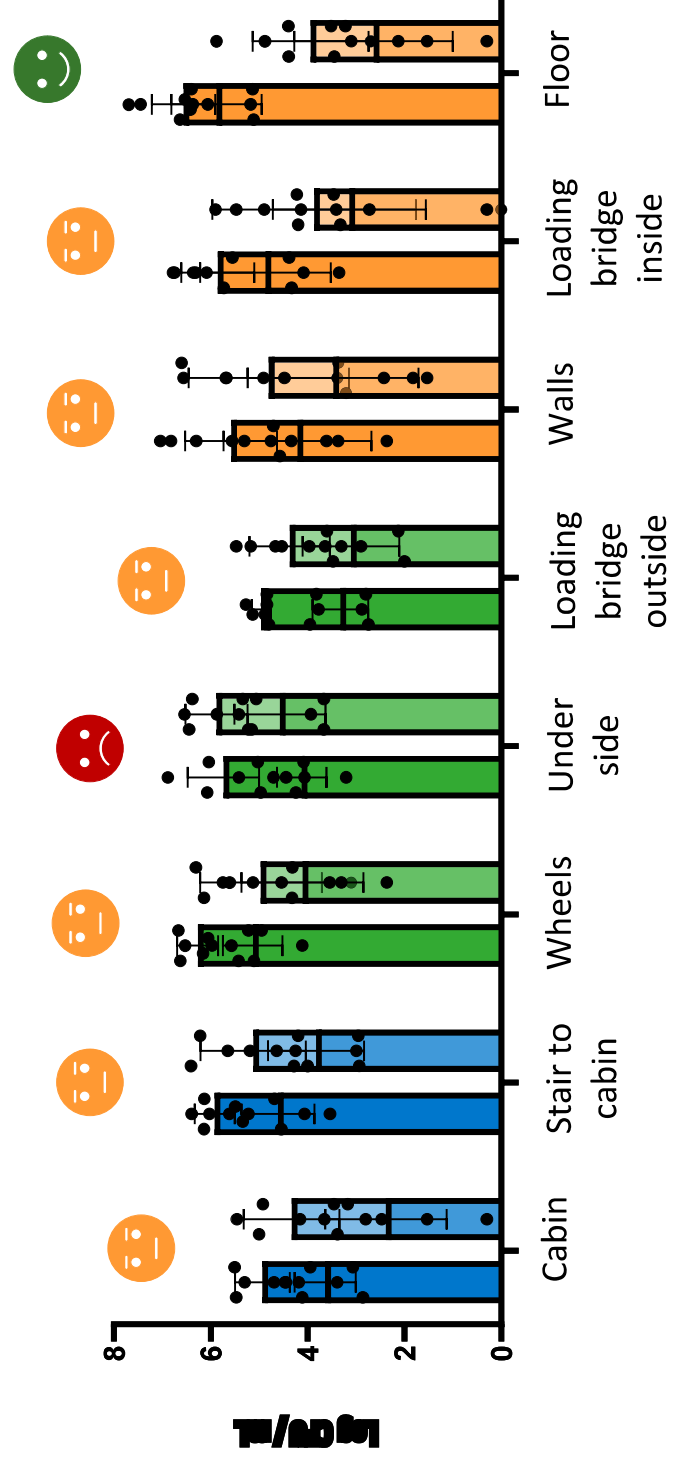


Effectiveness of cleaning and disinfection of poultry trucks (n=6) 🐔

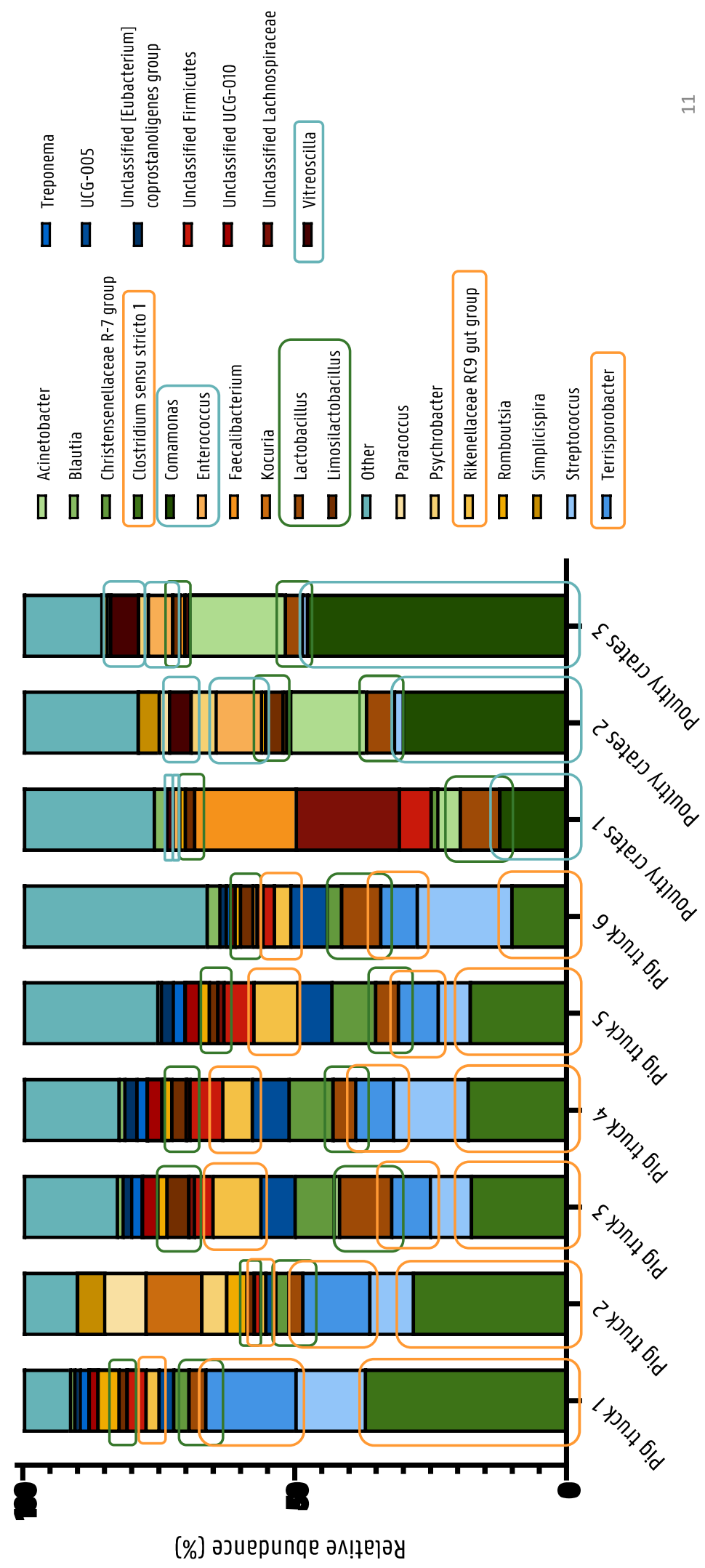
☹️ < 0 log reduction (LR): noncompliant
😐 0-2 LR: suboptimal
😊 >2 LR: compliant



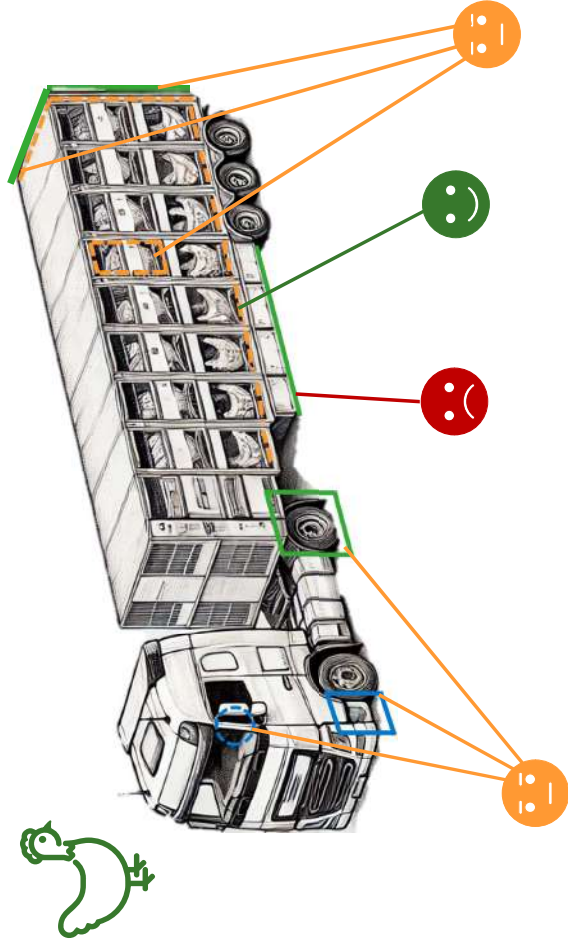
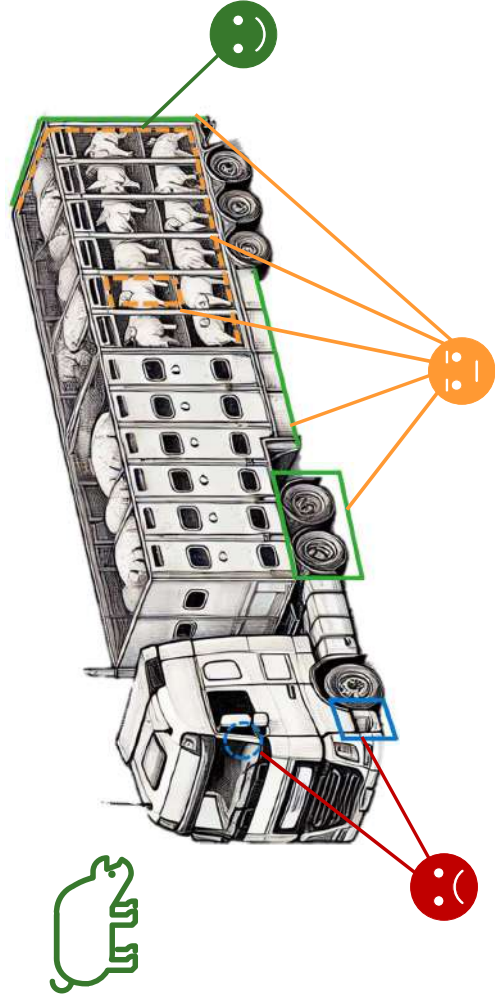
Effectiveness of cleaning and disinfection of poultry trucks (n=6)



Identification of bacteria after cleaning and disinfection: at genus level



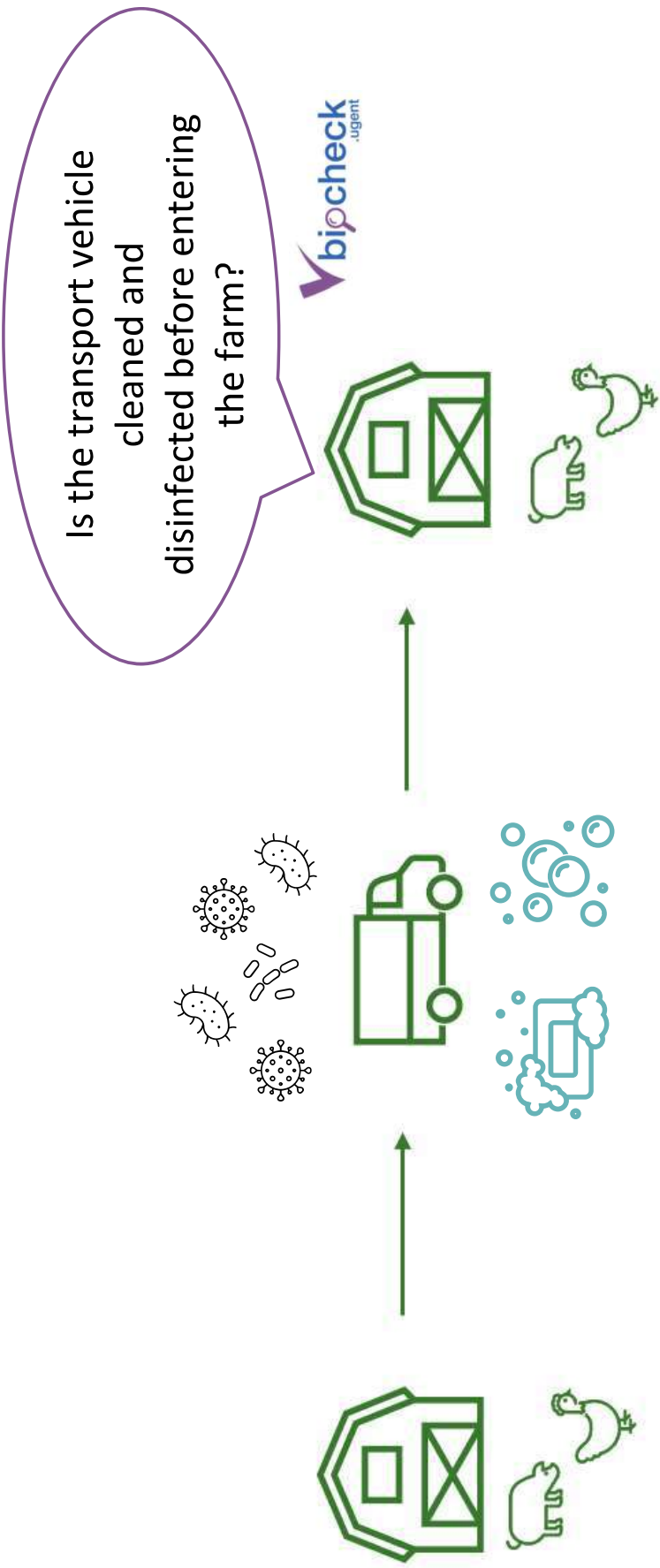
Conclusion



➤ Insufficient C&D

➤ Fecal contamination upon leaving the slaughterhouse!

Conclusion



BioSecure

HORIZON Europe FARM2FORK project

Laura Courtens



Laura.courtens@ugent.be



Faculty of Veterinary Medicine, Ghent University
Department of Internal Medicine, Reproduction and Population
Medicine

Veterinary Epidemiology Unit
Salisburylaan 133, B-9820 Merelbeke



<https://biosecure.eu/>



Funded by the
European Union



Funded by
the European Union