

## Animal Health

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# Promoting rabbit health through the collection and establishment of reliable health and performance data in the two major Swiss meat rabbit integrations

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### Key words

rabbit production, animal health, animal welfare, mortality rates, usage of antimicrobials, risk factors, *Salmonella* spp. in meat rabbits

### Aim of the study

The objectives of this study were to collect previously missing health and performance data in the Swiss meat rabbit production and to identify risk factors for high mortality with the aim to improve rabbit health and welfare, and therefore to reduce animal losses and antimicrobial treatments.

### Material and methods

For one year every new litter and fattening group was documented by the farmers using a standardized production data sheet with special interest in animal losses and medication. Investigation visits by a veterinarian took place to record the varying farm structures including their husbandry, hygiene and health management systems. Additionally, fecal samples were collected twice on 50 farms and tested for *Salmonella* spp. During periods with increased mortality second investigation visits took place allowing the detection of changes in management as well as the performance of further diagnostics such as necropsies and laboratory tests.

### Results and significance

For the first time, reliable health and performance data on Swiss meat rabbit production are now available. They form an important basis for further research in this field. Average mortality rates of 14.88% in suckling and 17.32% in fattening rabbits show that there is potential for improvement. In fattening rabbits, diseases of the digestive tract were the most common problem. The pathogens most often involved were *Eimeria* spp., *E. coli* and *C. perfringens*. In second place were respiratory diseases, in which *P. multocida* was frequently detected. The use of medication was limited to two groups, antiparasitics and antibiotics. 48% (12 farms) of the farms surveyed used antiparasitics and around 29.69% of all recorded fattening groups were treated with Toltrazuril. 60% (15 farms) of the farms used antibiotics in fattening rabbits, the percentage of treated fattening groups was 34.69%.

Of the 50 farms tested for *Salmonella* spp. 47 were negative and 3 farms were positive for *Salmonella Typhimurium*. The three positive farms were linked by animal trade. Results of the whole genome sequencing showed close relation between the three genotypes of the bacteria.

The analysis of risk factors associated with increased mortality is currently ongoing and should be the subject of further studies in the field of rabbit welfare, health and husbandry.

### Publications, posters and presentations

- Posters: Förderung der Fleischkaninchengesundheit dank Erhebung und Etablierung zuverlässiger Gesundheits- und Leistungsdaten in der Schweiz. Suisse Tier, Luzern, 22.-24.11.19 and Tagung Netzwerk Nutztiere, Zollikofen, 07.11.19

- Promoting rabbit health through the collection and establishment of reliable health and performance data in the two major Swiss meat rabbit integrations. Poster and Networking Day, Zürich, 25.09.19 and VPH-Conference, Bern, 28.11.19, World Rabbit Congress 23.-25.06.21

Presentations: Promoting rabbit health through the collection and establishment of reliable health and performance data in the two major Swiss meat rabbit integrations. Colloquium NRGK, Zürich, 01.10.19

- Einblick in die Schweizer Fleischkaninchenproduktion, Kolloquium HAFL, Zollikofen, 10.12.20
- Förderung der Fleischkaninchengesundheit dank Erhebung und Etablierung zuverlässiger Gesundheits- und Leistungsdaten in der Schweiz. Versammlung Verein Schweizer Kaninchenproduzenten, Lupfig, 22.03.19 and 01.11.19 and 13.03.20

Publications planned: Survey on Salmonella occurrence in meat producing rabbitries in Switzerland. Short communication in Veterinary record

- Gesundheits- und Leistungsdaten in der Schweizer Fleischkaninchenproduktion. Research paper in SAT
- Risk factors associated with increased mortality in Swiss meat rabbits

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