



Research in rabbit science



Department of Animal Science University of Padova







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RESEARCH STAFF



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DEPARTMENT'S LABORATORIES

- LAZ: laboratory for physical and chemical analyses of feeds and foods, and for biological analyses such as in vitro digestibility;
- NIRS: Near Infrared Spectroscopy Lab dedicated to a rapid evaluation of chemical composition of feeds and foods
- **DNA:** laboratory for DNA analysis (genomics, markers, candidate genes)
- **MILK:** analysis of milk renneting and manufacturing properties, small-scale cheese production









EXPERIMENTAL FACILITIES





Rabbitry of the University experimental Farm "Toniolo"

Commercial rabbit farms









TOPICS OF RESEARCH









Relationships between nutrition and digestive health in growing rabbits

- 1. Role of starch and fibre fractions level
- 2. Role of protein level and interactions with dietary starch and fibre fractions
- 3. Feeding plans with varying protein level and effects on nitrogen excretion
- 4. Feed restriction
- 5. Pre and probiotics in rabbit feeding (yeast, organic acids, bacteria)











Energy and protein metabolism in rabbit does

- 1. The body energy deficit of reproducing does
- 2. Feeding of young and reproducing does
- 3. Management strategies to reduce the energy deficit (reproductive rhythm, litter weaning age, parity order)
- 4. Comparative slaughters, ultrasound measurements











Harmonization of rabbit feed evaluation (EGRAN)

- 1. Chemical analyses
- 2. In vivo digestibility trial
- 3. In vitro method to estimate diet digestibility
- 4. Near infrared reflectance spectroscopy (NIRS) analysis to predict diet chemical composition, nutritive value, and ingredient inclusion rates











Rearing systems for growing rabbits

- 1. Individual and bicellular cages vs. collective systems
- 2. Dimension of cages, group size and stocking density
- 3. Type of floor (wire net, steel and plastic slat, wood, straw)
- 4. Effects on welfare (ethogram, reactivity tests), performance, slaughter results and meat quality







Other topics of research

- 1. Effect of rearing systems and pre-slaughter management on performance and welfare of poultry and fish
- 2. Factors affecting meat quality in poultry and fish
- 3. NIRS analysis to evaluate chemical composition, nutritional value and origin of poultry and fish products









Organization of congresses



- 10th World Rabbit Congress (2012,Egypt)
- ASIC Rabbit days





Funds of research

- 1. Public National Institution (e.g. Ministry of Instruction, University and Research, Ministry of Agriculture, Veneto Region, University of Padova, others)
- 2. European Union
- 3. Private enterprises (Feed industries, Producers of feed additives, Breeders associations)







Some projects we are working at:

- 1. Development of new feeding strategies to promote intestinal health and meat safety in rabbits Referencia projecto: AGL2008-00627/GAN Coordinator Prof. C. De Blas (Spain)
- Rearing and feeding strategies to improve nutritional and technological properties and safety of rabbit meat – MIUR – Coordinator Prof. C. Cavani (Bologna, Italy)
- 3. Effect of rearing systems (collective cages) on performance, animal health and welfare, and meat quality (private enterprises)





Thanks for your visit

