



UNIVERSITÀ DEGLI STUDI DI MILANO
DIPARTIMENTO DI SCIENZE ANIMALI

Research in rabbit science and production in Italy
Monday, September 13, 2010

University of Milano: research in rabbit science

PROF. FABIO LUZI





Sezione di Zootecnica Veterinaria

DIPAV

Dipartimento di Patologia Animale, Igiene e Sanità Pubblica Veterinaria

- Prof. Daniele Gallazzi - Pathology
- Prof. Marina Verga - Rabbit welfare
- Prof. Fabio Luzi – Rabbit welfare
- Dr.ssa Veronica Redaelli – Infrared Therm.
- Dr.ssa Piera Anna Martino – Microbiology
- Dr. Guido Grilli – Pathology



Experimental facilities for small animals (LODI)

- building and equipment for housing of rabbits, poultry species, and fisheries.



The small animals sector of the University of Milan, Veterinary Medicine Faculty is dedicated to housing of poultry, rabbit and fish.

Poultry facilities provide for up to 400 boilers in 6 rooms divided into boxes of approximately 6 m², with possible repetitions, performance tests, environmental enrichment and different eating patterns. Each room can accommodate alternatively 216 or 324 turkeys hens. For them there is the possibility of raising 288 subjects in enriched cages. The structures can also easily be adapted to fowls, quails and pheasants. And there is one room where you can raise up to 72 roosters caged single, which will receive different food plans. The center also has a hatchery.

The rabbit facilities can accommodate 60 rabbits breeding rabbits and 380 subjects in growing-fattening. It consists of two symmetric locals with the possibility of carrying out trials with repetition and environmental enrichments.

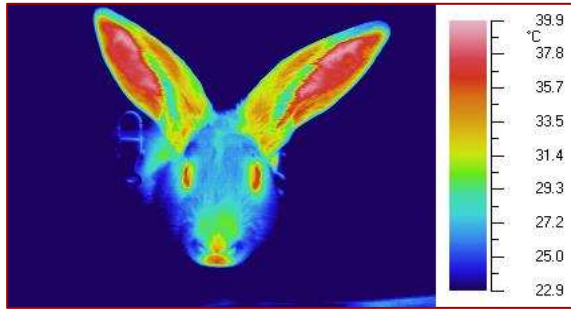
The room dedicated to aquaculture is for fresh water fish.



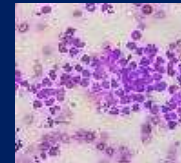
Laboratory of infrared thermography

2 portable thermocameras with microbolometric infrared detector for non invasive analysis.

Infrared analysis program Goratech®.



Laboratory of microbiology



Laboratory of pathology



Main research topics - 1

- Rabbit welfare reared under different housing conditions
- Environmental enrichment in intensive rabbit farm
- Non invasive methods to detect welfare conditions
- Ethogram
- Evaluation of different biostimulation methods to improve receptivity of rabbit does



Main research topics - 2

- Environmental control (micro – macroclimatic conditions)
- Pathology and Hygiene
- Zoonosis
- Rabbit as laboratory animal



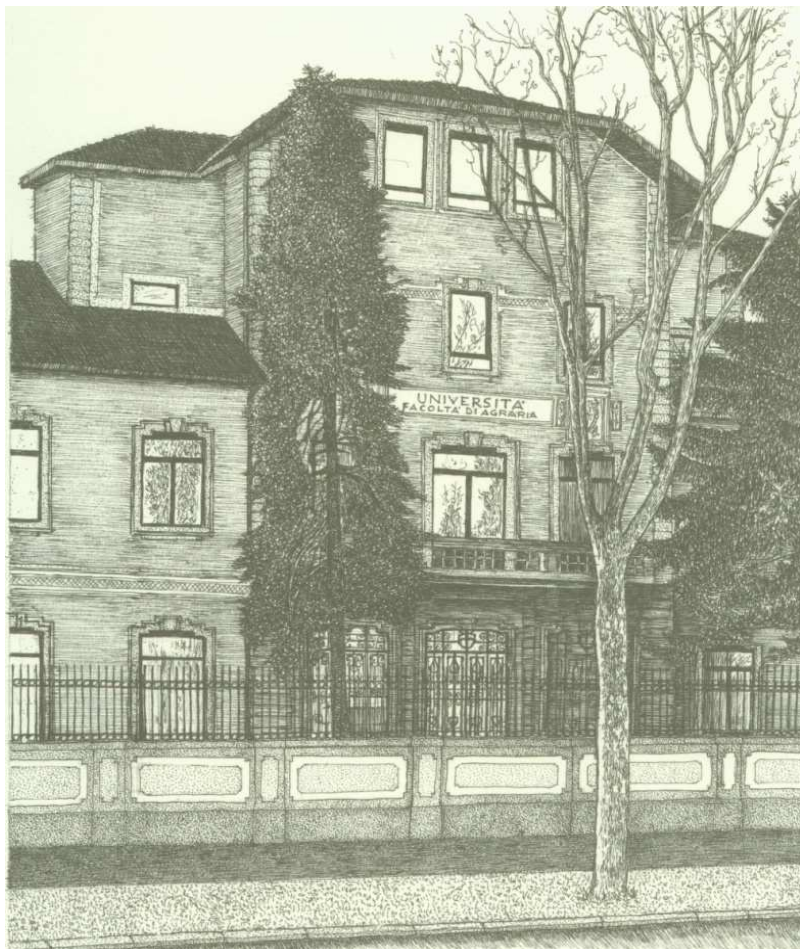
Collaborations

- Dipartimento di Patologia Animale, Igiene e Sanità Pubblica Veterinaria dell'Università degli Studi di Milano;
- Dipartimento di Scienze Animali, Sezione di Zootecnica Veterinaria dell'Università degli Studi di Milano;
- Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna "Bruno Ubertini";
- Universidad Politecnica de Valencia;
- Agricultural University of Athens;
- University of Giessen – Belgium;
- University of Kaposvar – Hungary;
- Ministry of Agriculture – Belgium;





UNIVERSITÀ DEGLI STUDI
DI MILANO
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Experimental facilities for small animals

- building and equipment for housing of rabbits, poultry species, pigs and small rodents;
- single metabolic cages for ingesta control and digestibility trials;
- 4 open-circuit respiratory chambers for material and energy balance in small animal



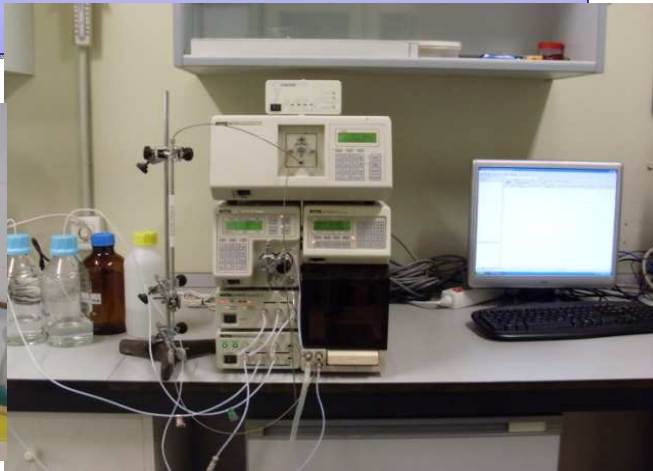
Experimental farm for rabbit and poultry

- building with 80 cages for lactating rabbit doe with litter and 45 cages for young doe or not-pregnant female;
- building with 216 pair cages for fattening rabbits;
- building with 6 pens for housing of 240 laying hens or 420 broilers in deep-litter system;
- experimental slaughterhouse.



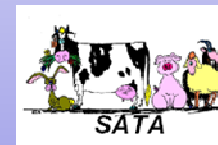
Laboratory for analysis of samples

Instruments for analysis of raw materials, diets, faeces, urine and biological samples in accordance with official methods.



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- Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna "Bruno Ubertini";
- Associazione Regionale Allevatori della Lombardia (ARAL)



Main research topics - 1

- Relationship between diet composition, weaning age, caecal microflora population, health status and growth performance in rabbit
- Effect of dietary acidification on growth performance, caecal characteristics and health status in rabbit
- Study of relationship between diet composition, milk production and reproductive rhythms of rabbit does
- Effect of the addition of natural and synthetic antioxidants on semen characteristics of rabbit buck and cock



Main research topics - 2

- Reduction of body energy losses of rabbit does using diets characterized by different energy concentration and chemical composition and using specific feeding programme
- Effect of the addition to the diet of oils rich in polyunsaturated fatty acids on energy metabolism
- Evaluation of different biostimulation methods to improve receptivity of rabbit does





Thank you for the attention

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