

Mountrain

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Solutions to Agricultural Problems in Mountainous Regions of Europe

5th Framework Programm

Thematic Programm:

Quality of Life and Management of Living Resources

Key words:

Grassland production, Animal production, Mountainous regions, Sustainability

Studies that try to find solutions to wide range of problems that face agriculture in disadvantaged areas, especially mountainous regions:

- a very unique understanding of problems that face agriculture in mountainous regions
- allows the fellows to develop strategies that will help to create and maintain an economically successful, environmentally beneficial and sustainable agriculture



Koordination: Dr. Marin Greimel, DI Renate Mayer, Birgit Huber-Kitzer

The horizon of the candidates on specific topics reaching from soil and root sciences, plant production and -sociology, ruminant feeding, milk and meat production, husbandary housing of animals under alpine conditions.

Duration: 4 years (2002-2005)

Researcher months: 96

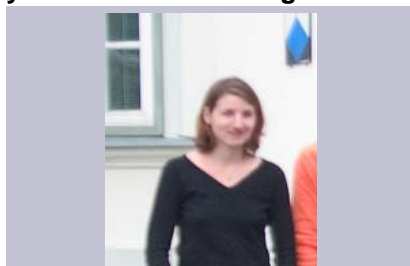
Fellows: 11; 5 female, 6 male

Countries: Germany, France, Hungary, Poland, Slovakia, Czech Republic

Legume-based forage systems for contrasting environments

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Supervisors: Univ. Doz. Dr. Erich Pötsch, HBLFA Raumberg-Gumpenstein
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Keywords: forage legumes, digestibility, protein quality

Grass-legume mixtures play an important role for protein supply of cattle and for providing nitrogen via biological N-fixation. Forage quality and digestibility are highly variable and mainly depend on plant utilisation, stage of development and legume species. On the basis of a common protocol field trials have been established in 2003 at study sites at the coastal area of Northern Germany as well as in the mountainous region of Austria. These trials include different mixtures of a single grass species (English ryegrass) with one of several clover species (white clover, red clover, bird's-foot trefoil) or alfalfa.

Objectives of the current research and plant analyses are focusing at the:

- impacts of the location due to differences in growth conditions between the study sites
- changes of forage quality during growing season
- impacts of the legume species itself on protein quality and digestibility
- comparison of common analytical methods for the determination of ruminal digestion

Further on, research aims at possible effects of special secondary plant components on the ruminal protein digestion, especially regarding red clover.

Economic parameters of boer goat breeding keep them indoor and on pasture

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Key words: boer goat breeding, carcass composition, meat quality, economic parameters

The goat project undertaken by HBLFA Raumberg-Gumpenstein concerns few topics:

- establishment of the economic parameters of boer goat breeding under alpine conditions
- economic solutions for boer breeders and agricultural advisors, who need the necessary economic calculations
- product quality and the method of obtaining the final product
- evaluation of quantity and quality of goat meat for the requirement or the consumers

Test of two production systems: indoor and pasture

The boer goats flock contained 30 goats and 2 bucks at the beginning.

Focal points:

- Feed intake and feed conversion of does and kids
- Fertility and rearing performance due to indoor or pasture keeping
- Carcass composition – meat, fat and bone content, proportions of cuts
- Meat quality (due to indoor and pasture keeping) – concerns several characteristics: protein content, fat content, meat color, tenderness, cooking features and sensory parameters

