



UE 1414

Herbipôle - Low mountain ruminant farming systems facility

The Herbipôle is a multidisciplinary experimental research platform on ruminants and grasslands, with a regional, national and european vocation, largely opened to scientific and professional partners, federating on a single facility complementary scientific approaches and disciplines.

Head

Philippe Pradel

Deputies head

Pascal Bak

Priscilla Note

Human resources

- 17 engineers
- 58 technicians

Species

- 900 beef and dairy cattle
- 800 sheep

1100 ha of grassland (850 to 1500m a.s.l)



Activities

The aims of the experiments conducted at the Herbipôle deal with ruminant farming systems in grassland mountain areas, in connection with products qualities (meat, milk and cheeses) and environmental impacts. The scales of work go from the organ to the farming system, including the animal and the herd:

- Intermediary metabolism of mammary gland and muscle,
- Feed values and ruminant nutrition,
- Feeding behaviour, social interaction and well-being of ruminants,
- Greenhouse gas emissions by ruminants,
- Interaction between farming practices and environment: greenhouse gas flow and biodiversity of grassland ecosystems (flora, fauna),
- Interaction between farming practices and products quality,
- Low input farming systems, including under organic farming specifications, of ruminants in grassland mountain areas.

Equipments

- Beef and sheep phenotyping equipments,
- Automatic recording of feed intake and eating behaviour,
- Facilities and equipments to measure the in vivo digestibility of forages and to study the eating behaviour and the ingestion of cattle and sheep,
- Multi-species platforms for the study of social behaviour,
- Breathing chambers and GreenFeed systems for the measure of methanogenesis (beef and small ruminants),



Centre
Clermont-Auvergne-Rhône-Alpes



UE Herbipôle
Theix

63122 Saint Genes Champanelle

Tél. : + 33 (0)4.71.78.81.11

Mail : herbipole-dir-Auvergne-Rhone-Alpes@inrae.fr

Web : <https://www6.clermont.inrae.fr/herbipole/>

- Experimental slaughterhouse with european standards,
- Various grasslands (simple to complex floras, elevation gradient from 850 to 1500 m, 1200 ha),
- Devices to measure ground/vegetation/atmosphere carbon flows (ICOS labelled station),
- Databases on animals and plots.



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Skills

- Management of experimental beef and dairy cows herds and sheep flocks, phenotypes characterization,
- Experimental fodders production,
- Beef and sheep carcass measurements,
- Agroenvironmental observations and measurements,
- Data processing, design of specific apparatus,
- Partnership and sharing with research users.

Key words

Ruminant experimentation, beef and dairy cattle, sheep, farming systems, agro-ecology, grassland, GHG, nutrition, ethology.



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