

«From pasture to plate» highlights 2004-2007

Abridged Version
Summary Report of the activities of
Agroscope Liebefeld-Posieux Research Station ALP



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department
of Economic Affairs DEA
**Agroscope Liebefeld-Posieux
Research Station ALP**



Dear Readers

Already we are looking back on four years of ALP, as well as at a successful 2004-2007 Performance Contract period. The targets set were achieved almost without exception. Much of our feedback shows that ALP is having a growing impact on those in the field, on knowledge communicators and also, increasingly, on nutritional experts and consumers. In this brochure you will find selected highlights from our activities over the past four years. At the same time we also give you a preview of our new 2008-2011 Performance Contract.

On the first of January 2008 Agroscope Liebefeld-Posieux ALP Research Station and the Swiss National Stud Farm came under joint management. This close collaboration permits the use of synergies, predominantly in the resources sphere, and provides both institutions with opportunities to benefit research and the equine industry.

The start of the new 2008-2011 Performance Contract and affiliation to the National Stud Farm also brought staff changes. On the first of January 2008 Daniel Guidon became the new Research Vice Director of the ALP/Stud Farm Management Unit. Andreas Aeschlimann, the previous Vice Director, has taken over the job of "International Research, Acquisition of Third Party Funding" - an increasingly important area for our institution. We are appointing Christine Grivel Niklaus to the post of second Resources Vice Director of the ALP/Stud Farm Management Unit until the first of November 2008. On 1 February 2008 Dieter Hess succeeded Daniel Guidon in managing the "Safety and Quality" product.

I hope you enjoy reading on!

Michael Gysi
Director ALP





2004-2007 Performance Contract: Agroscope settled in

Since 2004 the Swiss Federal agricultural research stations have successfully been incorporated into the Agroscope family brand. They have positioned themselves at home and abroad as a recognised institution for the promotion of sustainable, multifunctional agriculture. The relevant guidelines are laid down in the Agriculture Act and formulated in Agricultural Policy Reform Stage Three (AP 07). Together with the 2004-2007 Research Concept of the Federal Department of Agriculture they form the basis of the 2004-2007 Performance Contract for Agroscope, awarded by the Federal Council.

The Performance Contract period bore the stamp of underlying conditions and a changing environment, for example the abolition of milk quotas by 2009, market liberalisation, structural change, changing consumer habits, and also of budget cuts resulting from Relinquishment of Functions Planning (AVP), the Relief Programme (EP03) as well as loan embargos and centralisation of Federal Government resources.

Efficiency boost from merger with ALP

The beginning of the new Performance Contract was accompanied by the merger of the Liebefeld Dairy Research Station (FAM) and Posieux Animal Production Research Station (RAP) to form Agroscope Liebefeld-Posieux. This facilitated the interlinking of research, from animal feedstuffs through production and processing to foods of animal origin. It was also possible to effect savings in the resources area and use these to benefit research.

ALP projects covered important developments in quality, safety, nutrition, health and natural resources. Over 90 % of the goals set in the Performance Contract were achieved. The research, implementation and advisory activities carried out by ALP have helped to ensure that the production of milk, meat and honey is and will remain a strong central pillar of Swiss agriculture.



Milk and meat production

With the success of its research focussing on production systems, feeding strategies, animal health and product quality, ALP was able to supply practical solutions to integrated and organic farming.

Since a great part of Swiss farm land is pastures, issues on grazing were and still are a priority in ruminant research. Various grazing and complementary feeding strategies were investigated for milk production, and low input grazing systems with beef cattle were tested as possible tools for conservation of alpine pastures. In pig research there was an in-depth examination of an alternative outdoor rearing production system. Furthermore, young boar fattening as an alternative to the current practice of piglet castration was evaluated.

Feeding regimes have a significant impact on animal health, thus various issues relating to the prevention of nutritional diseases in animals were also tackled. High-value animal products are crucial for a sustainable agricultural production and hence have been an important part of research efforts at ALP. Detailed investigations were therefore carried out focussing on the influence of feeding regimes or production systems on technological, nutritional and hygienic quality of products.



In milk and meat production, the importance of Swiss pastures has increased.

Contact: walter.stoll@alp.admin.ch



ALP's job is only complete when new findings are successfully implemented in the field.

Milk and meat processing

The cheese industry has successfully risen to the major challenge of total liberalisation of the cheese market with the EU. ALP has made a substantial contribution to this success with its work on the safety, quality, health and uniqueness of traditional Swiss hard and semi-hard cheeses. The concepts which ALP offers the cheese industry for certification of origin have aroused great interest.

Various new, innovative milk and meat products are based on scientific or technological foundations laid by ALP. Due to their functional properties, selected milk compounds are increasingly being added to other foods, thus opening up new sales markets (including exports). In meat processing ALP has now developed into a sought-after partner.

The development of expertise by ALP staff in the field of nutrition and health has led to their increasing participation in expert commissions and to their presentations being in demand at important conferences. More and more nutritional studies are also being carried out together with partners.

ALP tested various kinds of skins for cervelat sausages



The disbandment of the Inspection and Advisory Service in Dairy Economic Matters (MIBD) at the close of 2006 brought a unique success story to an end. The advisory service is being continued by various regional institutions. ALP has been able to establish close working ties with these institutions at various levels, taking on new challenges at the same time. The link between ALP research and commercial practice was further strengthened by the very successful transfer of the approved model of the cheese sector to the dairy and meat processing sector.

Contact: hans-peter.bachmann@alp.admin.ch



Safety and quality

Various new requirements for the compound feed industry were introduced and implemented in the field of hygiene and quality assurance (HACCP concepts), involving a major deployment of staff at Official Feedstuffs Inspection. On the other hand, there was a marked easing of the situation on feed investigations relating to BSE eradication. No further animal meal contaminations have been found in recent years and there has also been a substantial improvement in the number of diseased cows. The cattle disease BSE has been overcome in Switzerland, not least thanks to the strenuous efforts of both the animal feed industry and Official Feedstuffs Inspection at ALP.

Bee mortality was the most important issue in bee research. There seem to be various reasons for the enormous colony losses. The Bee Research Centre at ALP is coordinating an international group of researchers, beekeepers and industry representatives who are tackling the problems of colony loss in detail. The Small Hive Beetle poses another possible threat to bees. This honey bee pest could cause huge problems if introduced into Switzerland. Bee health will continue to be of great importance in the years to come; in its plans for bee research ALP has borne these challenges very much in mind.

As far as analyses of animal feedstuffs for the eradication of BSE are concerned, the situation turned into normal.

Dead bee colony from the winter with higher-than-average colony losses



Contact: dieter.hess@alp.admin.ch

Our Key Figures

Financials (as per 2007 cost-performance accounting in CHF)

Staff expenses	26'052'461
Expenditure on materials	6'020'743
Investments	866'227
Expenditure	32'939'431
Receipts	4'137'957
Net financial requirement	28'801'474

Staff

Full time positions	FTE ¹	177.2
Percentage of women	%	35.9
Apprentices and trainees	FTE ¹	24.0
Percentage of university graduates	%	45.5
Percentage of externally funded staff	FTE ¹	14.0

Knowledge and technology transfer

Publications	Number	465
Presentations	Number	421
Lectures at universities and polytechnics	Lectures	242
Joint projects	Number	91
Consulting information	Number	25
Approvals and expert opinions	Number	487
Demonstrations for customers	Number	8
Cultures sold		
for fermented milk products	Units	98'900
Feed inspection	Samples	1'597
Inspections	Number	558

¹Converted in full-time jobs

ALP strives to achieve high quality working methods and works to international Standards: ISO 9001:2000 Certification and ISO/IEC 17025:2005 Accreditation



Preview of 2008-2011 Performance Contract

The current Performance Contract was preceded by careful planning. On the basis of the 2008-2011 Agroscope Research Concept, ALP formulated a vision, a product-market strategy, a performance-action model and finally the projects. Interested groups were included at every stage. This meant building on research interests expressed by clients, partners and colleagues as well as on proposals from the Peer Review Report and the Agroscope client satisfaction survey.

Through its research, advisory and implementation activities ALP is helping to ensure that the production of milk, meat and honey remains a strong, central pillar of Swiss agriculture. It promotes consumer confidence in Swiss foods of animal origin, improves image and boosts competitiveness.

ALP is basically continuing the course steered by the 2004-2007 Performance Contract. Intensified activity is anticipated in the nutritional sphere, in competitiveness/economics and in food safety.

In order to forge even stronger links between projects and ALP clients and partners, Forums were created in addition to the Accompanying Expert Group. The red line (meat), the white line (milk), honey bee research and the "NutriScope" research programme each has a Forum. This better combines similar ALP interest groups and takes even better account of the approach to the food chain and value creation chain.

Starting from a vision, ALP has constituted a product marketing strategy, a model of integrated management based on results and effects as well as projects in progress.



Communication of the results of ALP activities to clients and partners occupies a central role in the new Performance Contract, as do knowledge exchange and networking. A special highlight is the international "Cheese Symposium", organised by ALP and held in Berne in March 2008 with great success.

Agroscope Research Programmes

As part of the 2008–2011 Work Programme Agroscope made a successful start on research programmes overarching the three Research Stations. These are "ProfiCrops", on safeguarding the future of Swiss crop cultivation under largely liberalised market conditions, "AgriMontana", on the contribution of agriculture to the sustainable development of mountain areas and "NutriScope", on product quality and safety, health and nutrition. The programmes investigate questions of current social importance which can only be answered in an inter-disciplinary and trans-disciplinary research alliance.

ALP is responsible for the "NutriScope" research programme. Partnerships have already been arranged with various institutions. The home page www.nutriscope.ch provides up-to-date information on the state of work.

ALP is responsible for the new research programme "NutriScope" for product quality and safety, health and nutrition.



ALP's four main directions of thrust in the 2008-2011 Performance Contract

- Together with its research partners ALP is positioned relative to the qualitative properties of milk, meat and honey bee products. Through scientific studies ALP also makes a key contribution to healthy, safe, high quality foods.
- The new technologies/recommendations formulated by ALP are economically viable (feasibility studies). This improves acceptance by those in the field and secures a competitive advantage for Switzerland as a location.
- Environmentally friendly production compatible with animal welfare and high product quality, soundly based on nutrition and hygiene. ALP is rapidly becoming the national platform.
- Sustainable, extensive production and processing systems for marginal regions help safeguard the income of their populations and make Switzerland into an attractive recreational area for tourists.

Current ALP Projects

Milk and Meat Production

- Dairy cow nutrition and feed evaluation
- Milk quality
- Beef production
- Pig feeding and pork quality

Milk and Meat Processing

- Cheese quality
- New cultures
- Economic assessment
- Application in practice
- Milk processing
- Meat processing

Safety and Quality

- Official Animal Feed Inspection
- Bases for enforcement support & National Reference Laboratory
- Bee Research Centre
- Quality support



Further information

Detailed information on the 2004-2007 activities in ALP Projects were published in ALP science No. 523 and can be downloaded from our home page (www.alp.admin.ch).

E-mail: info@alp.admin.ch

Agroscope Liebefeld-Posieux Research Station ALP

Tioleyre 4
P.O. Box 64
CH-1725 Posieux
Tel. +41 26 407 71 11
Fax +41 26 407 73 00

Publisher	Agroscope Liebefeld-Posieux ALP
Pictures	Olivier Bloch (ALP), Michael Martinez (ALP) Paul Meier (IAG), Stefan Schlüchter (ALP) Jean-Daniel Charrière (ALP)
Layout	Olivier Bloch (ALP)
Print	Druck & Partner AG, Flamatt 03.08 500e 860193165

© 2008 *Agroscope Liebefeld-Posieux ALP*

Authorized reproduction, please indicate the source