



Background

Livestock production depends on grazing systems. In South America the area for grazing has been reduced by the expansion of intensive crops systems, pushing livestock towards less fertile and degraded areas. Under this reality, there is an increasing need for selection of productive forage species adapted to stressed environments.

The value of legume forage in low fertility soils is based on its capacity to fix atmospheric nitrogen. Compared to other legumes, *Lotus spp* have:

- good growth in low phosphorous soils;
- better adaptability to acid soils;
- potential for adaptability to other abiotic stresses;
- optimal tannin content.

Objectives of the Workshop

This Workshop is part of the activities of the LOTASSA project (www.lotassa.org), which is in its second year of execution.

The objectives are:

- to share and scrutinize preliminary results and achievements among the scientific community;
- to complement the LOTASSA project with the achievements of other scientific groups working in related areas;
- to establish contacts and to know the vision from the seed and inoculants industry as well as from the private sector involved in forage and animal production in the region.

THE WORKSHOP WILL BE IN ENGLISH AND NO INTERPRETER FACILITIES WILL BE AVAILABLE.

ENTRANCE FREE BUT PREVIOUS REGISTRATION IS REQUIRED.

FOR ADDITIONAL INFORMATION AND REGISTRATION:

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www.lotassa.org



"LOTASSA"

LOTus Adaptation and Sustainability in South America

Bridging Genomics and Agrosystems Management

International Workshop Integrating Genomics into Plant Breeding

October 25 and 26, 2007
Porto Alegre, Brazil

Address: Blue Tree Millenium Flat
Av. Borges de Medeiros, 3120,
Praia de Belas - Porto Alegre, RS



**ORGANIZADORES DEL WORKSHOP:
WORKSHOP ORGANIZERS:**

DR. MIGUEL DALL' AGNOLL (UFRGS)
DR. ENILSON SACCOL DA SA (UFRGS)
DR. EMILIO RUZ (PROCISUR)

**SECRETARÍA DEL WORKSHOP:
WORKSHOP SECRETARIAT:**

GLADYS FERNÁNDEZ (PROCISUR)

**ENTIDADES COLABORADORAS:
UNDER THE SPONSORSHIP OF:**



LOTUS ADAPTATION
AND SUSTAINABILITY
IN SOUTH AMERICA



UNIVERSIDADE
FEDERAL DO
RIO GRANDE
DO SUL



PROGRAMA COOPERATIVO PARA EL
DESARROLLO TECNOLÓGICO
AGROALIMENTARIO Y AGROINDUSTRIAL
DEL CONO SUR

Programme

Thursday, October 25

The LOTASSA Project

Chairperson: Mónica Rebuffo (Uruguay)

09:00-9:30 **Juan Sanjuán** (Spain)
General objectives, components, integration and perspectives.

Section 1: Model Legumes

Chairpersons: Mariana Melchiorre (Argentina) and Peter Palove-Balang (Slovakia)

09:30-10:00 **Niels Sandal** (Denmark)
Utility of genetic and genomic resources from *L. japonicus* to cultivated species of *Lotus*.

10:00-10:30 **Michael Udvardi** (USA)
Genomics from *Medicago truncatula*: advances and potential use in other species.

11:00-11:30 **Ryo Akashi** (Japan)
L. japonicus genetic and genomic resources in Japan.

11:30-12:00 **Marcio Moretzsohn** (Brazil)
Can legume synteny be useful in guiding the introgression of wild genes into cultivated peanut?

12:00-12:30 Discussion

14:00-14:30 **Michael Udvardi** (USA)
Postgenomics tools to study plant growth and development (metabolomics, proteomics and transcriptomics).

14:30-15:00 **Manuel Becana** (Spain)
Oxidative stress as response to salinity and aluminum.

15:00-15:30 **Antonio Márquez** (Spain)
Nitrogen metabolism in legumes.

16:00-16:30 **Antonio Márquez** (Spain) and **Jorge Monza** (Uruguay)
Physiological responses of *Lotus* to stresses.

16:30-17:00 Discussion

Friday, October 26

Section 2: Biotechnology and Plant Breeding

Chairpersons: Manuel Ortega (Chile) and Diego Sánchez (Germany)

- 08:00-08:30 **Heathcliffe Riday** (USA)
Marker assisted selection in legumes.
- 08:30-09:00 **Merixtell Antolin Llovera** (Germany)
Tilling: examples of utilization in plant breeding.
- 09:00-09:30 **Mónica Rebuffo** (Uruguay)
Breeding temperate legumes: advances and challenges.
- 10:00-10:30 **Nora Altier** (Uruguay)
Diseases of forage legumes: advances and prospects of research on management strategies.
- 10:30-11:00 **Federico Costa Beber Vieira** (Brazil)
Effect of crop systems and nitrogen application upon soil acidification.
- 11:00-11:30 Discussion

Section 3: Microbiology

Chairpersons: Merixtell Antolin Llovera (Germany) and Fernando Pieckenstain (Argentina)

- 13:00-13:30 **Carlos Labandera** (Uruguay)
Inoculants on forages: practical aspects and actual situation of their usage in relation to other countries.
- 13:30-14:00 **Jasmin Gossmann** (Germany)
Signal transduction in plant-microbe interactions.
- 14:00-14:30 **Fátima Moreira** (Brazil)
Soil biodiversity: genetic resources to enhance nitrogen fixation.

Section 4: General Perspectives

Chairpersons: Juan Sanjuán (Spain) and Mónica Rebuffo (Uruguay)

- 15:00-15:30 **Walter Ayala** (Uruguay)
Forage and Animal Production in the region.
- 15:30-16:00 **Carlos Foderé** (Uruguay)
Seed industry requirements.
- 16:00-16:30 **Martín Lage** (Uruguay)
Requirements from the inoculants industries.
- 16:30-17:00 **Carlos Nabinger** (Brazil)
Animal production: an integrated point of view.
- 17:00-17:30 Discussion