

**UNIVERSITY OF BUENOS AIRES
CONICET**

IFEVA

**AGRICULTURAL PLANT PHYSIOLOGY AND ECOLOGY
RESEARCH INSTITUTE**

**(INSTITUTO DE INVESTIGACIONES FISIOLÓGICAS Y ECOLÓGICAS
VINCULADAS A LA AGRICULTURA)**

**Director: Dr. Rodolfo A. Sánchez
Deputy Director: Dr. Antonio J. Hall**

Board of Directors:

**R.A. Sánchez
A.J. Hall
C.M. Ghera
J.J. Casal
R.L. Benech-Arnold
E.J. Chaneton
M.J. Yanovsky**

REPORT 2001-2004

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About IFEVA

The Agricultural Plant Physiology and Ecology Research Institute was founded by the late Professor Alberto Soriano in 1987 on the basis of the research group he led since the 60's as Chair of Plant Physiology and Phytogeography at the Faculty of Agronomy of the University of Buenos Aires. The Institute is jointly supported by the University of Buenos Aires and CONICET, and its Mission is:

1. to increase knowledge of the biology, structure and functioning of agricultural systems at their different levels of complexity and biological organization.
2. To train researchers and university lecturers.
3. To promote the induction of new human resources into scientific research, through the supervision of undergraduate and post-graduate scholars.
4. To contribute to higher level training through active involvement in higher degree and diploma programs.
5. To make public new scientific knowledge by publishing the work of the Institute`s members in research and general interest journals.

Research and teaching activities of IFEVA staff are based at the Faculty of Agronomy, University of Buenos Aires.

Director's review

Considering the purely quantitative aspects for the 2001-2004 period (i.e., number of researchers and scholarship holders, number of published papers, papers in high impact journals, theses, etc.), the work of IFEVA staff during that period was comparable, on the whole, with that of previous years. A comparison with other research centers within the country suggests that we are doing reasonably well, although there is still ample room for improvement.

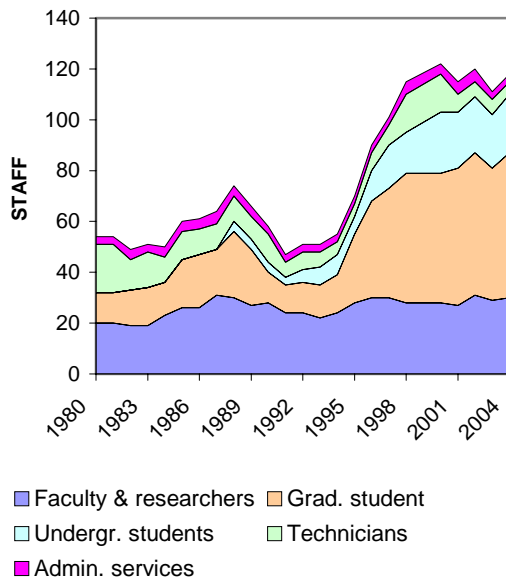
By contrast, the participation of IFEVA in editorial boards of international journals increased significantly during the same period, with 25% of our researchers fulfilling tasks of this kind. The thematic orientation of these journals adequately represents the spectrum of topics within the Institute's research program. This reflects the growing maturity of our research groups and is an indication that, from a thematic point of view, staff members are evolving in a reasonably balanced fashion. The same tendency is apparent when considering the awards and distinctions received by staff members. About 40% of our researchers received some distinction, ranging from prestigious scholarships to career recognition awards, or awards for distinguished contributions to specific subjects. Here again, there is little evidence of a thematic bias.

As is to be expected, part of the activities of our research staff were outreach-related, and was covered by agreements with various official and private organizations. In this sense, some thematic asymmetry can be perceived since only research groups in the ecology and ecophysiology areas were involved in these activities. However, there are good chances that in the near future other groups working on more basic aspects of plant biology will also become involved in outreach.

One of the strengths of IFEVA lies in that it encompasses research groups tackling problems at very different levels of organization, from molecular biology to regional and global issues. The possibility of combining different and complementary perceptions of a given problem, when properly exploited, contributes to the formulation of richer and more original approaches. In my opinion, we are only beginning to take advantage of our potential for interactions between groups with diverse thematic specializations. Possibly the paper by Perelman et al. (*Plant Physiology* 133:1717-1725, 2003) is an indication that we are beginning to explore this type of cooperation more intensively.

Rodolfo A. Sánchez

Staff



In recent years, the number of IFEVA members has grown rapidly, largely due to the increase in the number of post-graduate students.

Faculty and researchers

Dr. Rodolfo A. Sánchez ^{1,6}
Ecophysiology of seed germination. Photomorphogenesis

Dr. Antonio J. Hall ^{2,7}
Crop ecophysiology

Ing. Agr. Claudio M. Ghersa ^{3,7}
Ecology of agricultural systems Sustainability of agroecosystems

Dr. Jorge J. Casal ^{3,7}
Plant biology

Dr. Roberto Benech Arnold ^{3,8}
Seed and crop ecophysiology

Dr. Enrique J. Chaneton ^{4,9}
Community and ecosystem ecology

Dr. Marcelo J. Yanovsky ^{5,9}
Molecular basis of photoperiodism and photomorphogenesis

Dr. Rolando J.C. León ^{1,7}
Vegetation heterogeneity Grassland ecology

Dr. Víctor A. Deregibus ²
Pasture ecology and management

Ing. Agr. Raúl S. Lavado ^{2,7}
Soil fertility and fertilizers

Dr. Osvaldo E. Sala ^{2,6}
Ecology of arid zones. Biodiversity. Global change

Dr. Emilio H. Satorre ^{2,8}
Weed and crop ecology

Dr. Carlos L. Ballaré ^{3,7}
Plant biology and ecophysiology

Dr. Jorge H. Lemcoff ^{3,9}
Crop and forest ecology

Dr. Martín Oesterheld ^{3,8}
Grassland ecology

Ing. Agr. (MSc.) Susana B. Perelman ³
Quantitative ecology. Multivariate analysis of plant communities

Dr. Gustavo A. Slafer ^{3,8}
Crop ecophysiology

Dr. Martín R. Aguiar ^{4,9}
Ecology and conservation of semiarid grasslands

Dr. William B. Batista ⁴
Ecology of wild plant populations and communities

Ing. Agr. (MSc.) Claudio A. Chimenti ⁴
Ecophysiology of abiotic stress in crops and plants

Dr. Roberto J. Fernández-Aldúncin ⁴
Drought ecophysiology

Dr. Rodolfo A. Golluscio ^{4,9}
Ecology and management of arid zones

Ing. Agr. M.Sc. Pedro Insausti ^{4,11}
Ecophysiology of flood-prone grasslands

Dr. María A. Martínez-Ghersa ^{4,9}
Weed ecophysiology

Dr. José M. Paruelo ^{4,8}
Regional ecology of grasslands and woodlands

Dr. Damián Ravetta ^{4,10}
Development of new crops for arid zones

Dr. Ana L. Scopel ^{4,9}
Plant physiology and ecology
Photomorphogenesis

Ing. Agr. Nora Trápani ⁴
Crop ecophysiology

Dr. Amy T. Austin ⁵
Ecosystem ecology. Biogeochemistry.
Global change

Dr. Javier F. Botto ^{5,10}
Photomorphogenesis

Ing. Agr. (MSc.) Silvia E. Burkart ⁵
Vegetation heterogeneity.
Grassland ecology

Lic. Lucila De Miguel ^{5,11}
Ecophysiology of seed germination.
Photomorphogenesis

Dra. Alejandra R. Mella ⁵
Seed ecophysiology

Dra. María Semmartin ^{5,10}
Grassland ecology

Dr. Carlos A. Mazza ¹⁰
Ecophysiology. Plant photobiology

Lic. (MSc.) Marina Omacini ¹⁰
Grassland ecology. The role of
endophytic fungi

UBA: 1 Professor Emeritus, 2 Professor,
3 Associate Professor, 4 Assistant Professor,
5 Senior demonstrator.

CONICET: 6 Senior Researcher, 7 Principal
Research Scientist, 8 Research Scientist,
9 Adjunct Research Scientist, 10 Assistant
Research Scientist, 11 Principal Technician.

Post-Graduate students

Post-Doctoral associates

Carla V. Giordano. *Ecophysiology of the*
Andean-Patagonian forests
Advisor: A. Austin

Ph.D. candidates

Leonor G. Abeledo. *Crop ecophysiology*
Advisor: G. Slafer

M. Roxana Aragón. *Diversity and*
stability of ecosystems
Advisor: M. Oesterheld

M. Verónica Arana. *Regulation of seed*
germination and seedling development
Advisor: R. Sánchez

Sebastián Arisnabarreta Dupuy. *Floral*
biology of barley
Advisor: G. Slafer

Gabriela A. Auge. *Regulation of*
dormancy and germination
Advisor: R. Sánchez

Diego Batlla. *Regulation of dormancy of*
Polygonum aviculare seeds
Advisor: R. Benech-Arnold

Fernando Biganzoli. *The dynamics of*
wild shrub populations in the
Mesopotamian region
Advisor: W. Batista

Mariela Biondini. *Influences of light on*
plant-animal interactions
Advisor: C. Ballaré

Hernán E. Boccalandro. *Molecular*
mechanisms of plant sensitivity to light
Advisor: J. Casal

A. Sabrina Buchovsky. *Genetic and*
molecular basis of photomorphogenesis
Advisor: J. Casal

María José Burgin. *Regulation of seed*
germination by light
Advisor: R. Sánchez

Fernando Caccia. *Biotic controls of*
regeneration in Andean-Patagonian
forests
Advisor: E. Chaneton

Pablo A. Cipriotti. *Community ecology*
of arid zones
Advisor: M. Aguiar

Elba B. de la Fuente. *Structure and*
functioning of agroecosystems
Advisor: S. Perelman

Ana Faigón Soverna. *Photoperiodic*
responses of plants
Advisor: M. Yanovsky

Esteban Fernández. *Response*
mechanisms of Patagonian shrubs to
drought stress
Advisor: R. Fernández-Aldúncin

- Diego Ferraro. *Environmental impacts of agriculture in the Inland Pampa*
Advisor: C. Ghersa
- Pedro Flombaum. *Biodiversity and functioning of Patagonian ecosystems*
Advisor: O. Sala
- Guadalupe Galíndez. *Ecophysiology of native shrubs in the Mesopotamia region*
Advisor: A. Scopel
- Carla V. Giordano. *Effect of ultraviolet radiation on native plants*
Advisor: C. Ballaré
- Fernanda G. González. *Wheat eco-physiology*
Advisor: G. Slafer
- Marina González Polo. *Diversity, functioning and spatial variability of microbial communities*
Advisor: A. Austin
- B. Pamela Graff. *Grazing effects on Patagonian steppe communities*
Advisor: M. Aguiar
- Gonzalo Grigera. *Productivity and forage use in extensive cattle production systems of the Pampean region*
Advisor: M. Oesterheld
- Nicolás Gualano. *Control of grain germination in barley*
Advisor: R. Benech-Arnold
- Juan Pablo Guerschman. *Agriculture impacts on ecosystem functioning*
Advisor: J. Paruelo
- Pedro E. Gundel. *Responses of Lolium multiflorum populations to stress*
Advisor: C. Ghersa
- Pedro Insausti. *Environmental controls of seedling recruitment in grasslands*
Advisor: R. Sánchez
- Miriam M. Izaguirre. *Terrestrial plants photobiology. Implications for plant-insect relationships*
Advisor: C. Ballaré
- Adriana G. Kantolic. *Development and yield of the soybean crop*
Advisor: G. Slafer
- Elizabeth I. Karayekov. *Genetic and molecular basis of photomorphogenesis*
Advisor: J. Casal
- Betina C. Kruk. *Ecology of weeds of wheat*
Advisor: R. Benech-Arnold
- Laura Luccioni. *Plant sensitivity to light*
Advisor: J. Casal
- Marina Machera. *Disturbances and biological invasions in grasslands*
Advisor: E. Chaneton
- Julieta L. Mateos. *Control of plant development and growth by light*
Advisor: J. Casal
- C. Noemí Mazía. *Insect herbivory in Andean-Patagonian forests*
Advisor: E. Chaneton
- Carlos A. Mazza. *Terrestrial plant photobiology*
Advisor: C. Ballaré
- Analía I. Menéndez. *Ozone effects on plant-herbivore interactions*
Advisor: A. Martínez
- Federico P.O. Mollard. *Seed dormancy in natural grasslands*
Advisor: R. Sánchez
- Javier E. Moreno. *Effects of ultraviolet radiation on biotic interactions*
Advisor: C. Ballaré
- Karina A. Oliverio. *Plant sensitivity to light*
Advisor: J. Casal
- Marina Omacini. *Symbiosis between grasses and endophytic fungi*
Advisor: E. Chaneton
- Mariano Oyarzábal. *Controls of grassland ecosystem functioning*
Advisor: M. Oesterheld
- Verónica Pancotto. *Effects of ultraviolet radiation on ecosystem functioning*
Advisor: O. Sala
- Valeria S. Passarella. *Grain quality of barley*
Advisor: G. Slafer
- María C. Pereyra Cardozo. *Nitrate metabolism in wheat*
Advisor: J. Lemcoff

Gervasio Piñeiro. *Grazing impacts on biogeochemical cycles*
Advisor: J. Paruelo

Edmundo L. Ploschuk. *Lesquerella sp. ecophysiology*
Advisor: D. Ravetta

Santiago L. Poggio. *Controls on weed diversity in agricultural landscapes*
Advisor: C. Ghersa

Lara G. Reichmann. *Controls of productivity in arid and semiarid grasslands*
Advisor: O. Sala

Helena Rimsky-Korsakov. *Nitrate leaching in the Pampean region*
Advisor: R. Lavado

M. Verónica Rodríguez. *Resistance to pre-harvest sprouting in grain sorghum*
Advisor: R. Benesch- Arnold

Déborah P. Rondanini. *Controls of oil accumulation in sunflower*
Advisor: A. Hall

Mariana Rutitsky. *Plant responses to changes in the light environment*
Advisor: M. Yanovsky

Romina V. Sellaro. *Genetic basis of photomorphogenesis*
Advisor: J. Casal

María G. Semmartín. *Grazing effects on nutrient dynamics*
Advisor: C. Ghersa

Gustavo G. Striker. *Stress ecophysiology*
Advisor: R. León

Alfonsina Szpeiner. *Food-web dynamics in agroecosystems*
Advisor: C. Ghersa

Mariela Szwarcberg. *Effects of ultra-violet radiation on crops*
Advisor: C. Ballaré

Pedro M. Tognetti. *Secondary succession in agroecosystems*
Advisor: E. Chaneton

Hernán J. Trebino. *Secondary succession in agroecosystems*
Advisor: C. Ghersa

Santiago A. Trupkin. *Genetic and molecular basis of photomorphogenesis*
Advisor: J. Casal

Andrea Uchitel. *Symbiosis between grasses and endophytic fungi*
Advisor: E. Chaneton

Cristina C. Ugarte. *Ecophysiology of winter crops*
Advisor: G. Slafer

Santiago R. Verón. *Desertification in the Patagonian steppe*
Advisor: J. Paruelo

Lucía Vivanco. *Biodiversity and functioning of ecosystems*
Advisor: A. Austin

Diego Wassner. *Ecophysiology of Grindelia chilensis*
Advisor: D. Ravetta

María Elena Whitechurch. *Ecophysiology of wheat and barley*
Advisor: G. Slafer

María Laura Yahdjian. *Controls of net primary productivity in arid ecosystems*
Advisor: O. Sala

M.Sc. candidates

María Laura Appendino. *Regulation of cycle length in wheat*
Advisor: G. Slafer

Germán Baldi. *Fragmentation and landscape structure of the Río de la Plata grasslands*
Advisor: J. Paruelo

María Alejandra Blanco. *Variability among populations of Paspalum dilatatum*
Advisor: V. Deregibus

Hugo S. Bottaro. *Degradation of Patagonian grasslands*
Advisor: R. Golluscio

Gustavo G. Buono. *Productivity of Patagonian meadows*
Advisor: M. Oesterheld

Sergio A. Cepeda. *Weed demography*
Advisor: E. Satorre

- Gerardo M. Cerdeiras. *The influence of humidity on Lesquerella yield*
Advisor: D. Ravetta
- Ariela Cesa. *Grazing effects on Patagonian steppe vegetation*
Advisor: J. Paruelo
- Nicolás F. Ciano. *Responses of Patagonian shrubs to cold and water stress*
Advisor: R. Fernández-Aldúncin
- Irene Fabricante. *Productivity and stability of Patagonian ecosystems*
Advisor: M. Oesterheld
- Ana María Garau. *Tolerance of Eucaliptus seedlings to water stress*
Advisor: J. Lemcoff
- Martín F. Garbulsky. *Impact of land use on ecosystem functioning*
Advisor: J. Paruelo
- Willman García. *Sustainability of agroecosystems of the Inland Pampa*
Advisor: R. León
- Liliana Goveto. *Fire ecology in the Mesopotamian savannas*
Advisor: W. Batista
- Ana B. Guarnaschelli. *Eucalyptus globulus responses to water stress*
Advisor: J. Lemcoff
- María Verónica Herrera. *Physiological responses of sunflower to flooding*
Advisor: A. Hall
- Hector R. Huarte. *Ecology of weeds of the alfalfa crop*
Advisor: R. Benech-Arnold
- Jorge Gonzalo N. Irisarri. *Structural characterization of grasslands by remote sensing*
Advisor: M. Oesterheld
- Elizabeth J. Jacobo. *Effects of grazing management on vegetation and soil in the Flooding Pampa*
Advisor: V. Deregibus
- María C. Jaunarena. *Environmental controls of resin production in Grindelia chiloensis*
Advisor: D. Ravetta
- Varinia V. Jouve. *Remote sensing analysis of productivity in Patagonian steppes*
Advisor: J. Paruelo
- Adriana E. Lenardis. *Plant secondary metabolites and food-web structure in agroecosystems*
Advisor: C. Ghersa
- Rafael Mac Donough. *Sunflower ecophysiology*
Advisor: A. Hall
- Victoria Marchesini. *Consequences of bamboo mass flowering in Andean-Patagonian forests*
Advisor: O. Sala
- Gustavo D. Marino. *Mycorrhizal fungi in Flooding Pampa grasslands*
Advisor: M. Oesterheld
- Pablo H. Maseda. *Water relationships in woody plants*
Advisors: J. Lemcoff & R. Fernández-Aldúncin
- Fernanda Menvielle. *Invasion of Melia azedarach in Mesopotamian savannas*
Advisor: A. Scopel
- Santiago L. Poggio. *Ecology of weed communities*
Advisor: E. Satorre
- Laura E. Puhl. *Statistical methods to evaluate human impacts on ecosystems*
Advisor: S. Perelman
- Emiliano Quiroga. *Trichloris crinita resistance to drought and grazing*
Advisor: R. Golluscio
- Carlos A. Rezzano. *Natural regeneration of Pinus elliotti*
Advisor: A. Scopel
- Federico A. Rizzo. *Physiology of Cynodon dactylon*
Advisor: E. Satorre
- Adriana M. Rodríguez. *Effects of grazing management on Lolium multiflorum in the Flooding Pampa*
Advisor: V. Deregibus
- Andrés Rolhauser. *Ecology of native trees in Mesopotamian savannas*
Advisor: W. Batista

José Luis Rotundo. *Ecophysiology of arid grasslands*
Advisor: M. Aguiar

Mariano Sposaro. *Tolerance of sunflower crops to lodging.*
Advisor: C. Chimenti

Nicolás Trillo. *Long-term changes in the composition of Pampean grasslands*
Advisor: R. León

Martín Vila-Aiub. *Ecological aspects of herbicide resistance in Lolium multiflorum*
Advisor: C. Ghera

Pilar Vilariño. *Role of secondary metabolites in lupine*
Advisor: D. Ravetta

Liliana Windauer. *Controls of oil production by Lesquerella*
Advisor: D. Ravetta

Diploma students

Andrea Cardozo. *Evaluation of cattle management in the Patagonian steppe*
Advisor: R. Golluscio

Daniel Coria. *Control of Solanum glaucophyllum in the Flooding Pampa*
Advisor: R. Golluscio

Matías C. Ermarcora. *Chemical control of foliar diseases in northern Buenos Aires agroecosystems*
Advisor: E. Satorre

Fernando Solari. *Identifying indicator variables of soil degradation*
Advisor: E. Satorre

Cristina Vecchio. *Evaluation of grasslands of the Flooding Pampa*
Advisor: R. Golluscio

Undergraduate students

José María Amores. *Wheat ecology*
Advisor: E. Satorre

María C. Balbi. *Sunflower ecophysiology*
Advisor: A. Hall

German Baldi. *Landscape ecology*
Advisor: J. Paruelo

Andrés E. Berney. *Sunflower physiology*
Advisor: N. Trápani

Federico E. Bert. *Crop ecology*
Advisor: E. Satorre

Gabriel Burgueño. *Landscape ecology*
Advisor: R. León

Martín Cantore. *Sunflower physiology*
Advisor: N. Trápani

Andrea Cardozo. *Ecology of the Patagonian steppe*
Advisor: R. Golluscio

Martin M. Covalschii. *Ecology of the Patagonian steppe*
Advisor: O. Sala

Federico Elorza. *Ecology of the wheat crop*
Advisor: E. Satorre

César M. Ermarcora. *Ecology of the wheat crop*
Advisor: E. Satorre

Esteban Fernández. *Plant ecophysiology*
Advisor: R. Fernández-Aldúncin

Guillermo C. García Martínez. *Ecology of the Patagonian steppe*
Advisor: R. Golluscio

Lucas Garibaldi. *Grazing effects on nutrient cycling in grasslands*
Advisor: M. Semmartín

María Cristina Giallorenzi. *Germination physiology*
Advisor: R. Benech-Arnold

Jorgelina Giuliano. *Sunflower ecophysiology*
Advisor: C. Chimenti

Gonzalo Grigera. *Community ecology*
Advisor: M. Oesterheld

Nicolás A. Gualano. *Germination physiology*
Advisor: R. Benech-Arnold

Pedro E. Gundel. *Weed ecology*
Advisor: M. A. Martínez-Ghera

Guillermo Indaco. *Sunflower ecophysiology*
Advisor: N. Trápani

Alejandro Jacum. *Sunflower ecophysiology*
 Advisor: C. Chimenti

Paula Leva. *Ecology of the Patagonian steppe*
 Advisor: M. Aguiar

Grisel Longo. *Landscape ecology*
 Advisor: M. Aguiar

Pablo I. Maccor. *Crop ecology*
 Advisor: E. Satorre

Juan Manuel Magaz. *Germination physiology*
 Advisor: R. Benech-Arnold

Matías Marcantonio. *Ecophysiology of the sunflower crop*
 Advisor: C. Chimenti

Rosa Mendoza. *Weed ecology*
 Advisor: M. A. Martínez-Ghersa

María Isabel Miranda. *Community ecology*
 Advisor: E. Chaneton

Fernando Negri. *Wheat ecology*
 Advisor: E. Satorre

Juan I. Pearson. *Sunflower ecophysiology*
 Advisor: C. Chimenti

Ruy Perea. *Ecology of the Patagonian steppe*
 Advisor: M. Aguiar

A. Genoveva Pignataro. *Vegetation survey and classification*
 Advisor: W. Batista

Andrés E. Plager. *Landscape ecology*
 Advisors: W. Batista, R. León

Darío E. Rivero. *Forest ecology*
 Advisor: C. Ghersa

Daniel Rodano. *Grassland management*
 Advisor: R. Golluscio

Andrés Rolhauser. *Vegetation survey and classification*
 Advisor: W. Batista

José Luis Rotundo. *Population ecology*
 Advisor: M. Aguiar

Leonardo Storani. *Biotechnology*
 Advisor: M. Yanovsky

Gustavo G. Striker. *Stress ecophysiology*
 Advisor: P. Insausti

Hernán Testa. *Grassland management*
 Advisor: R. Golluscio

Pedro M. Tognetti. *Community ecology*
 Advisor: E. Chaneton

Nicolás Trillo. *Wheat crop ecophysiology*
 Advisor: R. Fernández-Aldúncin

Andrea Uchitel. *Community ecology*
 Advisor: E. Chaneton

Virginia Verges. *Germination physiology*
 Advisor: R. Benech-Arnold

Fernando Troiano. *Population ecology*
 Advisor: M. Aguiar

Technical and support staff

Oscar Jiménez. *Field assistant*
 (until 2002)

Mirta M. Rabadán. *Technician*
(ecological research)

Prof. Roberto Oscar Tornese. *Technician*
(Instrument maintenance and development)

Laura Ventura. *Assistant technician*
 (since 2004)

Ing. Agr. Lucila A. Viganó. *Technician*
(crop research)
 (since 2003)

Juan Carlos Villardi. *Technician*
 (since 2003)

Ing. Agr. Jazmín Vrsalovic.
Administrative and research technician

Administrative staff

Silvia E. González. *Secretary*
 (until 2002)

María Sol López. *Secretary*
 (since 2002)

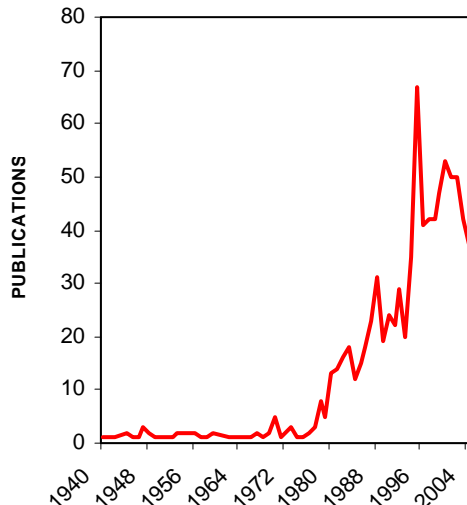
Christian Micieli. *Secretary*
 (until 2002)

Domingo Arcuri. *General services.*

Cerbanda Villalba. *General services*

Scientific Output

Papers in scientific journals



Abeledo, L.G., D.F. Calderini & **G.A. Slafer.** 2003. Genetic improvement of barley yield potential and its physiological determinants in Argentina (1944-1998). *Euphytica*, 130:325-334.

Abeledo, L.G., D.F. Calderini & **G.A. Slafer.** 2004. Leaf appearance, tillering and their coordination in old and modern barleys from Argentina. *Field Crops Research*, 86:23-32.

Acosta, A., J.J. Grigera Naón, G. Acosta & **V.A. Deregibus.** 2001. Digestion characteristics of Dallis Grass (*Paspalum dilatatum*, Poir) pastures during the grazing season. *Animal Feed Science and Technology*, 93:247-254.

Adler, P.B., D.G. Milchunas, W.K. Lauenroth, **O.E. Sala** & I. Burke. 2004. Functional traits of graminoids in semi-arid steppes: A test of grazing histories. *Journal of Applied Ecology*, 41: 653-663.

Aguiar, M.R. & W.K. Lauenroth. 2001. Local and regional difference in abundance of codominant grasses in the shortgrass steppe: a modelling analysis of potential causes. *Plant Ecology*, 156:161-171.

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Books

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Lavado, R.S. 2001. Aguas y sustratos para la producción ornamental. Ediciones New Plant, Buenos Aires, 109 pp.

Satorre E.H., Benech-Arnold R.L., Slafer G.A., Otegui M.E., de la Fuente E.B., Miralles D.J. & Savin R. (eds.) Producción de Cultivos de Granos. Bases Funcionales para su manejo. Editorial Facultad de Agronomía, Buenos Aires.

Chapin III, F.S., **O.E. Sala** & Huber-Sannwald, E. (Eds.) 2001. Global biodiversity in a changing environment. Scenarios for the 21st century. Ecological Studies, Springer, New York. 152pp.

Naveh, Z., M. Liberman, F. Sarmiento, **C.M. Ghera & R.J.C. León.** 2002. Ecología de paisajes. Teoría y aplicación. Editorial FAUBA, Buenos Aires, 571 pp.

Slafer, G.A., J.L. Molina-Cano, R.Savin, J.L. Araus & I. Romagosa. 2002. Barley science: recent advances from molecular biology to agronomy of yield and quality. Food Product Press, New York, 664 pp.

Publications for the general public

Fernández, R.J. 2002. Do humans create deserts? (Meeting Report). *Trends in Ecology and Evolution*, 17:6-7.

Oesterheld, M., M. Semmartin & A. Hall. 2002. Análisis bibliográfico de la investigación agronómica en la Argentina. *Ciencia Hoy*, 12:50-62.

Ravetta, D.A., D. Wassner & A.E. Vilela. 2002. Recent advances in the development of *Grindelia* as a new crop. *AgroFood Industry, Hi-Tech*. 13:27-30.

Paruelo, J.M. & M.R. Aguiar. 2003. Impacto humano sobre los ecosistemas. El caso de la desertificación. *Ciencia Hoy*, 13:48-59.

Slafer, G.A. 2001. Trigos franceses: rendimientos en danza. *Revista SuperCampo*, 76:46-49.

Yanovsky, M.J. & Casal, J.J. 2004. How Plants "See". *Natural History*, 113:32-37.

Short notes & comments

Ballaré, C.L. 2001. Circadian maestro leads plant gene expression symphony. *Trends in Genetics*, 17:130.

Ballaré, C.L. 2001. Circadian maestro leads plant gene expression symphony. *Trends in Plant Science*, 6: 96-97.

Ballaré, C.L. 2001. Phototropism: a family business. *Trends in Plant Science*, 6:403.

Ballaré, C.L. 2002. Bifunctional promoter mediates suppressing effect of pathogen infection on UV – induced responses. *Trends in Plant Science*, 7: 241-242.

Helbling E.W., **Ballaré C.L.**, Villafañe V.E. 2001. Impacts of ultraviolet radiation on aquatic and terrestrial ecosystems. *J. Photochemistry Photobiology B: Biology*, 62:vii-ix.

United Nations Environment Programme, Environmental Effects Assessment Panel (Andrady A, **Ballaré C.L.**,... *et al.*) 2004. Environmental effects of ozone depletion and its interactions with climate change: Progress report 2003. *Photochemical and Photobiological Sciences*, 3:1-5.

Sala, O.E. 2001. Price put on biodiversity. *Nature*, 412:34-36.

Sala, O.E. 2003. (Almost) All About Biodiversity. *Science*, 299:1521.

Ballaré, C.L. 2001. Smart plants or stealthy bugs? *Trends in Plant Science*, 6:142.

Scientific meetings

The members of the Institute have attended and presented their work in the following scientific meetings.

Year 2001

1^{er} Encuentro Binacional de Ecología, XX Reunión Argentina de Ecología, X Reunión de la Sociedad de Ecología de Chile, SC de Bariloche, Argentina.

Jornadas Argentinas de Botánica, Santa Rosa, La Pampa, Argentina.

Reunión Anual de la Sociedad de Biología de Chile, Pucón, Chile.

Ecological Society of America, Madison, Wisconsin, USA.

XIII Jornada de Fitosociología (Condiciones extremas y vegetación. Cambio climático y desertización).

Dpto. de Biología Vegetal, Area de Botánica. Universidad de León, España.

44th Symposium International Association of Vegetation Science. Freising, Alemania.

International Geosphere Biosphere (IGBP) Global Change Open Science Conference, Amsterdam, Netherlands.

Dahlem Konferenzen "An Integrated Assessment of the Ecological, Meteorological, and Human Dimensions of Global Desertification", Berlín, Germany.

XV Congreso de la Asociación latinoamericana de Malezas y X Jornadas Venezolanas Científico-Técnicas en Biología y Combate de Malezas, Maracaibo, Venezuela.

The 5th New Crops Symposium. New Crops and New Uses: Strength in Diversity. The Association for the Advancement of Industrial Crops.

International Conference. Atlanta, Georgia.

IUFRO Intl. Symp.: Developing the Eucalypt of the Future. Valdivia, Chile.

Jornada Tecnológica del XVI Congreso Nacional de los Grupo CREA, Mar del Plata, Argentina.

VII Congreso Nacional de Maíz, Pergamino, Argentina.

V Congreso Nacional de Trigo y III Simposio Nacional de Cereales de Siembra Otoño-Invernal. Carlos Paz, Argentina.

Seminario Internacional sobre "Estrategias y Metodologías Utilizadas en el Mejoramiento de Trigo" CIMMYT, Colonia, Uruguay.

IX International Symposium on Preharvest sprouting in Cereals, South Africa.

XXX Congreso Argentino de Genética y IV Jornadas Argentino-Uruguayas de Genética, Mar del Plata, Argentina.

21ª Reuniao de la Comissao Brasileira de Pesquisa de Aveia, Lages, Brasil.

IV Seminario Internacional de Sanidad de las Plantas. Varadero, Cuba.

X Simposio Latinoamericano y VII Simposio Argentino de Farmacobotánica. Comodoro Rivadavia, Argentina.

XV Encontro de Mirmecologia. Londrina, Brazil.

24to Congreso Argentino de Producción Animal. Rafaela, Santa Fe. Argentina.

XIX International Grassland Congress, Sao Paulo Brasil.

Reunión Anual sobre Forrajeras, Pergamino.

6th. Symp. Intl. Soc. Root Research; Roots: The Dynamic Interface Between Plants and the Earth. Nagoya, Japan.

19th Annual Missouri Symposium, Plant Photobiology. Photobiology in the natural environment. USA

Year 2002

29th International Symposium on Remote Sensing of Environment. Buenos Aires, Argentina.

45th Symposium International Association of Vegetation Science. Porto Alegre, Brazil.

Workshop on Resource Pulse Use in Arid Ecosystems, Tucson, AZ. USA.

Stanford Energy Modeling Forum. Workshop on Climate Change Impacts and Integrated Assessment. Snowmass, Colorado, USA.

Biodiversity Scenarios Design Meeting, Millennium Ecosystem Assessment, Port of Spain, Trinidad.

Annual Meeting of the Ecological Society of America, Tucson, Arizona, USA.

AAAS Annual Meeting and Science Innovation Fair, American Assoc. for the Advancement of Science. Boston, MA, USA (Invited Symposium presentation)

7 Jahrestagung des Arbeitskreises Experimentelle Ökologie, Gesellschaft für Ökologie. Freising, Deutschland.

XVth International Plant Protection Congress. Beijing, China.

Congress of the International Association of Vegetation Science (IAVS). Porto Alegre, Brasil.

Congreso Brasileiro de Soja e
Mercosoja, Foz do Iguazu, Brasil.

Taller interdisciplinario sobre aspectos
genéticos, moleculares y fisioecológicos
del *Lotus spp.* y sus simbioses.

Instituto de Investigaciones
Biotecnológicas -Instituto Tecnológico
de Chascomús. IIB-INTECh. (UNSAM-
CONICET). Chascomús. Provincia de
Buenos Aires. Argentina.

V Congreso Latinoamericano de
Sociedades de Estadística. Buenos
Aires, Argentina.

XIV International Biophysics Congress
(IUPAB), Buenos Aires, Argentina.

Eigth Meeting of the Society for
Research on Biological Rhythms.,
Amelia Island Plantation, Florida, USA.

First Conference EPSO (European Plant
Science Organisation), Brunnen,
Switzerland.

VII International Workshop on Seed
Biology, Salamanca, Spain.

XIII International Conference on
Arabidopsis Research. Sevilla, Spain.

IX Reunión Latinoamericana de
Fisiología Vegetal, XXIV Reunión
Argentina de Fisiología Vegetal, I
Congreso Uruguayo de Fisiología
Vegetal. Punta del Este, Uruguay.

Genotype - Phenotype: Narrowing the
Gaps. Conference of the Association of
Applied Biologists, Cirencester, UK.

Simposio sobre Biofísica de Plantas.
Reunión de la Sociedad Argentina de
Botánica. Argentina.

XVII Jornadas forestales de Entre Ríos.
Argentina.

V Congreso Argentino de Entomología,
Buenos Aires, Argentina.

Congreso Mundo Maíz, Buenos Aires.
Argentina.

25 Congreso Argentino de Producción
Animal.

Year 2003

XXIX Jornadas Argentinas de Botánica y
XI Reunión Anual de la Sociedad
Botánica de Chile. San Luis, Argentina.

1º Reunión de Ecología de Uruguay.
Montevideo, Uruguay.

7th International Conference on the
Ecology and Management of Alien Plant
Invasions. Ecological Society of
America. Fort Lauderdale, Florida, USA.

89th Meeting of the Ecological Society of
America, Savannah, Georgia, USA.

15th Annual International Conference of
the Society for Ecological Restoration,
Austin, Texas. USA

International Young Scientists Global
Change Conference. Trieste, Italia.

BES Soil Biodiversity and Function,
Lancaster University, Lancaster, UK.

Solving problems with industrial crops,
Annual Meeting, Association for the
Advancement of Industrial Crops,
Portland, Oregon, USA.

2º Congreso Argentino del Girasol.
Buenos Aires. Argentina.

I Jornada de Actualización en Cebada
cervecera: El Cultivo de Cebada y la
Producción de Malta. Facultad de
Agronomía, UBA. Argentina.

Seminario Internacional, CIMMYT-INIA,
Colonia, Uruguay.

Congreso Mundo Soja, Buenos Aires,
Argentina.

26 Congreso Argentino de Producción
Animal.

Primer Simposio Iberoamericano de
Eucalyptus globulus. Montevideo,
Uruguay.

X Jornadas Técnicas Forestales y
Ambientales. Fac. Ciencias Forestales,
Univ. Nac. Misiones. El Dorado,
Misiones, Argentina.

XVIII Jornadas Forestales de Entre Ríos. INTA y Asoc. Ing. Agron. Noreste (Secc. E. R.) Concordia, Entre Ríos, Argentina.

XVI Simposio de Mirmecología. Soc. Brasileira de Mirmecologia, Florianópolis, Brazil.

XXXII Congreso Argentino de Genética
XXXVI Congreso Chileno de Genética y
IV Jornadas Argentino-Chilenas de Genética, Huerta Grande, Córdoba, Argentina.

5^{tas} Jornadas de Preservación de Agua, Aire y Suelo en la Industria del Petróleo y del Gas. Mendoza, Argentina.

Insights and tools for adaptation: learning from climate variability. NOAA Workshop, Washington DC., USA.

VIII Reunión Científica Grupo Argentino de Biometría y Segunda Jornada en Actividades de Extensión: Estadística Ambiental, Mendoza, Argentina.

IX Congreso Brasileiro de Fisiología Vegetal, Atibaía, Brasil.

XIV International Conference on *Arabidopsis* Research. Madison, WI, USA.

Simposio sobre "Plasticity in plant morphogenesis" organizado por el Instituto Juan March de Estudios e Investigaciones de Madrid. Spain.

"OPTIMISE" *Optimisation of Water Use by Plants in the Mediterranean* Conference, co-organized by Association of Applied Biologists/ European Union/Rothamsted Research Institute/Univ. Islas Baleares, Mallorca, Spain.

International Plant Photobiology Meeting. Marburg, Germany

Year 2004

II Reunión Binacional de Ecología. XXI Reunión Argentina de Ecología. XI Reunión de la Sociedad de Ecología de Chile, Mendoza, Argentina.

Annual Meeting of the Ecological Society of America, Portland, Oregon, USA

5th International Symposium on *Neotyphodium*/Grass Interactions, Fayetteville, Arkansas, USA.

MODIS Vegetation Workshop II. Montana, USA.

Taller interdisciplinario sobre aspectos genéticos, moleculares y fisiocológicos del *Lotus spp.* y sus simbioses. Chascomús. Provincia de Buenos Aires. Argentina.

V Reunión Iberoamericana de Óptica y VIII Encuentro Latinoamericano de Óptica, Láseres y Sus Aplicaciones. Porlamar, Venezuela.

Taller Interinstitucional sobre pastizales de la Cuenca del Salado: Investigación, Experimentación, Extensión. Chascomús. Argentina.

XX Reunión Del Grupo Técnico Regional del Cono Sur en Mejoramiento y Utilización de los recursos Forrajeros del Area Tropical y Subtropical – Grupo Campos. Salto, Uruguay.

27^o Congreso Argentino de Producción Animal. Tandil, Argentina.

IV International Weed Science Congress, Durban, South Africa.

VI Congreso Nacional de Trigo / IV Simposio Nacional de Cultivos de Siembra Otoño-Invernal. Bahía Blanca, Argentina.

Congreso A Todo Trigo. Mar del Plata, Argentina.

'Super-Wheat' Symposium, Kaifeng, China.

Congreso Mundo Maíz - Integrando la cadena de valor. Buenos Aires, Argentina.

7th Internacional Oat Conference, Helsinki, Finland.

4th International Crop Science Congress, Brisbane, Australia.

16th International Sunflower
Conference, International Sunflower
Association: Fargo, North Dakota, USA.

VII World Soybean Research
Conference, Londrina, Brasil.

Intl. Conference IUFRO *Eucalyptus* in a
Changing World. Aveiro, Portugal

Ciencia das Plantas Danhinas. San
Pedro, Brazil.

XL Annual Meeting, Argentine Society
for Biochemistry and Molecular Biology,
SAIB, Iguazú, Misiones, Argentina.

XXV Reunión Argentina de Fisiología
Vegetal. Santa Rosa, La Pampa,
Argentina.

III Symposium on Plant Dormancy.
Wageningen, Holland.

58th Yamada Conference, Light Sensing
and Signal Transduction in Plant
Photomorphogenesis. Okasaki, Japan.

XIX Congreso Argentino de la Ciencia
del Suelo, Paraná, Entre Ríos,
Argentina.

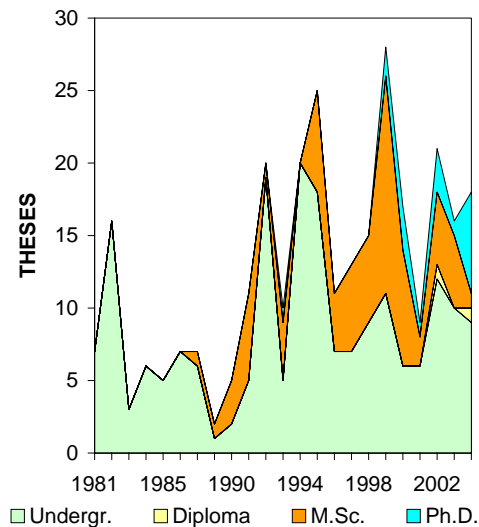
Jornadas de Biología de Suelos,
Centenario FAUBA. Argentina.

X Reunión Argentina y IV
Latinoamericana de Agrometeorología.
Mar del Plata. Argentina.

IX Reunión Científica Grupo Argentino
de Biometría, La Rioja, Argentina.

Teaching & training activities

Postgraduate theses



Ph.D. theses

* At the Alberto Soriano Graduate School, Faculty of Agronomy, UBA

Diego Batlla, 2004. Regulation of cyclic changes in the dormancy level of *Polygonum aviculare* seeds due to water availability and soil temperature. A simulation model.

Betina C. Kruk, 2002. Functional and quantitative assessment of weed emergence in the wheat crop.

Gustavo Maddonni, 2002. The structure of maize canopy and its relationship with the light environment. Effects of plant spatial arrangement and genetic material.

Gustavo D. Marino, 2004. Environmental controls of mycorrhizal infection in humid grasslands.

C. Noemí Mazía, 2004. Patterns and controls of herbivory in forests of the Northern Patagonia.

Carlos A. Mazza, 2001. Effect of ultra-violet-B radiation on cultivated plants.

Verónica Pancotto, 2004. Effect of ultraviolet-B radiation on ecosystem functioning.

María Semmartín, 2004. Grazing-derived effects on nitrogen cycling in a grassland ecosystem.

María Laura Yahdjian, 2004. Structural and biogeochemical constrains on primary productivity: mechanisms explaining spatial and temporal variation.

* At the Faculty of Exact and Natural Sciences, UBA

María José Burgin, 2002. Photocontrol of *Datura ferox* L. seed germination: physiological and molecular aspects.

Carla Giordano, 2004. Effects of solar ultraviolet-B radiation on *Gunnera magellanica*, a native plant of Tierra del Fuego.

Karina A. Oliverio, 2003. Regulation of the sensitivity to signals perceived by the phytochrome A in *Arabidopsis thaliana*.

M.Sc. theses

* At the Alberto Soriano Graduate School, Faculty of Agronomy, UBA

Sergio A. Cepeda, 2002. Seed bank dynamics of *Tagetes minuta* (L.) under different tillage and crop systems.

Ariela Cesa, 2003. Direct evidences of grazing impacts in Patagonian steppes.

Ana María Garau, 2003. Tolerance strategies to water stress caused by weed competition during the establishment of *Eucalyptus*.

Martín F. Garbulsky, 2004. Distribution and functioning of protected areas in Argentina. Functional differences with areas under agricultural use.

Héctor R. Huarte, 2002. Characterization of annual weed emergence in alfalfa fields in relation to thermal and light environments generated by plant canopies.

Elizabeth J. Jacobo, 2003. Assessment of changes in vegetation structure and soil properties due to grazing management in Flooding Pampa grasslands.

Varinia V. Jouve, 2003. Aerial net primary productivity of the Patagonian steppes. Environmental controls and assessment by remote sensing.

Fernanda Menvielle, 2003. Invasion of *Melia azedarach* in El Palmar National Park savanna. Effects of a single fire pulse.

Santiago L. Poggio, 2002. Intercropping of pea and winter crops. Effects on weed communities.

Federico A. Rizzo, 2001. Physiological basis for the establishment of *Cynodon dactylon* L. Pers from vegetative structures.

Martín Vila-Aiub, 2001. Tolerance of *Lolium multiflorum* to the herbicide Diclofop metil: effects of sublethal doses and *Neotyphodium* endophytes.

Pilar Vilariño, 2002. Assessment of defense mechanisms in lupine genotypes with high and low levels of constitutive alkaloids.

Liliana Windauer, 2002. Response of the *Lesquerella* genus to environmental variations: a study of their influence on oil quality and quantity with a view to optimization of yield.

Diploma theses

* At the Alberto Soriano Graduate School, Faculty of Agronomy, UBA

Matías C. Ermarcora, 2004. Relative importance, management and decision criteria for the chemical control of foliar diseases in northern Buenos Aires agroecosystems.

Fernando Solari, 2002. Assessment of crop and soil variables as indicators of soil degradation.

Undergraduate theses

Agronomy

José María Amores, 2002. Validation of predictive models of wheat (*Triticum aestivum*) diseases with genotype and environment.

María Celeste Balbi, 2003. Photoperiod, genotype and length of pre-floral ontogenic stages in sunflower.

Andrés E. Berney, 2003. Use of pre-anthesis photoassimilates during the grain filling stage in sunflower (*Helianthus annuus* L.): a study of ancient and modern cultivars.

Federico E. Bert, 2002. Competitive relations between soybean (*Glycine max* L. Merr.) and weed communities of northern Buenos Aires. Its use for the assessment of the most efficient period of control.

Federico Bock, 2002. Interannual and seasonal variation of the productivity of five vegetation units of the North-eastern Argentina. Impact of great floods.

Martín Cantore, 2003. Physiological assessment of the "stay green" trait in sunflower and its relationship with crop yield.

Mariano Cossani. 2004. Monitoring of wheat crop yields in SW Buenos Aires by remote sensing.

Martín M. Covalschi, 2003. Controls of spatial heterogeneity in the vegetation of the Patagonian steppe.

Federico Elorza, 2002. Competition processes in wheat (*Triticum aestivum* L.) and pea (*Pisum sativum* L.) polycultures.

Matías C. Ermarcora, 2002. Foliar disease dynamics and their management in different wheat (*Triticum aestivum*) cultivars.

- Lucas Garibaldi, 2004. Grazing effects on decomposition rates and nitrogen and phosphorus dynamics of litter in a Flooding Pampa grassland.
- María Cristina Giallorenzi, 2002. Dormancy breakage in barley and its relationship with ABA content and sensitivity of the embryos.
- Gonzalo Grigera, 2003. Grazing effects on mycorrhizal colonization of two grassland communities.
- Nicolás A. Gualano, 2004. Nature of differential sensitivity to ABA in grain sorghum lines of contrasting pre-harvest sprouting.
- Pedro E. Gundel, 2004. Resistance to diclofop-metil in *Lolium multiflorum* and its relationship with germination.
- Guillermo Indaco, 2002. Short flooding events during grain filling stage in sunflower (*Helianthus annuus* L.): effects on yield and its components.
- Gonzalo Irisarri, 2004. Identification of forage species by hyperspectral remote sensing analysis.
- Alejandro Jacum, 2002. The effects of thermal stress on the final weight of sunflower (*Helianthus annuus* L.) achenes.
- Pablo Ignacio Maccor, 2002. Response to density in three pea (*Pisum sativum* L.) cultivars. Plant mortality and yield components.
- Juan M. Magaz, 2001. Hormonal regulation of dormancy in barley grains: identification of some physiological mechanisms involved by using the TL 43 mutant.
- Matías Marcantonio, 2001. Osmotic adjustment in maize: its relationship with yield, biomass production and water consumption.
- Fernando Negri, 2004. Foliar diseases in wheat (*Triticum aestivum*): interactions.
- Juan I. Pearson, 2002. Effect of osmotic adjustment expression level on grain number and weight in sunflower (*Helianthus annuus* L.) exposed to water stress.
- Darío Rivero, 2004. Dormancy in *Pseudotsuga menziesii* seeds and its relationship with regenerative success in the northcentral region of the Patagonian Andes.
- Daniel Rodano, 2004. Estimation of vegetation carrying capacity for sheep by combining satellite and floristic information in Patagonia.
- Andrés Rolhauser, 2002. Plant communities of *Butia yatay* savannas in El Palmar Nacional Park.
- José Luis Rotundo, 2001. Effect of sowing depth and litter on the recruitment of Patagonian grasses threatened by overgrazing.
- Verónica Satragno, 2004. Variation in primary productivity of pastures in relation to age and soil.
- Gustavo G. Striker, 2001. Plastic responses of *Paspalum dilatatum* to photomorphogenetic signals related to grazed or closed canopies.
- Pedro Maximiliano Tognetti, 2003. Predictability of post-agricultural succession in grasslands of the Inland Pampa.
- Nicolás Trillo, 2003. Changes in the hydraulic architecture of wheat plants in response to drought.
- Manuel Vadillo, 2003. Spatial and temporal variation of productivity in grasslands of the Flooding Pampa.
- Virginia Verges, 2001. Effect of after-ripening temperature on changes in the sensitivity to alternating temperatures of *Polygonum aviculare* seeds.

Biology

Germán Baldi, 2002. Landscape fragmentation in the Río de la Plata Grasslands region: a spatial quantification using LANDSAT TM images.

Esteban Fernández, 2003. Osmotic adjustment capacity of two *Eucalyptus* spp. populations.

Lara G. Reichmann, 2003. Floristic changes and natural restoration of environments degraded by actions of oil enterprises in the Monte Austral.

Andrea Uchitel, 2001. Disturbance impacts on the invasion dynamics of *Gleditsia triacanthos* in grasslands of the Inland Pampa.

Landscape Planning and Design

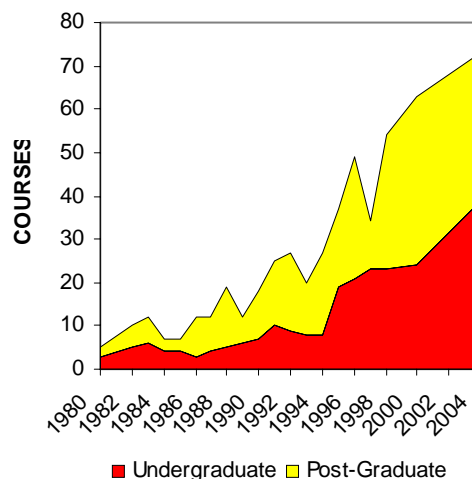
Gabriel Burgueño, 2003. Starting points for a management Plan for the Ing. Roggero reservoir, a natural protected area.

Ana Fiona Mohr-Bell, 2004. A landscape effects of oil industries.

Grisel Longo, 2004. Landscape planning exercise for Potrerillos, Mendoza.

Andrés E. Plager, 2004. Assessment of landscape services in the Esquel region, province of Chubut: possible influences of gold extraction activities.

Courses



Undergraduate

Agronomy

Ecology

M.R. Aguiar, W.B. Batista, S.E. Burkart, E.J. Chaneton, R. Fernandez, C. Ghersa, R.A. Golluscio, R.J.C. León, M.A. Martínez-Ghersa, M. Oesterheld, J.M. Paruelo, S.B. Perelman, O. Sala, M. Semmartin

Soil fertility

R.S. Lavado

Plant physiology

C.L. Ballaré, H. Boccalandro, J.J. Casal, C.A. Chimenti, L.C. de Miguel, A.J. Hall, P. Insausti, J.H. Lemcoff, A. Mella, R.A. Sánchez, A.L. Scopel, N. Trápani

Environmental impact on agroecosystems

R. Fernández, R. Lavado

Statistical models

S. Perelman

Forage production

V.A. Deregibus

Grain production

R.L. Benech-Arnold, E.H. Satorre, G.A. Slafer

Crop production systems

D.A. Ravetta

Workshop I

M. Semmartin

Workshop II

S.E. Burkart, R.J.C. León, O. Sala

Forage production

V.A. Deregibus

Ecophysiological aspects of plant stress
C.A. Chimenti, J.H. Lemcoff, N. Trápani

Ecophysiological basis for weed management in extensive crops
R.L. Benech-Arnold, E.H. Satorre

Physiological basis of wheat and barley development
G.A. Slafer

Data collection and interpretation
S. Perelman

Soil and water contamination
R. Lavado

Yield and quality determinants
G.A. Slafer

Ecophysiology applied to crop breeding
G.A. Slafer

Sunflower ecophysiology
C.A. Chimenti, N. Trápani

Evaluation of forage resources
J.M. Paruelo, M. Oesterheld

Non-woody plant fibers for paper. Alternatives for their production in Argentina
D. Ravetta

Yield physiology of wheat and maize
G.A. Slafer

Seed physiology and technology
R. Benech Arnold

Functioning of rangeland ecosystems
M.R. Aguiar y R.A. Golluscio

Heterogeneity of forage resources at the regional and landscape scales
W. Batista, R.J.C. León

Crop management II. Resources availability
E.H. Satorre

Secondary metabolites for industrial applications: Resins, oils and rubbers
D. Ravetta

Laboratory methods for the extraction and characterization of plant products of economic interest (oils, resins, rubber, essential oils, waxes, and proteins)
D. Ravetta

New sources of plant oils for industrial use
D. Ravetta

Non-traditional oil crops
D.A. Ravetta

Biochemical responses to stress in plants
R.A. Mella

Plant responses to flooding
P. Insausti

Environmental risk in the agricultural sector: Evaluation and remediation
R.S. Lavado

Use of fertilizers in intensive crops and non traditional environments
R.S. Lavado

Landscape Planning and Design

Landscape ecology
W.B. Batista, C.M. Ghersa, R.J.C. León, J.M. Paruelo

Plant physiology
A. Mella y R. Sánchez

Agricultural Economy and Administration

Ecosystem ecology
M.R. Aguiar, E.J. Chaneton, R. Fernández, R.A. Golluscio, J.M. Paruelo, O.E. Sala, C.M. Ghersa

Environmental Sciences

Statistical models
S. Perelman

Diploma in Floriculture and Gardening

Plant physiology
J.J. Casal, L. de Miguel, P. Insausti, J.H. Lemcoff, N. Trápani

Plant stress
P. Insausti

Post-graduate

* At the Alberto Soriano Graduate School, Faculty of Agronomy, UBA

Control of plant growth and development
J.J. Casal, R.A. Sánchez

Crop ecophysiology
A.J. Hall

Seed ecophysiology
R.L. Benech-Arnold, R.A. Sánchez

Crop ecology
E.H. Satorre

Weed ecology
C.M. Ghersa

Plant and cell physiology under stress conditions
P. Insausti, J.H. Lemcoff

Physiology of forage plants
V.A. Deregibus

Photobiology: ultraviolet-B radiation and terrestrial plants responses
C.L. Ballaré, A.L. Scopel

Genetic breeding of forage species
V.A. Deregibus, G. Schrauf

Simulation models for agronomic applications.
A.J. Hall

Special topics in plant biology
C.L. Ballaré, A.L. Scopel

Regional ecosystem assessment using remote sensing
J.M. Paruelo

Analysis of vegetation heterogeneity
W.B. Batista, R.J.C. León, S.B. Perelman

Biophysical basis of water and energy interchange in ecosystems
R. Fernández Aldúncin

Biodiversity
O.E. Sala, E.J. Chaneton, R.J. Fernández

Ecology of plant-herbivore interactions
M. Oesterheld, E.J. Chaneton

Grassland ecology
R.A. Golluscio, O.E. Sala

Plant population ecology
M.R. Aguiar, W. B. Batista

Ecology of arid zones
O.E. Sala

Fundamentals and recent advances in ecology
M.R. Aguiar, E.J. Chaneton, J.M. Paruelo

Statistical methodology
S.B. Perelman

New cultures for arid zones
D.A. Ravetta

Grasslands and savannas of Argentina
R.J.C. León, M. Oesterheld, J.M. Paruelo

Agroecosystem sustainability
C.M. Ghera, A. Martínez-Ghera

Use of systemic methods for the solution of agronomic problems
C.M. Ghera, A. Martínez-Ghera, S.B. Perelman

Grassland management
V.A. Deregibus

Linear algebra II
S.B. Perelman

Applied statistics in biological research
S.B. Perelman

Statistical methods
S. Perelman

Soil fertility and fertilizer use
Docentes: R.S. Lavado

Physical processes of soil degradation
R.S. Lavado

Soil-plant relationships
R.S. Lavado, J.H. Lemcoff

Preparing and publishing scientific papers
M. Oesterheld

Applied statistics in biological research
S.B. Perelman

Outreach and services

Conferences

M. Aguiar, R. Perea and S. Aguiar. Primary and secondary dispersal of grass species in the Patagonian steppe. Plant Dispersal and Migration workshop. Montpellier, France, 2001.

M. Aguiar y M. Román. Workshop on "Restoring natural capital: Emerging countries of the South. Prince Albert, South Africa, 2004.

M. Aguiar y S. Perelman. Ecología, Agronomía y Sustentabilidad. Jornada de Sustentabilidad de la Agroindustria en Argentina, organizada por la Fundación FAUBA, 2004.

C. Ballaré. XIX Ann. Symp. "Current Topics Plant Biochem. Physiol. Mol. Biol": Plant Photobiology. Invited. Univ. Missouri, Columbia, MO, USA, 2001.

C. Ballaré. AAAS Annual Meeting and Science Innovation Fair, American Assoc. for the Advancement of Science. Boston, MA, USA. 2002.

C. Ballaré. XIII Reunión Nac. de Botánica, Soc. Bot. de Chile. Univ. La Serena, La Serena, Chile. 2001.

C. Ballaré. International Plant Photobiology Meeting. Marburg, Germany. 2003.

C. Ballaré. Primer Taller Parlamento Latinoamericano sobre Cambio Climático, Honorable Senado de la Nación. Buenos Aires, Argentina. 2004.

R. Benech-Arnold. Physiological and molecular aspects of the control of dormancy and germination in developing sorghum caryopses. VII International Workshop on Seeds. Salamanca, Spain. 2002.

R. Benech-Arnold. Physiological, molecular and environmental control of dormancy in grain crops. III Symposium on Plant Dormancy. Wageningen, Holland, 2004.

J.J. Casal. "Phytochrome signaling circuitry". Reunión de la SAIB, 2001.

J.J. Casal. "Red de señalización de los fitocromos en plantas". Reunión de la SAB, 2002.

J.J. Casal. "Signal transduction in sensory systems" Symposium. XIV International Biophysics Congress (IUPAB), Buenos Aires, Argentina. Light signaling circuitry in plants, 2002.

J. J. Casal. "Plasticity in plant morphogenesis" Symposium. Instituto Juan March de Estudios e Investigaciones de Madrid. Light signalling circuitry in plants, 2003.

J. J. Casal. IX Congreso Brasileiro de Fisiología Vegetal, Atibaia. Fotomorfogénesis, 2003.

J. J. Casal. Phytochrome-ABA genetic network regulates responses to light environment. European Symposium on Plant Morphogenesis, Marburg, Germany, 2003.

J.J. Casal. 58th Yamada Conference: Light Sensing and Signal Transduction in Plant Photomorphogenesis, Okasaki, Japan, 2004.

E. Chaneton. Competencia aparente, diversidad y resistencia a la invasión en comunidades vegetales. Simposio de la XX Reunión Argentina de Ecología, Bariloche, 2001.

E. Chaneton. Cascadas tróficas en redes de insectos fitófagos y sus enemigos naturales: el papel de los mutualismos. Simposio Ecología de Insectos. V Congreso Arg. de Entomología, Buenos Aires, 2002.

- E. Chaneton. Controles de la diversidad de especies exóticas en los pastizales de la Pampa Deprimida. Simposio Binacional de Invasiones de Plantas Exóticas. XXIX Jornadas Arg. de Botánica, San Luis, 2003.
- C. M. Ghersa. Factores que controlan la estructura de la comunidad de los bosques a lo largo de un gradiente de precipitaciones en el NO de USA y la Patagonia argentina. II Reunión Binacional de Ecología. Mendoza, Argentina, 2004.
- C. M. Ghersa. Spatial variability in weed populations related to natural and management ecological factors. IV International Weed Science Congress. Durban, South Africa, 2004.
- R.J.C. León. La ecología del paisaje, una nueva y vieja disciplina. Asociación Química Argentina. Buenos Aires, 2002.
- R.J.C. León. Heterogeneidad Ambiental y Diseño del Paisaje. Diez años de la carrera de Licenciatura en Planificación y Diseño del Paisaje, FADU-FAUBA, 2003.
- R.J.C. León. Educación de Arquitectura del Paisaje. Reunión Región Occidental 2004, IFLA (International federation of Landscape Architects). Buenos Aires, 2004.
- R.J.C. León. Ecología del paisaje, Academia Nacional de Agronomía y Veterinaria. Buenos Aires, 2004.
- R.J.C. León. 40 años en la Sociedad Argentina de Botánica. Museo Argentino de Ciencias Naturales Bernardino Rivadavia, Buenos Aires, 2004.
- C. A. Mazza, A. L. Scopel y C. L. Ballaré. Efectos de la radiación ultravioleta-B en agro-ecosistemas. XXIII Reunión Argentina de Fisiología Vegetal, 2001.
- D.J. Miralles y G.A. Slafer. Fisiología del trigo: Series of 4 conferences for Bayer Crop Science (Argentina), accesible in internet (<http://www.bayercropscience.com.ar/>) 2003.
- M. Oesterheld. "La investigación agronómica argentina. Su relación con la formación de posgrado". Jornada sobre "La formación de posgrado en la Argentina". Facultad de Ciencias Agrarias, Universidad Nacional de Rosario. Rosario, 2002.
- M. Oesterheld. Variación temporal de la producción forrajera evaluada mediante sensores remotos. Alcances y limitaciones. 25º Congreso Argentino de Producción Animal. Buenos Aires, 2002.
- M. Oesterheld. Bases ecológicas de la sustentabilidad ambiental. Seminario: La sustentabilidad ambiental de la cosecha de 100 millones. Bolsa de Cereales. Buenos Aires, 2003.
- M. Oesterheld. Scientific impact of Sam McNaughton. Celebrating the legacy of Samuel J. McNaughton. Syracuse, 2004.
- M. Oesterheld. Fortalezas y debilidades de las ciencias agropecuarias de Argentina. XVII Congreso Nacional CREA, Jornadas Tecnológicas CREA. Mar del Plata, 2004.
- M. Oesterheld. Sensores remotos y su aplicación a la producción agropecuaria. XVII Congreso Nacional CREA, Jornadas Tecnológicas CREA. Mar del Plata, 2004.
- M. Omacini. Linking endophytes and ecosystem functioning. 5th International Symposium on *Neotyphodium*/Grass Interactions, Fayetteville, Arkansas, USA, 2004.
- J.M. Paruelo. Uso de sensores remotos para la descripción de la heterogeneidad del paisaje. XVII Congreso Nacional CREA, Jornadas Tecnológicas CREA. Mar del Plata, 2004.
- D. Ravetta. Desarrollo del cultivo de *Lesquerella* en Argentina. Seminario Internacional de Cultivos Oleaginosos especiales. Organizado por FIA, Ministerio de Agricultura, Gobierno de Chile. Universidad de Concepcion, Chillan, Chile, 2004.

- O.E. Sala. The role of biodiversity and climate in the functioning of ecosystems. Workshop to identify areas of scientific collaboration between the US and the AMPATH service area. Florida International University, Miami, Florida, USA, 2001.
- O. E. Sala. Vertical water fluxes control carbon and nutrient cycling in semiarid ecosystems. American Geophysical Union, Chapman Conference, Eco-hydrology of semiarid landscapes: interactions and processes. Taos, New Mexico, USA, 2002.
- S. Ollinger and O. E. Sala. New frontiers in the study of element interactions. SCOPE Rapid Assessment Project on Element Interactions. Karolinum University, Prague, Czech Republic, 2002.
- O.E. Sala and A.T. Austin. Spatial heterogeneity of carbon cycling in the Patagonian steppe. Cary Conference 2003, New York, USA, 2003.
- A.T. Austin and O.E. Sala. Regional variation in litter decomposition and ecosystem processing along a natural rainfall gradient in Patagonia, Argentina. Cary Conference 2003, New York, USA, 2003.
- O.E. Sala. Biodiversity and Global Change in the Americas: Impacts on Ecosystem Functioning. InterAmerican Institute for Global Change Research, Science Forum, Boulder, Colorado, USA, 2003.
- O.E. Sala. Report of the Secretary General, SCOPE 47th Open Executive Committee Meeting, Granada, Spain, 2003.
- O.E. Sala. Biodiversity Scenarios, Millennium Ecosystem Assessment, Global Scenarios Workshop, Copenhagen, Denmark, 2003.
- O.E. Sala. A 2003 Review of the GEO 2000 Future Perspectives, SCOPE/UNEP GEO 2003 Meeting, Paris, France, 2003.
- O.E. Sala. Ecosystem Services. Indicators of Aggregate Ecosystem Services: Current Status, Future Options. A Meeting of the State of the Nation's Ecosystems Project. The H. John Heinz III Center for Science, Economics and the Environment, Jonsson Center, National Academy of Science, Woods Hole, MA USA, 2004.
- R. A. Sánchez. El fotocontrol de la germinación. XXV Reunión de la SAFV, Santa Rosa, La Pampa, 2004.
- E. Satorre. Tecnología clave en el manejo del cultivo de soja en la región centro de Buenos Aires. 14^o Reunión Abierta del CREA Roque Pérez – Saladillo y Regional II Sur AAPRESID, Buenos Aires, 2001.
- E. Satorre. Siembra Directa, Biotecnología y Sistemas de Producción Agrícola en el Norte de Santa Fe. Jornada Técnica de la Zona Norte de Santa Fe de AACREA, Avellaneda, Santa Fe, 2001.
- E. Satorre. Bases para el Manejo de la Fertilización en maíz. Jornada Técnica de Soja y Maíz, organizada por Asoc. Don Mario y Golden Harvest Arg., Pergamino, 2001.
- E. Satorre. Las posibilidades ambientales y tecnológicas de la pradera pampeana para la producción de granos. Seminario *Las Ciento y Una*, Hacia los 100 millones de toneladas de granos y la exportación de 1 millón de toneladas de carnes. Bolsa de Cereales, Buenos Aires, 2003.
- E. Satorre. Marco conceptual de la sustentabilidad: El suelo y la aplicación de pronósticos climáticos. Seminario *Sustentabilidad de la Producción Agrícola*, Buenos Aires, 2004.
- E. Satorre. Análisis de tecnologías para el cultivo de girasol en la región semiárida. 2^o Jornada Técnica Agrícola en la Región Semiárida de AACREA., Buena Esperanza, San Luis, 2004.

E. Satorre. *Proyectando técnicamente la campaña 2004-05*. Jornada de Actualización Agrícola, Región CREA Litoral Sur, Urdinarrain, Entre Ríos, 2004.

E. Satorre. *Resultados del Plan Nacional de Trigo*. Presentación del programa de diagnóstico de fertilización: TRIGUERO. Jornada de Actualización Técnica de Trigo, Zona Centro de AACREA. Cañada Seca, Buenos Aires, 2004.

G.A. Slafer. *Productividad de cereales de estación fría: impacto del mejoramiento genético y características fisiológicas asociadas*. 21ª Reuniao de la Comissao Brasileira de Pesquisa de Aveia, Lages, Santa Catarina, Brasil, 2001.

G.A. Slafer. *Factores ecofisiológicos determinantes del rendimiento en trigo y su relación con la campaña entrerriana*. Reunión Anual del Colegio de Profesionales de la Agronomía de Entre Ríos (COPAER), Paraná, 2001.

G.A. Slafer. *Herramientas Fisiológicas para el Mejoramiento del Rendimiento de Trigo*. Seminario Internacional sobre "Estrategias y Metodologías Utilizadas en el Mejoramiento de Trigo" CIMMYT. Colonia-Uruguay, 2001.

G.A. Slafer. *Fisiología de la determinación del rendimiento en trigo*. Reunión mensual de Productores de ACA (Asociación de Cooperativas Argentinas de Cordoba). Justiniano Posse, Córdoba, 2002.

G.A. Slafer. *Relación entre la publicación científica y la docencia de grado en la universidad*. Jornada sobre "Publicación Científica en Ciencias Agrarias". Fac. Cs. Agrarias, Universidad Nacional de Rosario. Zavalla-Santa Fe, 2002.

G.A. Slafer. *Rendimiento potencial y contribuciones al mismo del germoplasma frances*. Simposio sobre "El cultivo de trigo, en el marco de una agricultura sustentable de alta producción". X Congreso de la Asociación Argentina de Productores en Siembra Directa - AAPRESID. Rosario-Santa Fe, 2002.

G.A. Slafer. *Mitos y realidades acerca de las bases genéticas del rendimiento: el punto de vista de un fisiólogo de la realidad y de necesidades futuras*. Taller Regional del Cono Sur sobre "Fisiología del Rendimiento en Trigo: Avances Recientes y su Utilidad Práctica en Mejoramiento". Taller Regional del Cono Sur. CIMMYT-INIA, Colonia-Uruguay, 2002.

G.A. Slafer. *Genetic basis of yield as viewed from a crop physiologist's perspective*. Conference of the Association of Applied Biologists "Genotype - Phenotype: Narrowing the Gaps". The Royal Agricultural College, Cirencester, UK, 2002.

G.A. Slafer. *Promising traits in the improvement of cereal yields in Mediterranean environments*. Conference co-organized by Association of Applied Biologists/European Union/Rothamsted Research Institute/Univ. Islas Baleares "OPTIMISE *Optimisation of Water Use by Plants in the Mediterranean*", Univ. Islas Baleares, Mallorca, España, 2003.

G.A. Slafer. *Physiological determination of grain number and its importance to breeding*. 'Super-Wheat' Symposium. Kaifeng, Henan, China, 2004.

G.A. Slafer. *Yield and stability in cereals: past achievements and future progress*. 7th Internacional Oat Conference. Helsinki, Finland, 2004.

Institutional

Martín R. Aguiar

- Member, Teaching Staff Evaluation Committee, FAUBA, 2000-2001.

- Member, Departamental Board, Natural Resources and Environment. FAUBA, 2002-2003.

Carlos L. Ballaré

- Member, Advisory Committee, Biological Sciences and Health, CONICET, 2000-2002.

- Member, Environmental Effects Panel. United Nations Environment Programme. 2002-present.

Roberto L. Benech-Arnold

- Member, Advisory Committee, Agricultural Sciences, CONICET, 2002-2003.
- Coordinator, Plant Production M.Sc. Programme. Alberto Soriano Graduate School, FAUBA, 2003-2004.

Jorge J. Casal

- Member, Evaluation Committee, Teaching Staff Incentive Programme, 1999-present.
- Member, Departamental Board, Applied Biology and Food, 1999-2001.
- Member, Advisory Committee, Agricultural Sciences, Engineering and Materials, CONICET, 2000-2002.
- Substitute Member, Faculty Council, FAUBA, 2002-2004.
- Member, Technical Advisory Committee 6, UBA, 2002-2004.
- Representative for Argentina, *Arabidopsis thaliana* International Committee for Functional Genomics.

Enrique J. Chaneton

- Member, Departamental Board, Natural Resources and Environment. FAUBA, 2000-2004.
- Evaluator, British Council–Antorchas Foundation fellowships, 2001.
- Member, Board of Directors, Ecological Society of Argentina. 2001-2002.

Claudio A. Chimenti

- Adjunct Coordinator, Aid and Semi arid zone Doctoral Degree and M.Sc. Programme, Alberto Soriano Graduate School, FAUBA.
- Member, Diploma Committee, FAUBA.

- Member, Committee for Foreign Students, Grade Degree Validation and Biological Sciences, Ministry of Education, Science and Technology.

Claudio M. Ghersa

- Evaluator, Ministry of Education, Argentina, 1998-2004.
- Member, Advisory Committee, Agricultural sciences, CONICET, 2003-2004.
- Member, Departamental Board, Natural Resources and Environment. FAUBA, 2004-2005.

Rodolfo A. Golluscio

- Member, Diploma Committee, FAUBA.
- Coordinator, Natural resources M.Sc. Programme, Alberto Soriano Graduate School, FAUBA, 2002-2004.
- Member of the Preparation and Evaluation Committee of the ACCEDE test Programme (Analyses of the Knowledge and Abilities the Students Really Have), CONEAU.
- Evaluator of research proposals for the development of adaptive technologies for small farmers of Argentina (PROINDER Programme, BIRF 4212-AR).

Antonio J. Hall

- Director, Alberto Soriano Graduate School, FAUBA, 2001-2004.
- Member, Entry & Promotion Committee, CONICET, 2002-2004.

Pedro Insausti

- Member, Departamental Board, Applied Biology and Food, FAUBA, 2002-2004.

Jorge H. Lemcoff

- Director, Flower Production and Parks & Gardens Diplomes, FAUBA, 2002-2003.

- Deputy-Director, Career of Landscape Planning & Design degree, FAUBA and Faculty of Architecture, 2002-2003.

- Director, Departamental Board, Applied Biology and Food, FAUBA, 2001.

Rolando J.C. León

- External Reviewer, University of La Plata, 2001; University of Cuyo, 2001.

- Director, Advisory Committee, Bunge y Born Foundation Awards, 2001.

- Member, Advisory Committee, Parodi Award, Botanical Society of Argentina, 2001.

- Member, Academic Council, Alberto Soriano Graduate School, FAUBA, 2001-2003.

- Member, Advisory Committee, Biological Sciences. CONICET, 2002.

- Evaluator, Natural Resources Committee, National Agency for Science and Technology, Buenos Aires, 2004.

- Member, Patagonian Region Committee, FONCyT. Buenos Aires, 2004.

- Member, Editorial Board, Plant Biosystems, Italia, 2004.

- Member, Emeritus Professors Selection Committee, UBA, 2004-present.

Alejandra R. Mella

- Member, Departamental Board, Applied Biology and Food, FAUBA, 2001-2004.

Martín Oesterheld

- Member, Advisory Committee, Biological Sciences, CONICET, 2000-2002.

- Member, Advisory Committee for Science and Technology, UBA, 2001-2002.

- Member, Advisory Committee, Agricultural Sciences, CONICET, 2002-2003.

- Evaluator, ANPCyT, 2003.

- Deputy director, Alberto Soriano Graduate School, FAUBA, 2001-2004.

- Member, Board of Directors, EUDEBA, 2004.

- Member, Advisory committee, Biological Sciences, CONICET, 2004.

- Member, Ethics Committee, SECTIP.

Susana B. Perelman

- Member, Academic Committee, M.Sc. Programme, Maimónides University.

José M. Paruelo

- Member, Advisory Committee N° 5, UBA.

- Member, Advisory Committee, Agricultural Sciences, CONICET.

Damián Ravetta

- Coordinator, Area 8, FONCyT, ANPCyT, 2004.

Oswaldo E. Sala

- Secretary-General, Scientific Committee on Problems of the Environment (SCOPE), 2001-present.

- Member, "Scientific Advisory Committee of Diversitas, An International Programme of Biodiversity Science", IUBS, SCOPE, UNESCO, ICSU, IGBP-GCTE, and IUMS, 2001.

- Member, Executive Committee of Scientific Committee on Problems of the Environment (SCOPE), 2001.

- Member, Scientific Committee, Red Latinoamericana de Botánica, 2001.

- Member, Scientific Committee, "Vida Silvestre" Foundation. 2000-2004.

- President, Ecological Society of Argentina, 2001.

- President, Red Latino Americana de Botánica, 2001-2004.

- Member, Governing Board, Ecological Society of America, 2002-2004.

- Member, Entry & Promotion, CONICET, 2004.

Rodolfo A. Sánchez

- Coordinator, Ph.D. Programme, Alberto Soriano Graduate School, FAUBA.

- Coordinator, Agricultural Sciences Advisory Committee, CONICET, 2002.

Emilio Satorre

- Evaluator, research proposals, Universities of Buenos Aires, La Plata, Rosario, Litoral and Entre Ríos, and CONICET and ANPCyT.

- Coordinator, Agricultural Technology Area, AACREA. 1990-2004.

- Academic Coordinator, Technology Area, AACREA. 2002-2004.

- Council Member, Centro Nacional de Investigaciones Agropecuarias, INTA, 2002-2004.

María Semmartín

- Member, Member, Departamental Board, Natural Resources and Environment. FAUBA, 2004.

Gustavo Slafer

- Coordinator, Plant Production M.Sc. Programme, Graduate School, FAUBA, 2001-2003.

- Coordinator, Actualization Programme, Graduate School, FAUBA. -AACREA, 2001-2003.

- Member, Panel of Experts, INCO-MED Program, European Union, Bruselas, 2002-2003.

- Miembro, Advisory Committee, Agricultural Sciences, CONICET, 2001-2003.

- Member, Selection Committee, National Programme for Agrifood Technology & Resources, Ministry of Science and Technology, Madrid, 2004.

Nora Trápani

- Director, Department of Applied Biology and Foods. 2001-present.

Editorial boards

In addition to serving on various editorial boards, staff members regularly review papers for a wide range of scientific journals.

Carlos L. Ballaré

- Plant Physiology: Editor 2000-present.

- Journal of Photochemistry and Photobiology. B: Biology: Invited Editor, special issue on SPARC workshop on biological impacts of UV radiation 2001.

- Trends in Plant Science (Elsevier Science London): Board of Journal Club Authors 2000-2003.

Jorge J. Casal

- Plant Molecular Biology: Editor

- Photochemical and Photobiological Sciences: Editor

- Spanish Journal of Agricultural Research: Associate Editor .

Enrique J. Chaneton

- Plant Ecology: Associate Editor.

Rodolfo A. Golluscio

- Ecosystems: Editorial Board member, 2001-2004.

Antonio J. Hall

- Field Crops Research: Editorial Board member, 2001-2004.

Rolando J.C. León

- Ecología Austral: Editorial Board member, 2001-2004.

- Plant Biosystems: Editorial Board member, 2004.

Martín Oesterheld

- Environmental and Experimental Botany: Editorial Board member, 2002-2004
- Plant Ecology: Associate Editor, 2004

Damián Ravetta

- Journal of Arid Environments: Editorial Board member, 2001-2003; Editor-in-Chief, 2004.

Oswaldo E. Sala

- Global Change Biology: Editorial Board member 1994-2003. Editor 2003-2004.
- Ecosystems: Editorial Board member, 1997-2004.
- Climate Research: Editorial Board member, 1992-2004.
- Oecologia: Editorial Board member, 1994-2004.

Gustavo Slafer

- Journal of Crop Production: Editor 2001-2004.
- Australian Journal of Plant Physiology: International Advisory Panel, 2003-2004.
- Field Crops Research: Editorial Board member, 2004.
- European Journal of Agronomy: Editorial Board member, 2004.

Nora Trápani

- Editorial Facultad de Agronomía UBA: Editorial Board member.

Consulting

Roberto L. Benech-Arnold

- FAUBA/Monsanto Argentina. Assessment of the susceptibility to pre-harvest sprouting in parent lines of grain sorghum, 2003-2004.

- FAUBA/Nitragin S.A. Evaluation of new techniques for coating maize seeds, 2003-2004.

Víctor A. Deregibus

- Bermuda grass and Fescue pastures. Their use in the States of Alabama, Georgia and Kentucky, USA, 2004.
- Commercial development of supplements for ruminants VOERMOL FEEDS (South Africa), 1996-2002.

Rodolfo A. Golluscio

- FAUBA/Compañía de Tierras Sur Argentino S.A. (Ea. Leleque, Ea. El Maitén y Ea. Pilcañeu) and FAUBA/Compañía de Tierras Tecka S.A. Diagnosis of the status of forage resources and grassland management (with J.M. Paruelo).

Martín Oesterheld

- FAUBA/MAAyP, Land use evaluation system for the Province of Buenos Aires. (<http://www.agro.uba.ar/users/lart/estimacionesagricolas/>), 2003-2004.
- FAUBA/AACREA On-line analysis of the evolution and estimation of annual wheat yields of the SE and Sea & Hills regions of Buenos Aires, 2004.
- FAUBA/Cazenave y Asoc. S.A. On-line analysis of the evolution and estimation of annual maize yields in the Pampas Region, 2004-2005.
- FAUBA/ADECO Agropecuaria S.A. Generation of an spatially explicit model (GIS) to facilitate the decision taking process about the magnitude and distribution of agriculture, and the design of monitoring protocols for agricultural and non-agricultural regions to evaluate their sustainability, 2004-2005.

José M. Paruelo

- FAUBA/Government of San Luis Province, Description of ecosystem functioning in the "Pioneros Siglo XXI" enterprise, 2002.

- FAUBA/CEPAL, ANPP estimations for Latin America and the Caribbean and changes during the last two decades. Agreement, 2003.
- FAUBA/FAO/WORLD BANK, Study of temporal and spatial patterns of the soybean crop expansion in Argentina; an analysis of its relationships with social and economic factors; an assessment of the environmental sustainability (with M. Oesterheld), 2004.
- FAUBA/INAI, Assessment of the natural resources in public lands #55 and #14 of the Salta Province. (with M. Oesterheld), 2004.
- FAUBA/GeoAgris S.A. and FAUBA/OVIS XXI S.A., Spreading of the satellital technology applied to the agricultural sector, and development of technology related to the needs of the sector (with M. Oesterheld), 2003-2004.

Emilio Satorre

- FAUBA/La Biznaga SAACIF&M, Production technology for Maize, Soybean and Wheat crops in the S of Entre Ríos Province, 2003–ongoing..
- FAUBA/La Biznaga SAACIFyM, El Tejar S.A. and Los Grobo, Modeling of production areas in the Pampean region, 2003–ongoing.

Awards

Martín R. Aguiar

- UBATEC Award, 2004, "Technology transfer": "The use of remote sensing and ecology in agrarian issues".

Carlos L. Ballaré

- Guggenheim Fellow, 2001.

Roberto L. Benech-Arnold

- Invited Professor: Universite Pierre et Marie Curie (Paris, Francia), 2003 and 2004.

- Invited Professor. Department of Horticulture and Crop Science. Ohio State University, 2003.

- Advisor, Diploma Thesis of Nicolás Gualano. Second Prize, Dow-Elanco and FAUBA, 2004.

Jorge J. Casal

- Guggenheim Fellow, 2002.
- Merit Diploma, Fundación Konex, 2003.

Claudio M. Ghersa

- Fulbright Research Award, 2003.

Rodolfo A. Golluscio

- UBATEC Award, 2004, "Technology transfer": "The use of remote sensing and ecology in agrarian issues".

Antonio J. Hall

- Member, National Academy of Agronomy and Veterinary Science. Argentina, 2004.
- Editors' Citation for Excellence in Manuscript Review, Agronomy Journal, 2004.

Jorge H. Lemcoff

- R. Thalmann Fellowship, UBA, 2001.

Rolando J.C. León

- Honorary Life Member, Argentine Society of Botany, 2003.
- Lecture hall of the Genetics building, FAUBA, named after him, 2004.

Martín Oesterheld

- UBATEC Award, 2004, "Technology transfer": "The use of remote sensing and ecology in agrarian issues".
- Best Poster Prize, XIX Argentine Conference on Soil Science, 2004 (with G. Piñeiro Guerra and J.M. Paruelo).

José M. Paruelo

- UBATEC Award, 2004, "Technology transfer": "The use of remote sensing and ecology in agrarian issues".
- Best Poster Prize, XIX Argentine Conference on Soil Science, 2004 (with G. Piñeiro Guerra and M. Oesterheld).

Gervasio Piñeiro Guerra

- UBATEC Award, 2004, "Technology transfer": "The use of remote sensing and ecology in agrarian issues".
- Best Poster Prize, XIX Argentine Conference on Soil Science, 2004 (with J.M. Paruelo and M. Oesterheld).

Damián Ravetta

- AAIC Outstanding Researcher. Association for the Advancement of Industrial Crops, 2003.
- Bernardo Houssay Award, CONICET, 2003.
- National Congress Award, 2004.
- UBATEC Award, 2004, "Technology transfer": "The use of remote sensing and ecology in agrarian issues".

Oswaldo E. Sala

- Member, National Academy of Sciences, Córdoba, Argentina, 2002.
- Member, American Academy of Arts and Sciences, USA, 2003.
- Member, National Academy of exact, Physical & Natural Sciences, Buenos Aires, 2003.
- Bernardo Houssay Award, CONICET, 2003.
- Konex Platinum Award, 2003.
- Andrew D. White Professor- at- Large. Cornell University. USA, 2004.

Rodolfo A. Sánchez

- Bunge & Born Award. Agronomy, 2002
- Emeritus Professor, UBA, 2004.

Emilio H. Satorre

- "Golden Spike" Award- 32^a Fiesta Provincial del Trigo, Tres Arroyos, 2001.
- FAUBA Award, 2003.
- Professional Excellence Award. Cooperativa Agropecuaria Unión, Argentina, 2004.

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