
PERSONAL DATA

Name: Gustavo Ariel SLAFER LAGO

Degrees: Ing. Agr., MSc., PhD_{Melbourne University - Australia}

PRESENT PROFESSIONAL POSITION

- **Research Professor** of **ICREA** (Catalonian Institution for Research and Advanced Studies) based at the University of Lleida. *This is a permanent, full-time research position. With permission from ICREA I do also currently hold the following positions*
 - **Associate Professor**, Department of Crop and Forest Sciences of the **University of Lleida**
 - **Special Professor**, School of Biosciences, **University of Nottingham**, United Kingdom.
 - **Adjunct Coordinator**, Agriculture Area, **ANEP** (*Spanish National Evaluation and Foresight Agency*)
 - **Member of the Editorial Board of Field Crops Research**, Elsevier, The Netherlands
 - **Member of the Editorial Board of European Journal of Agronomy**, European Society of Agronomy (ESA) and Elsevier, The Netherlands
 - **Associate Editor of Euphytica**, Springer-Verlag, Germany

ACADEMIC BACKGROUND

• PUBLICATIONS

General overview of international publications

I have **edited or co-edited 5 scientific books**, by two different publishers in New York (USA), and **published 29 books chapters** and more than 120 papers in SCI-indexed journals. My H-index at Dic 2009 was 26 considering only papers quoted or 29 considering chapters quoted as well.

Most recent international publications (*only last 4 years, from Jan 2006 to Dec 2009*)

SCI Papers published (*not including 'in press', even less 'under revision'*)

- Windauer, L.B., **Slafer, G.A.**, Ravetta, D.A. & Benech-Arnold, R.L. 2006. Environmental control of phenological development in two *Lesquerella* species. Field Crops Research, **96**:320-327.
- Muurinen, S., **Slafer, G.A.** & Peltonen-Sainio, P. 2006. Breeding Effects on Nitrogen Use Efficiency of Spring Cereals under Northern Conditions. Crop Science, **46**:561-568.
- Calderini, D.F., Reynolds, M.P. & **Slafer, G.A.** 2006. Source-sink effects on grain weight of bread wheat, durum wheat and triticale at different locations. Australian Journal of Agricultural Research, **57**:227-233.
- Acreche, M. & **Slafer, G.A.** 2006. Grain weight response to increases in number of grains in wheat in a Mediterranean area. Field Crops Research, **98**:52-59.
- Cartelle, J., Pedró, A., Savin R. & **Slafer, G.A.** 2006. Grain weight responses to post-anthesis spikelet-trimming in an old and a modern wheat under Mediterranean conditions. European Journal of Agronomy, **25**:365-371.
- Ugarte, C., Calderini, D.F. & **Slafer, G.A.** 2007. Grain weight and grain number responsiveness to pre-anthesis temperature in wheat, barley and triticale. Field Crops Research, **100**:240-248.
- Miralles, D.J. & **Slafer, G.A.** 2007. Sink limitations to yield in wheat: how could it be reduced? Journal of Agricultural Science, Cambridge, **145**:139-149.
- Whitechurch, E.M., **Slafer, G.A.** & Miralles, D.J. 2007. Variability in the duration of stem elongation in wheat and barley. Journal of Agronomy & Crop Science, **193**:138-145.
- Whitechurch, E.M., **Slafer, G.A.** & Miralles, D.J. 2007. Variability in the duration of stem

- elongation in wheat genotypes and sensitivity to photoperiod and vernalization. Journal of Agronomy & Crop Science, **193**:131–137.
- Kantolic, A.G., Mercau, J.L., **Slafer, G.A.** & Sadras, V.O. 2007. Simulated yield advantages of extending post-flowering development at the expense of a shorter pre-flowering development in soybean. Field Crops Research, **101**:321–330.
- Marti, J., Bort, J., **Slafer, G.A.** & Araus, J.L. 2007. Can wheat yield be assessed by early measurements of Normalized Difference Vegetation Index? Annals of Applied Biology, **150**:253-257.
- Kantolic, A.G. & **Slafer, G.A.** 2007. Development and seed number in intermediate soybean as affected by timing and duration of exposure to long photoperiod after flowering. Annals of Botany, **99**:925-933.
- Cossani, C.M. Savin, R. & **Slafer, G.A.** 2007. Contrasting performance of barley and wheat in a wide range of conditions in Mediterranean Catalonia (Spain). Annals of Applied Biology, **151**:167-173.
- Acreche, M., Briceño-Félix, G. Martín Sánchez, J.A. & **Slafer, G.A.** 2008. Physiological bases of genetic gains in Mediterranean bread wheat yield in Spain. European Journal of Agronomy, **28**:162-170.
- Abeledo, L.G., Calderini, D.F. & **Slafer, G.A.** 2008. Nitrogen economy in old and modern malting barleys. Field Crops Research, **106**:171–178.
- Estrada-Campuzano, G., Miralles, D.J. & **Slafer, G.A.** 2008. Genotypic variability and response to water stress of pre and post anthesis phases in triticale. European Journal of Agronomy, **28**:171-177.
- Serrago, R.A., Miralles, D.J. & **Slafer, G.A.** 2008. Floret fertility in wheat as affected by photoperiod during stem elongation and removal of spikelets at booting. European Journal of Agronomy, **28**:301-308.
- Abeledo, L.G., Savin, R. & **Slafer, G.A.** 2008. Wheat productivity in the Mediterranean Ebro Valley: analyzing the gap between attainable and potential yield with a simulation model. European Journal of Agronomy, **28**:541-550.
- Estrada-Campuzano, G., Miralles, D.J. & **Slafer, G.A.** 2008. Yield determination in triticale as affected by radiation in different development phases. European Journal of Agronomy, **28**:597-605.
- Passarella, V.S., Savin R. & **Slafer, G.A.** 2008. Are temperature effects on weight and quality of barley grains modified by resources availability? Australian Journal of Agricultural Research, **59**:510-516.
- Acreche, M., Briceño-Félix, G., Martín Sánchez, J.A. & **Slafer, G.A.** 2008. Radiation interception and use efficiency as affected by breeding in Mediterranean wheat. Field Crops Research, **110**:91-97.
- Acreche, M. & **Slafer, G.A.** 2008. Grain weight, radiation interception and use efficiency as affected by sink-strength in Mediterranean wheats released from 1940 to 2005. Field Crops Research, **110**:98-105.
- Slafer, G.A.** 2008. Should crop scientists consider a journal's impact factor in deciding where to publish? European Journal of Agronomy, **29**:208-212.
- Araus, J.L., **Slafer, G.A.**, Royo, C. & Serret, M.D. 2008. Breeding for Yield Potential and Stress Adaptation in Cereals. Critical Reviews in Plant Science, **27**:377–412.
- Acreche, M., Briceño-Félix, G., Martín Sánchez, J.A. & **Slafer, G.A.** 2009. Grain number determination in an old and a modern Mediterranean wheat as affected by pre-anthesis shading. Crop & Pasture Science (formerly *Australian Journal of Agricultural Research*), **60**:271–279.
- Cossani, C.M., **Slafer, G.A.** & Savin, R. 2009. Yield and biomass in wheat and barley under a range of conditions in a Mediterranean site. Field Crops Research, **112**:205-213.
- Reynolds, M., Foulkes, J., **Slafer, G.A.**, Berry, P., Parry, M.J., Snape, J.W. & Angus, W.J. 2009. Raising yield potential in wheat. Journal of Experimental Botany, **60**:1899–1918.
- Acreche, M., Briceño-Félix, G., Martín Sánchez, J.A. & **Slafer, G.A.** 2009. Radiation interception and use efficiency as affected by breeding in Mediterranean wheat. Field Crops Research,

110:91-97.

- Acreche, M. & Slafer, G.A. 2009. Grain weight, radiation interception and use efficiency as affected by sink-strength in Mediterranean wheats released from 1940 to 2005. *Field Crops Research*, **110**:98-105.
- Borràs, G, Romagosa, I, van Eeuwijk, F & Slafer, G.A. 2009. Genetic variability in duration of pre-heading phases and relationships with leaf appearance and tillering dynamics in a barley population. *Field Crops Research*, **113**:95-104.
- Acreche, M. & Slafer, G.A. 2009. Variation of grain nitrogen content in relation with grain yield in old and modern Spanish wheats grown under a wide range of agronomic conditions in a Mediterranean region. *Journal of Agricultural Science, Cambridge*, **147**:657-667

Chapters in international books

- Slafer, G.A., González, F.G., Kantolic, A.G., Whitechurch, E.M., Abeledo, L.G., Miralles, D.J., & Savin, R. 2006. Grain Number Determination in Major Grain Crops. In: "*Handbook of Seed Science and Technology*" (A.S. Basra, Ed), The Haworth Press, Inc. New York, pp. 95-123.
- Slafer, G.A. & Savin, R. 2006. Physiology of crop yield. In: "*Encyclopedia of Plant and Crop Science*" (R. Goodman, Ed.), Taylor & Francis, New York.
- Slafer, G.A. 2007. Physiology of determination of major wheat yield components. In: "*Wheat Production in Stressed Environments*" (H. Buck, Ed.), Springer, Dordrecht, the Netherlands, pp. 557-565.
- Slafer, G.A. & Araus, J.L. 2007. Physiological traits for improving wheat yield under a wide range of conditions. In: "*Scale and Complexity in Plant Systems Research: Gene-Plant-Crop Relations*" (J.H.J. Spiertz, P.C. Struik & H.H. van Laar, Eds.), Springer, Dordrecht, the Netherlands, pp. 147-156.
- Slafer, G.A., Kantolic, A.G., Appendino, M.L., Miralles, D.J., & Savin, R. 2009. Crop development: genetic control, environmental modulation and relevante for genetic improvement of crop yield. In: "*Crop Physiology: Applications for Genetic Improvement and Agronomy*" (V.O Sadras and D.F. Calderini, Eds), Elsevier, The Netherlands, pp. 277-308.
- Araus, J.L., Slafer, G.A., Reynolds, M.P. & Royo, C. 2009. Breeding for yield potential. In: "*Plant Breeding and Farmer Participation*" (S. Ceccarelli, E.P. Guimaraes and E. Weltzien, Eds), FAO, Rome, pp. 449-478.

• PARTICIPATION IN INTERNATIONAL COORDINATED RESEARCH PROJECTS

- **European Commission, 2005-2009. INCO-MED Program. Management Improvements of WUE and NUE of Mediterranean Strategic Crops (WatNitMED). GA Slafer, Scientific Coordinator of the consortium** [14 partners of 9 different countries] & **Principal Researcher** of Partner 9, Univ of Lleida.
- **European Commission, Jul 2006-Jun 2010. INCO-MED Program. Improving the yield stability of Durum wheat under Mediterranean conditions (OPTIWHEAT). GA Slafer, Principal Researcher** of Partner 5, Univ of Lleida.
- **FONTAGRO** (Internacional Fund for Agricultural Technology of Spain, Latin-American and Caribbean countries). 2009-2012. **Mitigar el Efecto de Altas Temperaturas en la Productividad de Maíz**. Code FTG-0831 **GA Slafer, Scientific Coordinator of the consortium** [4 partners of 3 different countries] & **Principal Researcher** of Partner 1, Univ of Lleida
- - **CYTED** (Iberoamerican Programme of Science and Technology for Development). 2010-2013. **Mejorar la eficiencia en el uso de insumos y el ajuste fenológico en cultivos de trigo y cebada (METRICE)**. International Network, Code 110RT0394. **GA Slafer, Scientific Coordinator of the consortium** [7 partners of 6 different countries] & **Principal Researcher** of Partner 1, Univ of Lleida

In addition I was responsible (IP) of individual projects funded by the Ministry of Science of Spain (Plan Nacional)

• **RECENT PARTICIPATION IN SCIENTIFIC COMMITTEES**

- * Member of the Panel of Experts, INCO-DEV Program, European Union, Brussels, 2000.
- * Member of the Panel of Experts, INCO-MED Program, European Union, Brussels, 2002.
- * Member of the Panel of Experts, INCO-MED Program, European Union, Bruselas, 2003.
- * Member of Evaluating Committees for the National Program of AgriFood Resources and Technologies, Department of Science & Technology of Spain, Madrid. 2004.
- * Member of Research Committee of the Department of Plant Production Forestry of the UdL (2004-)
- * Member of Evaluating Committee for selecting Postdoctoral Researchers for INIAs, 2007
- * I have been Referee of various international journals including

Elsevier Science:

**Field Crops Research
Agronomic
European Journal of Agronomy
Journal of Arid Environments
Agricultural Water Management**

Kluwer Academic Publishers:

**Plant & Soil
Euphytica
Plant Growth Regulation**

CSIRO Publishing:

**Australian Journal of Plant Physiology and then Functional Plant Biology
Australian Journal of Agricultural Research**

Academic Press:

Annals of Botany

Crop Science Society of America:

Crop Science

Oxford University Press:

Journal of Experimental Botany

MTT and Scientific Agricultural Society of Finland:

Agricultural and Food Science in Finland

The Royal Society of New Zealand:

New Zealand Journal of Crop and Horticultural Science

Cambridge University Press:

Journal of Agricultural Science

Blackwell Publishing:

Annals of Applied Biology

• **THESIS SUPERVISED AND PARTICIPATION IN EUROPEAN MASTERS OR DOCTORATE STUDIES**

I was main supervisor of 7 PhD and 2 MSc (by thesis) students (already finished).

I am main lecturer in two PhD courses at the Univ of Lleida

- 'Publishing Scientific Papers' (55 h) within a wider course on Management of Scientific Information
- 'Crop Physiology' (55 h)

• **INVITED PRESENTATIONS IN INTERNATIONAL SCIENTIFIC EVENTS (congresses, conferences, symposia)**

- I have presented 21 papers by invitation of the conference organisation
- Along the last 10 years I delivered invited presentations (either talks in conferences/meetings or invited seminars in international centres) in Argentina; Australia; Brazil; Canada; Chile; China; Finland, Hungary; Lebanon; Mexico; The Netherlands; Tunisia; UK; Uruguay; and USA. The following list includes the latest presentations (2006-08), **in bold when they were in conferences** in plain text when they were invited seminars, were
 - Wheat yield: the relevance of floret primordia survival. Invited virtual (through video-interaction) conference, within the international course on *Plant Organization and Crop Simulation Modeling: Integrating Interdisciplinary Perspectives*. University of Nebraska, Lincoln, USA, January 2006.
 - Physiological determination of grain number. Lebanese Agricultural Research Institute. March 2006.
 - **Do yield QTLs mean anything? A crop-physiology perspective. 3rd UK Cereal Genetics & Genomics Workshop, Norwich, UK. April 2006.**
 - **Comparative performance of wheat and barley in Mediterranean Catalonia. Séminaire Méditerranéen sur les Céréales Irriguées (SMCI), El Kef, Tunisia, May 2006.**
 - Journal's impact factors and having impact. Talk presented at (i) IFEVA-Univ. Buenos Aires. Argentina, Aug. 2006; (ii) School of Agricultural Science, Universidad Austral de Chile. Nov. 2006.
 - **Impact evaluation: traits for N uptake and N utilization. Workshop on "Traits influencing water x N interactions and scope for developing GECROS", University of Nottingham, UK, Jan 2007.**
 - Management Improvements of WUE and NUE of Mediterranean Wheat and Barley. Invited Seminar to CSIRO's Division of Plant Industry, Perth, Australia, March 2007.
 - Photoperiod sensitivity during stem elongation as an avenue to increase wheat yield. SARDI (South Australian Research and Development Institute) & Plant Genomics Centre, Univ of Adelaide (Waite Campus), Australia, Mar 2007.
 - **Compensation between components of wheat yield: is it a feedback process of responses to availability of resources?. International Workshop on 'Crop Physiology Applied to Yield and Quality Determination in Grain Crops', RAICES Network, Mar del Plata, Argentina. September 2007.**
 - **Photoperiod sensitivity during stem elongation as an avenue to increase wheat yield. 3rd International Symposia on Genetics & Breeding of Super Wheat. Kaifeng – China, May 2008.**
 - Biomass Production. OECD Workshop: Sustainability of biofuel production on the landscape. Universidad Politecnica de Madrid, October 2008.
 - **Challenges and opportunities for further improvements in wheat yield. OECD Workshop: Challenges for Agricultural Research. Ministry of Agriculture of the Czech Republic, Prague, April 2009.**
 - Optimizing developmental pattern to maximize spike fertility. International Workshop on Complementary Strategies to Raise Wheat Yield Potential. CIMMYT, El Batán-Mexico, 10-13 November 2009.

• **OTHER MERITS**

Undergraduate lecturing on Crop Production in different Universities along my career

Extension papers (only 2004-2008)

Araus, J.L., Slafer, G.A., Buxo, R. & Romagosa, I. 2005. Productividad en la agricultura prehistórica. Investigacion y Ciencia (edicion española de Scientific American), **340**:38-39.

Araus, J.L., Buxo, R., Slafer, G.A. & Romagosa, I. 2005. La productivitat en l'agricultura prehistòrica: models fisiològics per a la quantificació dels rendiments de cereal com una alternativa als models tradicionals. Cota Zero Revista d'Arqueologia i Ciència, **20**: 139-154.

B) Extension talks (only 2004-2008)

As ICREA Research Professor I participated, invited by the FCRI (Fundació Catalana per a la Recerca i la Innovació), in the programme "Scientist at reach" (El científic a l'abast) in which every 19 Nov (the World Science Day) we discuss with high-school students about science in general and particularly deliver a talk of one of our lines of research. This extension activity was developed in the following sites

- Consell Comarcal de Balaguer, Balaguer, 2004.
- Centre de Recursos Pedagògics del Pla d'Urgell, Mollerussa, 2005.
- Centre de Recursos Pedagògics de l'Alta Ribagorça, Pont de Suert, 2006.
- Servei Educatiu de l'Urgell, Tarrega, 2007.
- IES Guindavols, Lleida, 2008.
- Centre de Recursos Pedagògics del Pallars Sobirà, Sort, 2009

¿Com saben les plantes quan han de florir? Tarragona, Nov. 2008. Invited extension talk in Caixaforum (Obra Social de La Caixa), with the support and advise from Servei de Gestió de la Recerca - Universitat Rovira i Virgili.

Extended CV is available within the website of ICREA: <http://www.icrea.es/pag.asp?id=Gustavo.Slafer>