

**CURRICULUM VITAE**  
**PROF. DR. CHRISTIAN BREDEMEIER**

**PERSONAL DATA**

---

Name: Christian Bredemeier

E-mail: bredemeier@ufrgs.br

Current position:

Associate Professor of UFRGS

(Faculty of Agronomy, Universidade Federal do Rio Grande do Sul, Brazil)

Associate Professor, Post-graduation Programm in Crop Science, Universidade Federal do Rio Grande do Sul, UFRGS, Brazil)

**DEGREES**

---

a) Post-Doc

Universidade Federal do Rio Grande do Sul, UFRGS, Brazil.

b) Doctorate course – Ph.D. in Agronomy

Technical University Munich (Germany), Chair of Plant Nutrition

Thesis: Laser-induced chlorophyll fluorescence sensing as a tool for site-specific nitrogen fertilization evaluation under controlled environmental and field conditions in wheat and maize

c) Master of Science course – M.Sc. in Crop Science

Universidade Federal do Rio Grande do Sul, UFRGS, Brazil.

Dissertation: Predição da necessidade de nitrogênio em cobertura em trigo e aveia  
(Prediction of nitrogen topdressing requirements in wheat and oat)

d) Undergraduate course – Ing. Agr.

Agronomy, Universidade Federal do Rio Grande do Sul, UFRGS, Brazil.

**MAIN RESEARCH AND TEACHING SUBJECTS**

---

- \* Precision agriculture
- \* Remote sensing and its applications
- \* Crop management
- \* Crop physiology
- \* Yield determination of field crops
- \* Soil fertility and fertilizers
- \* Geographical information systems and geostatistics

**PARTICIPATION IN SCIENTIFIC COMMITTEES**

---

- \* Member of the “Brazilian Committee of Wheat Research”
- \* Member of the “Brazilian Committee of Precision Agriculture”
- \* Referee of scientific journals

Ciência Rural

Revista Agropecuária Brasileira

Revista Thesis

Revista de Ciências Agroveterinárias

Revista Biotemas

**PARTICIPATION IN MASTER STUDIES**

---

Currently, Dr. Christian Bredemeier is supervisor of 2 M.Sc. students

## **ADVISOR ACTIVITIES**

---

- \* Currently, Prof. Christian Bredemeier is supervisor of two M.Sc. students and two undergraduate students (research students with scholarship from Brazilian government – CNPq)
- \* Supervisor of one M.Sc. student (already finished).
- \* Co-orientation of a Ph.D. thesis at UFRGS
- \* Supervisor of four undergraduate students (final dissertation).
- \* Supervisor of 28 undergraduate students in the last 4 years (already finished)
- \* Supervisor of four research students (already finished)

## **TEACHING ACTIVITIES**

---

### a) Undergraduate course

- \* Winter cereals (wheat, oat, barley)
- \* Leguminous plants (soybean, beans)
- \* Summer cereals (maize and flooded rice)
- \* Tubers, roots and industrial crops (cassava, potato, sugarcane, tobacco)

### b) Master and doctorate studies

- \* Sustainable crop production systems
- \* Precision agriculture

## **INVITED PRESENTATIONS/TALKS IN SCIENTIFIC AND EXTENSION CONFERENCES**

---

- \* Grain quality of corn. 2010
- \* Challenges of nitrogen fertilization in high-yielding wheat fields. 2010
- \* Grain quality of corn. 2010
- \* Decision criteria for the use of Technologies in wheat. 2009
- \* Good practices for high-efficient use of fertilizers in wheat. 2009
- \* Precision agriculture and sensors for site-specific management. 2008
- \* Limitations and opportunities of cassava. 2008
- \* Yield potential and strategies for minimizing stress of flooded Rice. 2008
- \* Market for corn grains. 2008
- \* Crop management and its influence on corn grain quality. 2007
- \* Grain quality of corn. 2006
- \* Precision agriculture. 2006
- \* Use of sensors in precision agriculture. 2005
- \* Precision agriculture. 2005

## **PUBLICATIONS**

---

### a) Books published

BREDEMEIER, C.; MUNDSTOCK, C.M. Qualidade de grãos de milho (*Grain quality of corn*). 1. ed. Porto Alegre: Evangraf, 2006. v.1. 112p.

BREDEMEIER, C. Laser-induced chlorophyll fluorescence sensing as a tool for site-specific nitrogen fertilization - evaluation under controlled environmental and field conditions in wheat and maize. 1. ed. Aachen (Alemanha): Shaker Verlag, 2005. v.1. 219p.

### b) Chapters in books

MEROTTO, A.; BREDEMEIER, C. Agricultura de precisão aplicada aos NCD (nível crítico de dano) de infestantes (*Precision agriculture applied on weed control*). In: Ribas Vidal; João Portugal;

Francisco Skora Neto. (Org.). Nível crítico de dano de infestantes em culturas anuais. Porto Alegre: Evangraf, 2010, v.1, p.99-113.

c) Papers published

- BREDEMEIER, C. ; SANGOI, L. ; SILVA, P. R. F. ; THOMAS, A. . Exigências hídricas e aumento na eficiência de uso da água em cultivos de verão. Revista Plantio Direto, Passo Fundo (RS), p. 13 - 17, 25 jan. 2010.
- GROHS, D. S. ; BREDEMEIER, C. ; MUNDSTOCK, C. M. ; POLETTI, N. . Modelo para estimativa do potencial produtivo em trigo e cevada por meio do sensor Greenseeker. Engenharia Agrícola, v. 29, p. 101-112, 2009.
- PIANA, A. T. ; SILVA, P. R. F. ; BREDEMEIER, C. ; SANGOI, L. ; VIEIRA, V. M. ; SERPA, M. S. . Densidade de plantas de milho híbrido em semeadura precoce no Rio Grande do Sul. Ciência Rural, v. 38, p. 2608-2612, 2008.
- FREITAS, T. F. S. ; SILVA, P. R. F. ; MARIOT, C. H. P. ; MENEZES, V. G. ; ANGHINONI, I. ; BREDEMEIER, C. ; VIEIRA, V. M. . Produtividade de arroz irrigado e eficiência da adubação nitrogenada influenciadas pela época da semeadura. Revista Brasileira de Ciência do Solo, v. 32, p. 2397-2405, 2008.
- MUNDSTOCK, C. M. ; BREDEMEIER, C. . Qualidade de grãos de milho. SEED News, Pelotas (RS), p. 32 - 33, 01 set. 2006.
- SCHMIDHALTER, U. ; BREDEMEIER, C. ; GEESING, D. ; MISTELE, B. ; JUNGERT, S. . Precision agriculture: spatial and temporal variability of soil water, nitrogen, and plant crop response. Fragmenta Agronomica, v. 11, p. 97-106, 2006.
- SCHMIDHALTER, U. ; BREDEMEIER, C. ; JUNGERT, S. ; BLESSE, D. . Lasersensorik zur Erfassung des Stickstoffstatus und der Biomasse von Pflanzen (Sensoriamento a laser para a determinação do teor de nitrogênio e da biomassa de plantas). Bornimer Agrartechnische Berichte, Postdam (Alemanha), v. 36, p. 29-34, 2004.
- MUNDSTOCK, C. M. ; BREDEMEIER, C. . Dinâmica do afilhamento afetada pela disponibilidade de nitrogênio e sua influência na produção de espigas e grãos em trigo. Revista Brasileira de Ciência do Solo, Vicos, v. 26, p. 141-149, 2002.
- MUNDSTOCK, C. M. ; BREDEMEIER, C. . Disponibilidade de nitrogênio e sua relação com o afilhamento e o rendimento de grãos de aveia. Ciência Rural, Santa Maria/RS, v. 31, n. 2, p. 205-211, 2001.
- BREDEMEIER, C. ; MUNDSTOCK, C. M. . Estadios fenológicos do trigo para a adubação nitrogenada em cobertura. Revista Brasileira de Ciência do Solo, Vicos, v. 25, p. 317-323, 2001.
- BREDEMEIER, C. ; MUNDSTOCK, C. M. ; BUTTENBENDER, D. . Efeito do tamanho das sementes de trigo no desenvolvimento inicial das plantas e no rendimento de grãos. Pesquisa Agropecuária Brasileira, Brasília, v. 36, n. 8, p. 1061-1068, 2001.
- BREDEMEIER, C. ; MUNDSTOCK, C. M. . Regulação da absorção e assimilação do nitrogênio nas plantas. Ciência Rural, Santa Maria, v. 30, n. 2, p. 365-372, 2000.

d) Papers published on scientific conferences: more than 100

**PARTICIPATION ON MASTER AND DOCTORATE EVALUATING COMMITTEES**

- 
- \* Participation on 7 M.Sc. dissertation committees (evaluation)
  - \* Participation on 4 Ph.D. thesis committees (evaluation)

Extended CV is available within the following website:

<http://lattes.cnpq.br/0364795290228832>