

# Gustavo G. T. Camargo

Curriculum Vitae

October 2011

239 Agricultural Engineering Bldg.  
Pennsylvania State University  
University Park, PA 16802

Phone: (814) 865-5616  
Fax: (814) 863-1031  
E-mail: ggc107@psu.edu

## EDUCATION

**Ph.D. The Pennsylvania State University.** 2010 – present.

Major: Agricultural and Biological Engineering

**M.S. The Pennsylvania State University.** 2007 – 2009.

Thesis title: Modeling Energy and Greenhouse Gas Emissions for Farm Scale Production  
Major: Agricultural and Biological Engineering

**B.S. State University of Campinas, Brazil (UNICAMP).** 2001 – 2005.

Major: Agricultural Engineering

## RESEARCH INTERESTS

Sustainability assessment of agro-ecosystems systems. Specific interests include:

- Water, carbon, and nutrient flows
- Energy use
- Global warming impact
- Economics

## RESEARCH EXPERIENCE

**Graduate Research Assistant.** Department of Agricultural and Biological Engineering, Penn State. University Park, PA. 2010 – present.

- Soil-plant system modeling.
- Soil-plant system resources.
- Crop growth modeling for double crop rye biomass production.

- Sustainable dairy cropping systems.

**Agricultural Research Science Engineer.** Rodale Institute. Kutztown, PA. 2011.

- Energy and greenhouse gas emissions evaluation of the Farming Systems Trial (FST) cropping systems.

**Agricultural Research Science Engineer.** Beltsville Agricultural Research Center (BARC), USDA/ARS, Beltsville, MD. 2010.

- Energy and greenhouse gas emissions evaluation of the Farming Systems Project (FSP) cropping systems.

**Graduate Research Assistant.** Department of Agricultural and Biological Engineering, Penn State. University Park, PA. 2007-2009.

- Development of whole farm system models including the Farm Energy Analysis Tool (FEAT).
- Energy and greenhouse gas evaluations of cropping, livestock, and bioenergy systems.

**Undergraduate Research Assistant.** Department of Agricultural Engineering, State University of Campinas. 2003 – 2005.

- Physical damage determination in a post-harvest tomato and orange handling using an impact recording device.
- Physical damage evaluation in post-harvest tomato using an ultra sound device.

## MANAGEMENT EXPERIENCE

**Production Supervisor.** Cutrale Citrus Juices. Auburndale, FL. 2006 – 2007.

- Planned, directed and coordinated activities of employees engaged in orange oil production.
- Coordinated not from concentrate (NFC) orange juice production and storage.

## ARTICLES IN REFEREED JOURNALS

Ferreira, M. D., **Camargo, G. G. T.**, Andreuccetti, C., & Moretti, C. L. (2009). Real time determination of physical impact damage in packing lines and under laboratory conditions and its effects in tomato fruits quality. *Eng. Agríc.*, 29(4), 630-641.

Ferreira, M. D., Franco, A. T. O., Ferraz, A. C. O., **Camargo, G. G. T.**, & Tavares, M. (2008). Tomato quality in different postharvest phases. *Horticultura Brasileira*, 26, 231-235.

Ferreira, M. D., Silva, M. C. d., **Camargo, G. G. T.**, Amorim, L., & Fischer, I. H. (2006). Evaluation of critical points of impact on citrus sorting lines in the state of Sao Paulo. *Rev. Bras. Frutic.*, 28(3), 523-525.

## **RESEARCH PROJECT REPORTS**

**Camargo, G. G. T.**, Seidel R., Richard, T. L. (2011). *Rodale Institute Farming Systems Trail (FST) cropping systems energy and greenhouse gas analysis using the Farm Energy Analysis Tool (FEAT)*, Penn State University, University Park, PA.

**Camargo, G. G. T.**, Ryan, M. R., Mirsky, S., Cavigelli, M., Richard, T. L. (2010). *Energy and greenhouse gas emissions of the Farming Systems Project (FSP) cropping systems at Beltsville Agricultural Research Center (BARC) - USDA ARS*, Penn State University, University Park, PA.

## **PROFESSIONAL PAPERS AND POSTERS**

**Camargo, G. G. T.**, Feyereisen, G. W., Baxter, R. E., Baker, J. M., & Richard, T. L. (2011). *Biofuel potential of cellulosic double crops across the U.S. corn-soybean belt*. Presentation at the American Society of Agricultural & Biological Engineers.

**Camargo, G. G. T.**, Feyereisen, G. W., Baxter, R. E., Baker, J. M., & Richard, T. L. (2011). *Biofuel potential of cellulosic double crops across the U.S. corn-soybean belt*. Presentation at the 6th Frontiers in bioenergy . United States-Brazil Symposium on Sustainable Bioenergy.

**Camargo, G. G. T.**, Feyereisen, G. W., Baxter, R. E., Baker, J. M., & Richard, T. L. (2010). *Biofuel potential of cellulosic double crops across the U.S. corn-soybean belt*. Presentation at the 26th Annual graduate exhibition.

**Camargo, G. G. T.**, Feyereisen, G. W., Baxter, R. E., Baker, J. M., & Richard, T. L. (2010). *Biofuel potential of cellulosic double crops across the U.S. corn-soybean belt*. Presentation at the College of Ag. Sciences /Gamma Sigma Delta Research Expo.

**Camargo, G. G. T.**, Richard, T. L., Owerkerk, E. v., & Anex, R. P. (2009). *Modeling sustainable strategies for farm scale biomass production*. Presentation at the Sun Grant initiative energy conference.

**Camargo, G. G. T.**, & Richard, T. L. (2009). *Modeling sustainable strategies for farm scale biomass production*. Presentation at the Penn State Graduate Exhibition.

**Camargo, G. G. T., & Richard, T. L. (2008).** *Integrating a Northeast livestock farm with the emerging bioenergy industry.* Presentation at the Northeast Renewable Energy Conference.

**Camargo, G. G. T., & Richard, T. L. (2008).** *Integrating a Northeast livestock farm with the emerging bioenergy industry.* Presentation at the Northeast Agricultural and Biological Engineering Conference.

Silva, M. C., Ferreira, M. D., **Camargo, G. G. T.**, Amorim, L., & Fisher, I. H. (2005). *Critical points evaluation of a postharvesting unit for oranges.* Presentation at the XXXIV Congresso Brasileiro de Engenharia Agrícola - CONBEA.

**Camargo, G. G. T.,** Gonçalves, R., & Ferreira, M. D. (2005). *Variation of the ultra-sound wavelength propagation to determine physical damage in tomatoes.* Presentation at the XXXIV Congresso Brasileiro de Engenharia Agrícola - CONBEA.

**Camargo, G. G. T., & Ferreira, M. D. (2005).** *Impact test for Saturn tomato (*Lycopersicon esculentum* Mill.) variety.* Presentation at the 45 Congresso Brasileiro de Olericultura.

**Camargo, G. G. T., & Ferreira, M. D. (2004).** *Evaluation of levels of impact in postharvesting and classification equipment for tomatoes.* Presentation at the XXXIII Congresso Brasileiro de Engenharia Agrícola, CONBEA.

**Camargo, G. G. T., & Ferreira, M. D. (2004).** *Impact test for Carmen tomato (*Lycopersicon esculentum* Mill.) variety.* Presentation at the XXXIII Congresso Brasileiro de Engenharia Agrícola, CONBEA.

**Camargo, G. G. T., & Ferreira, M. D. (2004).** *Impact test for Debora tomato (*Lycopersicon esculentum* Mill.) variety.* Presentation at the 44 Congresso Brasileiro de Olericultura.

**Camargo, G. G. T., & Ferreira, M. D. (2004).** *Physical damage determination of tomatoes using an instrumented sphere.* Presentation at the XII Congresso Interno de Iniciação Científica da UNICAMP.

**Camargo, G. G. T.,** Ferreira, M. D., & Sakai, E. C. (2003). *Impact protector use in vegetable/fruit sorting machine.* Presentation at the Workshop Tomate na Unicamp: Perspectivas e Pesquisas.

**Camargo, G. G. T.,** Ferreira, M. D., & Sakai, E. C. (2003). *Impact protector use in vegetable/fruit sorting machine.* Presentation at the 43 Congresso Brasileiro de Olericultura.

Ferreira, M. D., **Camargo, G. G. T.**, Shu, A. T., Franco, A. T. O., & Chiumarelli, M. (2003). *Comparison between different harvesting methods for Debora tomato variety.* Presentation at the Workshop Tomate na Univamp: Perspectivas e Pesquisas.

Ferreira, M. D., **Camargo, G. G. T.**, Shu, A. T., Franco, A. T. O., & Chiumarelli, M. (2003). *Different harvesting methods comparison for Debora tomato variety*. Presentation at the 43 Congresso Brasileiro de Olericultura.

Ferreira, M. D., Franco, A. T. O., Ferraz, A. C. O., Cortez, L. A. B., **Camargo, G. G. T.**, & Shu, A. T. (2003). *Tomato quality in different stages of postharvest in a traditional system using the K box*. Presentation at the Workshop Tomate na Unicamp: Perspectivas e Pesquisas.

Ferreira, M. D., Franco, A. T. O., Ferraz, A. C. O., Cortez, L. A. B., **Camargo, G. G. T.**, & Shu, A. T. (2003). *Tomato quality in different stages of postharvest in a traditional system using the K box*. Presentation at the 43 Congresso Brasileiro de Olericultura.

## **EXTENSION AND OUTREACH PUBLICATIONS**

Richard, T. L., & **Camargo, G. G. T.** (2011). Greenhouse Gas Emissions Associated with Dairy Farming Systems Webinar. University Park, PA: eOrganic. Available online at <http://www.youtube.com/watch?v=YJLH8goB6TI>

**Camargo, G. G. T.** (2011). Farm Energy Analysis Tool (FEAT). October 2011. Webpage available at <http://www.ecologicalmodels.psu.edu/agroecology/feat/>

## **PROFESSIONAL ACTIVITIES**

### **Technical Reviewer**

*Transactions of the ASABE*

### **Professional Affiliations**

American Society of Agricultural and Biological Engineers (ASABE)  
The Order of the Engineer

### **Consulting**

United State Department of Agriculture (USDA)  
Rodale Institute

## **HONORS AND AWARDS**

2011. Harold V. and Velma B. Walton Doctoral Student Endowment.

1<sup>st</sup> place poster presentation:

**Camargo, G.G.T**, Feyereisen, G, Baxter, R.E., Baker, J., Richard, T.L. (2010). *Biofuel Potential of Cellulosic Double Crops across the U.S. Corn-Soybean Belt*. Presentation at College of Ag. Sciences - - Gamma Sigma Delta Research Expo. University Park, PA.

2<sup>nd</sup> place poster presentation:

**Camargo, G.G.T**, Richard, T.L. (2009). *Modeling sustainable strategies for farm scale biomass production*. Presentation at Penn State Graduate Exhibition. University Park, PA.

2<sup>nd</sup> place poster presentation:

**Camargo, G.G.T.**, Richard, T.L. (2008). *Integrating a Northeast livestock farm with the emerging bioenergy industry*. Presentation at Northeast Agricultural and Biological Engineering Conference. Aberdeen, MD.

1<sup>st</sup> place oral presentation:

**Camargo, G.G.T.**, Gonçalvez, R., Ferreira, M.D. (2005). *Ultra-sound wavelegh propagation velocity variation corelation with tomato physical damage*. Presentation at XXXIV Congresso Brasileiro de Engenharia Agrícola - CONBEA. Canoas, RS, Brazil.

## **COURSES ABROAD**

2009. *Brazil–U.S. biofuels short course – Interdisciplinary education in biofuels*. Fulbright Commission, University of Sao Paulo, Sao Paulo, Brazil. July 2009.

2008. *Comparing the United States and the French Agricultural Systems*. Summer University. AgroParis Tech University, Paris, France. June 2008.

2006. *Post-harvest tour in Florida*. University of Florida, Gainesville, FL. May 2006.

2005. *Customer Relationship Management (CRM)*. State University of Campinas (UNICAMP), Campinas, SP, Brazil. February – July 2005.