

# Caio Luiz dos Santos

716 Farm House Ln  
Ames, Iowa

50011  
E-mail: clsantos@iastate.edu

---

## Education

- B.S., Agricultural Engineering  
College of Agriculture “Luiz de Queiroz” / University of Sao Paulo 2013-2018
- M.S., Crop, Soil, and Environmental Sciences  
University of Arkansas  
Thesis: Managing Corn Nitrogen Fertility in Arkansas Based on Data from  
an Unmanned Aerial System 2018 - 2020
- PhD, Crop Production and Physiology  
Iowa State University 2020 - present

## Publications

### a. Peer-reviewed Papers

- dos Santos, C.L.**, A.F. De Borja Reis, P. Mazzafera, J.L. Favarin. 2018. Determination of the water potential threshold at which rice growth is impacted. *Plants* 7, 48.
- dos Santos, C.L.**, M. Salmerón, and L.C. Purcell. 2019. Soybean phenology prediction tool for the Midsouth. *Agricultural and Environmental Letters*, 4, 190036.
- dos Santos, C.L.**, T.L. Roberts, L.C. Purcell. 2020. Canopy greenness as a midseason nitrogen management tool in corn production. *Agronomy Journal*. 112, 5279-5287.
- dos Santos, C.L.**, T.L. Roberts, and L.C. Purcell. 2021. Leaf Nitrogen Sufficiency Level Guidelines for Midseason Fertilization in Corn. *Agronomy Journal*, 113, 1974-1980.
- dos Santos, C.L.**; Abendroth, L.J.; Coulter, J.A.; Nafziger, E.D.; Suyker, A.; Yu, J.; Schnable, P.S.; Archontoulis, S.V. 2022. Maize Leaf Appearance Rates: A Synthesis From the United States Corn Belt. *Frontiers in Plant Science*, 13.
- Ruiz, A., Trifunovic, S., Eudy, D.M., Sciarresi, S. C., Baum, M., Danalatos, G.J.N., Elli, E.F., Kalogeropoulos, G., King, K., **dos Santos, C.L.**, Thies, A., Pico, L.O., Castellano, M.J., Schnable, P.K., Topp, C., Graham, M., Lamkey, K.R., Vyn, T.J., and Archontoulis, S.V. 2023. Harvest Index has increased over the last 50 years of maize breeding. *Field Crops Research*, 300, 10900.
- dos Santos, C. L.**, Miguez, F. E., King, K. A., Ruiz, A., Sciarresi, C., Baum, M. E., Danalatos, G. J. N., Stellman, M., Wiley, E., Pico, L.O., Thies, A., Puntel, L. A., Topp, C. N., Trifunovic, S., Eudy, D., Mensah, C., Edwards, J. W., Schnable, P. S., Lamkey, K. R., ... , and Archontoulis, S. V. 2023. Accelerated leaf appearance and flowering in maize after four decades of commercial breeding. *Crop Science*, 1–13.

Pessotto, M. V., Roberts, T.L., Bertucci, M., **dos Santos**, C., Ross, J., and Savin, M. 2023. Determining cardinal temperatures for eight cover crop species. *Agrosystems, Geosciences & Environment*, 6, e20393.

## **b. Extension Publications**

**dos Santos, C.L.**, L.C. Purcell, and W.J. Ross. 2018. Developing a new staging system for soybean. In: J.D. Ross (eds.). *Arkansas Soybean Research Series 2016*. (In press). Arkansas Agricultural Experiment Station, University of Arkansas Division of Agriculture, Fayetteville.

**dos Santos, C.L.**, T.L. Roberts and L.C. Purcell. 2020. Nitrogen sufficiency level guidelines for pretassel fertilization in Arkansas. In N.A.Slaton (eds.). *Wayne E. Sabbe Arkansas Soil Fertility Studies 2019*, (In press). Arkansas Agricultural Experiment Station, University of Arkansas Division of Agriculture, Fayetteville.

**dos Santos, C.L.**, T.L. Roberts and L.C. Purcell. 2020. Dark Green Color Index as a midseason nitrogen management tool in corn production systems. In N.A.Slaton (eds.). *Wayne E. Sabbe Arkansas Soil Fertility Studies 2019*, (In press). Arkansas Agricultural Experiment Station, University of Arkansas Division of Agriculture, Fayetteville.

Purcell, L.C., **C.L. dos Santos**, and M. Salmerón. 2021. Soybean Development Stage Predictions. Cooperative Extension Service, University of Arkansas.

## **c. Abstracts**

**dos Santos, C.L.**, M. Salmerón, L.C. Purcell. 2019. Soybean phenology prediction tool for the Midsouth, ASA-CSSA-SSSA International Annual Meeting, November 11. San Antonio, Texas.

**dos Santos, C.L.**, T.L. Roberts, and L.C. Purcell. 2019. Managing corn nitrogen fertility based on data from an unmanned aerial system, ASA-CSSA-SSSA International Annual Meeting, November 11. San Antonio, Texas.

**dos Santos, C.L.**, M. Salmerón, L.C. Purcell. 2019. Soybean phenology prediction tool for the Midsouth, Arkansas Crop Protection Association Meeting, November 19. Fayetteville, Arkansas.

**dos Santos, C.L.**, T.L. Roberts, and L.C. Purcell. 2019. Managing corn nitrogen fertility based on data from an unmanned aerial system, Arkansas Crop Protection Association Meeting, November 20. Fayetteville, Arkansas.

**dos Santos, C. L.**, J.L.C. Baptistella, and R.A. Migliavacca. Desenvolvimento das raízes do algodoeiro submetidas a doses crescentes de fertilizantes minerais e organominerais. In: 14º Encontro nacional de plantio direto na palha, 2014, Bonito. Anais do 14º Encontro nacional de plantio direto na palha. Dourados: Embrapa Agropecuária Oeste, 2014. v. 1.

## **Software**

Soystage – Online decision support tool for the Midsouthern U.S. <a href="http://soystage.uark.edu">http://soystage.uark.edu</a>	2019
-------------------------------------------------------------------------------------------------------------------------------------	------

## **Awards/Recognition**

Outstanding Master's student in the Crop, Soil, and Environmental Sciences Department at the University of Arkansas, 2020.

2<sup>nd</sup> Place in the master's division at Gamma Sigma Delta Student Competition, 2019.  
Fayetteville, Arkansas.

## **Service and Offices Held**

President of the Group of Agricultural Experimentation	2016
Scientific Initiation Scholarship – Sao Paulo Research Foundation (FAPESP)	2017
Vice president of the Crop, Soil, and Environmental Sciences Graduate Student Club	2018
President of the Crop, Soil, and Environmental Sciences Graduate Student Club	2019
Member of the Curriculum Comittee	2019

## **Teaching experience**

Teaching assistant in Soil Fertility (CSES 5114) – University of Arkansas	2019
Teaching assistant in Crop and Soil Modeling (AGRON 525) – Iowa State University	2022 - 2023
Guest Lecturer in Soybean Production (CSES 3322) – University of Arkansas	2023
Teaching assistant in Crop Development, Production, and Management (AGRON 280) – Iowa State University	2023