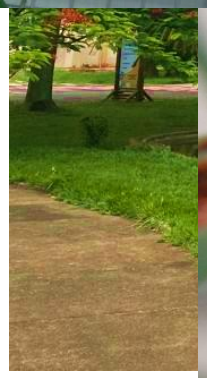
Louisiana Agricultural Technology & Management Conference - 2024

André Bueno Gama, Ph.D.

Introduction and background

- Hometown – Piracicaba, São Paulo, Brazil - an important sugarcane-producing region.
- Undergrad – Agriculture – University of São Paulo – 2010 - 2014
- Intern – Plant Pathology Department – 2012-2014
- Advisor: Dr. Lilian Amorim
- Focus: Orange and Brown Rusts of Sugarcane



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Introduction and background

- Internship in 2014 – Everglades Research and Education Center
- Advisor: Dr. Richard Raid
- Focus: Pineapple disease of Sugarcane – *Ceratocystis paradoxa*

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Introduction and background

- Master’s degree – 2015-2017
- University of São Paulo
- Advisor: Dr. Lilian Amorim
- Part of research: University of Florida
- Focus: Postbloom fruit drop of citrus

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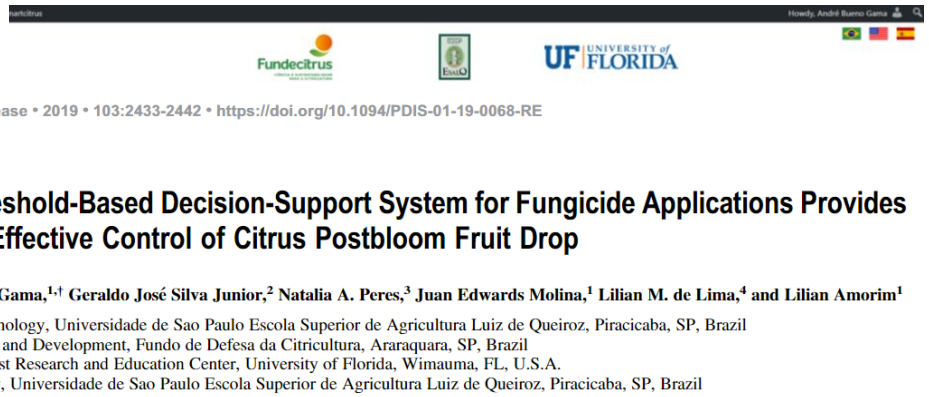
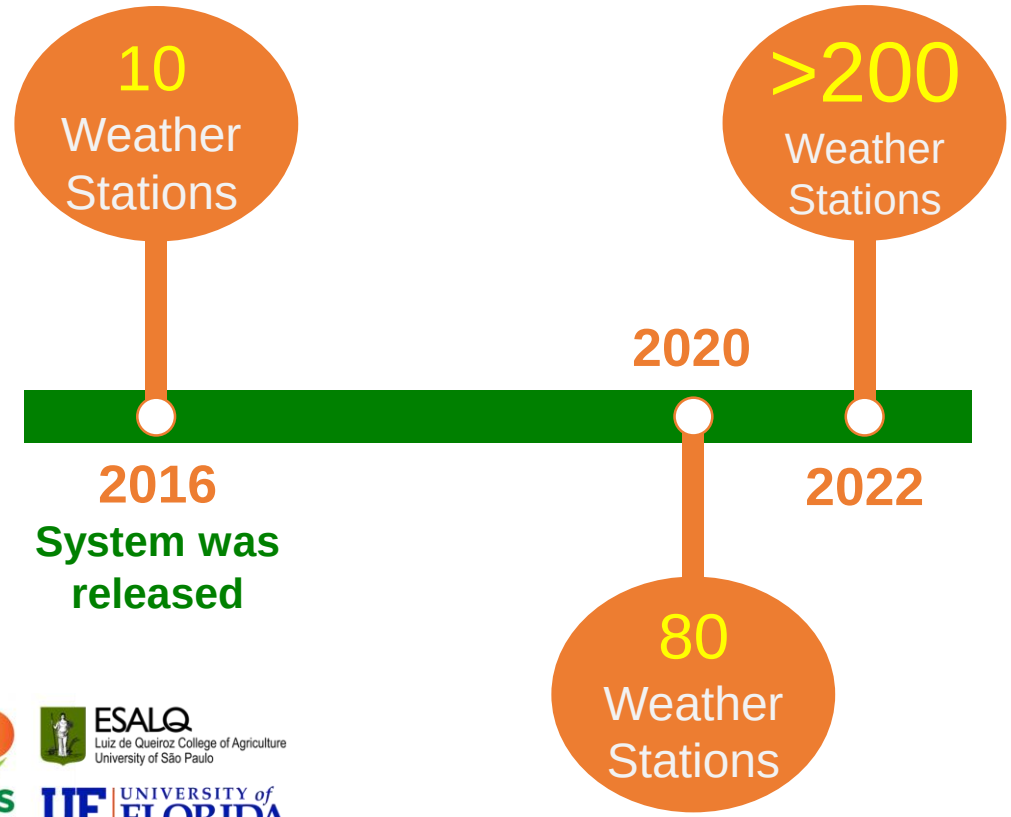
Master's Research – Postbloom fruit drop of citrus – Validating a disease alert system for Brazilian citrus growers

- **Development of a Decision-support system for postbloom fruit drop of citrus in Brazil**
- 33 to 71% fewer fungicide applications in citrus fields than calendar-based applications
- An automated disease alert system for postbloom fruit drop was released and is managed by Fundecitrus





Fundecitrus
CIÊNCIA E SUSTENTABILIDADE PARA A CITRICULTURA
ESALQ
Luiz de Queiroz College of Agriculture
University of São Paulo
UF UNIVERSITY of FLORIDA

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Source: Silva-Junior 2023

Introduction and background

- Ph.D. studies – 2017-2021
- University of Florida
- Advisor: Dr. Megan M. Dewdney
- Co-advisor: Dr. Natalia Peres
- Focus: Postbloom fruit drop of citrus and blueberry and strawberry anthracnose

Ph.D. Research – Optimizing alert systems for diseases caused by *Colletotrichum* spp.

Contents lists available at ScienceDirect

Crop Protection

journal homepage: www.elsevier.com/locate/cropro

Evaluation of disease alert systems for postbloom fruit drop of citrus in Florida and economic impact of adopting the Citrus Advisory System

Andre B. Gama [a], Natalia A. Peres [b], Ariel Singerman [c], Megan M. Dewdney [a,*]

[a] University of Florida, Department of Plant Pathology, Citrus Research and Education Center (GCREC-UF), Lake Alfred, FL, 33850, USA
[b] University of Florida, Department of Plant Pathology, Gulf Coast Research and Education Center (GCREC-UF), Wimauma, FL, 33598, USA
[c] University of Florida, Department of Agricultural Economics, Citrus Research and Education Center (GCREC-UF), Lake Alfred, FL, 33850, USA

Plant Disease • 2021 • 105:1806-1813 • https://doi.org/10.1094/PDIS-09-20-1961-RE

Computers and Electronics in Agriculture 178 (2020) 105781

Contents lists available at ScienceDirect

Computers and Electronics in Agriculture

journal homepage: www.elsevier.com/locate/compag

Citrus advisory system: A web-based postbloom fruit drop disease alert system

Daniel Perondi[a], Clyde W. Fraisse[a,*], Megan M. Dewdney[b], Vinícius A. Cerbaro[a], José H. Debastiani Andreis[a], André B. Gama[b], Geraldo J. Silva Junior[d], Lilian Amorim[e], Willingthon Pavan[f,g], Natalia A. Peres[c]

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[e] Plant Pathology and Nematology Department, Luis de Queiroz College of Agriculture, University of São Paulo, Piracicaba, SP 13418-900, Brazil
[f] Graduate Program in Applied Computing (PPGCA), University of Passo Fundo, Passo Fundo, RS 99052-900, Brazil
[g] International Fertilizer Development Center (IFDC), 46 David Lilienthal Dr, Muscle Shoals, AL 35661, USA

Validation of a Decision Support System for Blueberry Anthracnose and Fungicide Sensitivity of *Colletotrichum gloeosporioides* Isolates

Andre B. Gama,[1] Leandro G. Cordova,[2] Carolina S. Rebello,[1] and Natalia A. Peres[1,†]

[1] University of Florida, Gulf Coast Research and Educat
[2] Corteva Agriscience, Application Technology, Indiana

Theoretical and Applied Climatology (2022) 149:83–99
https://doi.org/10.1007/s00704-022-04036-1

ORIGINAL PAPER

Evaluation of a multi-model approach to estimate leaf wetness duration: an essential input for disease alert systems

Andre B. Gama[1,2] · Daniel Perondi[3] · Megan M. Dewdney[1] · Clyde W. Fraisse[3] · Ian M. Small[4] · Natalia A. Peres[2]

Received: 3 December 2021 / Accepted: 23 March 2022 / Published online: 3 April 2022

UF IFAS Extension UNIVERSITY of FLORIDA

UF/IFAS PEER REVIEWED PP36
https://doi.org/10.32473/edis-PP366-202

Blueberry Advisory System: A Disease Alert System for Blueberry Anthracnose Fruit Rot[1]

erbaro, Phillip F. Harmon, Clyde W. Fraisse,

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Introduction and background

- Postdoc – August 2021 through February 2022
- University of Florida
- Advisor: Dr. Natalia Peres
- Focus: Neopestalotiopsis Fruit Rot, Anthracnose Fruit Rot, and Botrytis Fruit Rot

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Postdoctoral research and other projects – Anthracnose, Botrytis, and Neopestalotiopsis Fruit Rots

- Assessed whether captan application will return the investment at low, medium, and high market price regimens – it did.
- High probabilities of control of cull fruit, AFR, and BFR.
- Evaluated the efficacy of several pesticides against a new strawberry disease – *Neopestalotiopsis* fruit rot and leaf spot

Plant Disease • 2023 • 107:3071-3078 • https://doi.org/10.1094/PDIS-12-22-2781-RE

Old but Gold: Captan Is a Valuable Tool for Managing Anthracnose and Botrytis Fruit Rots and Improving Strawberry Yields Based on a Meta-Analysis

André B. Gama,[1] Leandro G. Cordova,[1,2] Juliana S. Baggio,[1,3] James C. Mertely,[1] and Natalia A. Peres[1,†]

[1] Department of Plant Pathology, Gulf Coast Research and Education Center, University of Florida, Wimauma, FL 33598
[2] Corteva Agriscience, Application Technology, Indianapolis, IN 46268
[3] Syngenta Crop Protection, Vero Beach, FL 32967

Efficacy of Single- and Multi-Site Fungicides Against *Neopestalotiopsis* spp. of Strawberry

Juliana S. Baggio,[1] Carolina S. Rebello,[1,2] Mayara B. de Morais,[1,2] Marcus V. Marin,[1,2] Andre B. Gama,[1] Bruna B. Forcelini,[3] James C. Mertely,[1] and Natalia A. Peres[1,2,†]

[1] University of Florida, Gulf Coast Research and Education Center, Wimauma, FL 33598
[2] Department of Plant Pathology, University of Florida, Gulf Coast Research and Education Center, Wimauma, FL 33598
[3] Corteva Agriscience, Indianapolis, IN 46268

Introduction and background

- Field Scientist – 2022 – 2023
- Invaio Sciences
- Focus: Lead scientist for the company's efficacy program
- Main crop – Citrus
- Daily interaction with growers – most trials in commercial farms, partnerships with Universities

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Introduction and background

- Assistant Professor – Sugarcane Pathology
- Louisiana State University – AgCenter
- Focus: Epidemiology and management of sugarcane diseases
- Appointment – 70% Research, 20% Extension, and 10% teaching.

Research plans and services

- Focus – red rot research. Epidemiology, association with borers, continuing to assess the efficacy of pesticides against the disease, assessing cultivar susceptibility
- Developing a predictive model for brown rust epidemics
- Remote sensing for sugarcane diseases – partnership with Dr. Felipe Dalla Lana
- **Interested in collecting isolates of red rot, brown stripe and brown rust pathogens – please contact me if you come across outbreaks**

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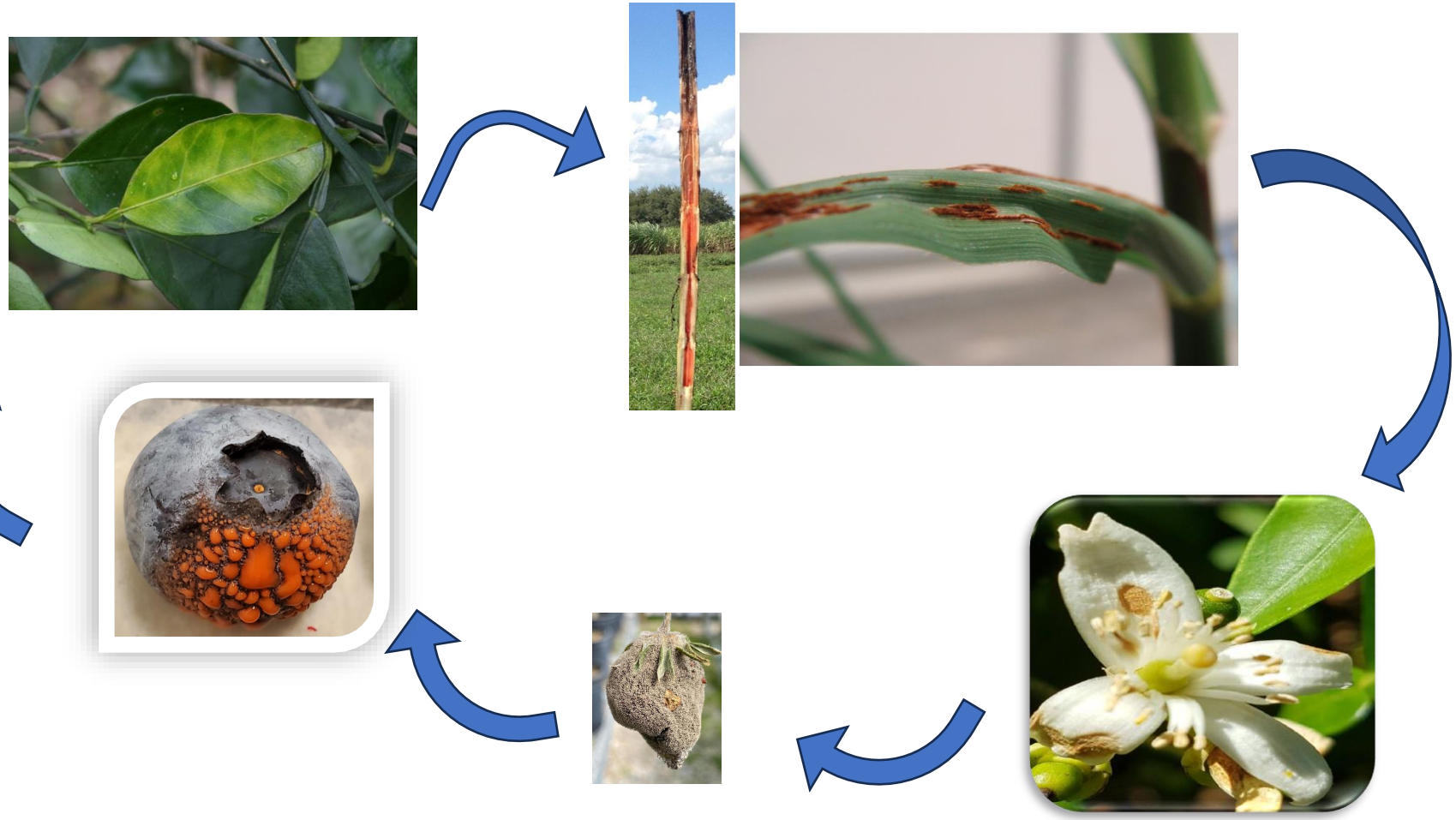
Introduction and background

Coming full circle.



Research plans and services

- Diagnosis of sugarcane diseases – Ratoon Stunting Disease (RSD), Sugarcane Yellow Leaf Virus, Brown Rust Severity Assessments, Mosaic Virus (SMV and SrMV).
- Dropping off samples - Life Sciences Building – Room 338 or 302 is preferred. Alternatives: Sugar Research Station (St. Gabriel) or LSU AgCenter Extension office in Port Allen, LA.
- Please contact us prior to submitting samples – there is a small form that must be filled prior to sending samples in. Make sure samples are labeled and secured (issues with some samples)
- For RSD – lower portion of the stalk is preferred – no need for long stalks. Preferred that samples are collected not a lot earlier than submission

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DEPARTMENT OF PLANT PATHOLOGY AND CROP PHYSIOLOGY

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Sugarcane Pathology Lab – Sample Submission Form

Samples submitted by: _____

Date Submitted: _____

Date Collected: _____

Number of Samples: _____

Number of Sub Samples (Stalks or leaves): _____

Please fill out this table before dropping off your samples. If you do not have all the information, please provide your best estimate. If you have any questions, please contact Andre Gama (813-539-9594) or Mary-Beth Rollins (337-852-6382).

SAMPLE ID	NUMBER OF SUB-SAMPLES	CULTIVAR	TARGET PATHOGEN/DISEASE

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THANK YOU!

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