## CURRICULUM VITAE

### 1. Personal and Institutional Information

Name: Giuliana Gambetta Romaso

- 2. TITLES
- 2.1. Postgraduate Degree and Thesis
- 2010. PhD. Universidad Politécnica de Valencia, España.
- 15/12/2009. Endogenous and exogenous control of citrus fruit ripening. Universidad Politécnica de Valencia, España. Tutor PhD. Manuel Agustí Fonfría
- 2006. Advanced Studies Diploma (DEA). Universidad Politécnica de Valencia, España.
- 17/10/2006. Endogenous regulation of the citrus fruit ripening: soluble carbohydrates and nitrogenous flavedo evolution. Universidad Politécnica de Valencia, España. Tutor: PhD. Manuel Agustí Fonfría
- 2.2. Undergraduate Degree and Thesis
- 1999. Agronomist. Facultad de Agronomía. Universidad de la República, Uruguay
- 26/11/1999. Effect of pre-and post-harvest cellulose membrane bagging, Moscatel de Hamburgo (*Vitis vinífera* L.) grape quality. Facultad de Agronomía, Universidad de la República, Uruguay. Tutor: PhD. Albertina Guarinoni
- 3. University Positions
- 3.1. HEAD POSITIONS
- 12/2017 12/2023. Responsible for the Ecophysiology and Fruit Trees Agricultural Management Group, Department of Plant Production, Facultad de Agronomía, UDELAR
- 12/2017 08/2023. Interim Director of the Plant Production Department, Facultad de Agronomía, UDELAR, for up to two months periods.
- 3.2. Professor Positions
- 12/2017 to date. Associate Professor, Grade 4, 40 hours per week. Full Position, Department of Plant Production, Facultad de Agronomía, UDELAR. Merit competition.
- 05/2009 12/2017. Associate Professor, Grade 3, 40 hours per week. Full Position, Department of Plant Production, Facultad de Agronomía, UDELAR. Competitive examination and merits.
- 06/2002 05/2009. Assistant, Grade 2, 30 hours per week. Full Position, Biological Sciences Area, Facultad de Agronomía, UDELAR. Competitive examination and merits.
- 06-1998 06/2002. Teaching Assistant, Grade 1, 20 hours per week. Interim Position, Biological Sciences Area, Facultad de Agronomía, UDELAR. Merit competition.
- 11/1997 08/2000. Research Assistant, Grade 1, 20 hours per week. Contract, Biological Sciences

### 3.3. OTHER POSITIONS

- 09/2021 to date. Head of the Citriculture Interdepartmental Group, GTI Citricultura, Facultad de Agronomía, UDELAR.
- 02/2013 to date. Professor included in the Full-Time Dedication Regime of the Universidad de la República (UDELAR).
- 04/2010 to date. Member of the Postgraduate Studies College, Facultad de Agronomía, UDELAR. 05/2019 05/2023. Substitute Learning Coordinator of the Department of Plant Production, Facultad de Agronomía, UDELAR.

### 4. RESEARCH ACTIVITY

Head of the ecophysiology and agricultural management of citrus research line, at the Department of Plant Production (Facultad de Agronomía, UDELAR). The line's main purposes are to characterize national or foreign citrus cultivar productive behaviour and to develop or adapt technology that allows sustainably increased citrus tree yield and fruit quality. Research addresses the study of endogenous and exogenous factors associated with flowering, fruit set, growth and ripening, to improve capacity to solve productive problems that limit yield and export quality fruit percentage. Research is coordinated with national and foreign research teams, field experiments are carried out on commercial farms. Results are constantly fed into the undergraduate and graduate courses of the Facultad de Agronomía, transferred to the productive sector, presented at regional and international conferences and published in national and international peer-reviewed journals.

# 4.1. Publications

# 4.1.1. PEER-REVIEWED PUBLICATIONS

- Mesejo C, Lozano-Omenaca A, Martínez-Fuentes A, Reig C, Gambetta G, Marzal A, Martínez-Alcantara B, Gravina A, Agustí M. 2022. Soil-to-fruit nitrogen flux mediates the onset of fruit-nitrogen remobilization and color change in citrus. Environmental and Experimental Botany, 204: 105088.
- Gravina A, Fornero C, Galiger S, Inzaurralde C, Fasiolo C, Gambetta G. 2022. Parthenocarpy, cross-pollination and seed presence in 'Afourer' mandarin. Agrociencia Uruguay, Special edition: 25 years in 25 articles, 26 (2): 1101.
- Salvo M, Rey F, Arruabarrena, A, Gambetta G, Rodrigo MJ, Zacarías L, Lado J. 2020. Transcriptional analysis of C-Repeat Binding Factors in fruit of Citrus species with differential sensitivity to chilling injury during postharvest storage. International Journal of Molecular Sciences, 22 (804): 1-20.
- Lado J, Gambetta G, Zacarías L. 2018. Key determinant of citrus fruit quality: metabolites and main changes during maturation. Scientia Horticulturae, (233): 238 248
- Zócalo P, Gambetta G, Rey F, Gravina A, Borges A. 2018. Satsuma 'Okitsu' rind breakdown: anatomical description and effect of environmental conditions and postharvest practices. Agrociencia (Uruguay), 22 (2): 24 35
- Gravina A, Gambetta G, Rey F, Guimaraes N. 2016. Improvement of 'Afourer' mandarin productivity in isolation of cross-pollination. Agrociencia (Uruguay), 21 (20): 22 28
- Mautone A, Rey F, Pereira das Neves V, Guimaraes G, Gambetta G, Gravina A. 2016. Characterization of the reproductive behaviour of two new mandarin hybrids. Agrociencia (Uruguay), 20 (2): 29 35
- Mesejo C, Reig C, Martínez-Fuentes A, Gambetta G, Gravina A, Agustí M. 2016. Tree water status

- influences fruit splitting in Citrus. Scientia Horticulturae, 209: 96 104
- Gambetta G, Mesejo C, Gravina A, Agustí M, Fasiolo C, Rey F, Reig C, Martínez-Fuentes A, Bentancur O. 2015. Hydrated lime soil coverage: Effect on soil temperature reduction and early mandarin colour break. Agrociencia Uruguay. 19 (1): 31-40.
- Gambetta G, Mesejo C, Martínez-Fuentes A, Reig C, Gravina A, Agustí M. 2014. Gibberellic acid and norflurazon affecting the time-course of flavedo pigment and abscisic acid content in 'Valencia' sweet orange. Scientia Horticulturae. 180: 94-101.
- Gambetta G, Gravina A, Fasiolo C, Fornero C, Galiger S, Inzaurralde C, Rey F. 2013. Self-incompatibility, parthenocarpy and reduction of seed presence in 'Afourer' mandarin. Scientia Horticulturae. 164: 183-188.
- Gambetta G, Martínez-Fuentes A, Bentancur O, Mesejo C, Reig C, Gravina A, Agustí M. 2012. Hormonal and nutritional changes in the flavedo regulating rind color development in sweet oranges. Journal of Plant Growth Regulation. 31: 273-282
- Mesejo C, Gambetta G, Gravina A, Martinez-Fuentes A, Reig C, Agusti M. 2012. Relationship between soil temperature and fruit colour development of 'Clemenpons' Clementine mandarin (*Citrus clementina* Hort ex. Tan). Journal of the Science of Food and Agriculture. 92: 520-525
- Gravina A, Cataldo J, Gambetta G, Pardo E, Fornero C, Galiger S, Pienika R. 2011. Relation of peel damage in citrus fruit to wind climate in orchard and its control. Scientia Horticulturae. 129 (1): 46-51
- Gravina A, Fornero C, Galiger S, Inzaurralde C, Fasiolo C, Gambetta G. 2011. Parthenocarpy, cross-pollination and seed presence in 'Afourer' mandarin. Agrociencia Uruguay. 15 (2): 40-47.
- Gambetta G, Borges A, Espino M, Da Cunha Barros M, Rivas F, Arbiza H, Gravina A. 2008. 'Nova' mandarin productivity improvement: physiological aspects and agricultural practices Agrociencia. 12(2): 1-9.
- Gambetta G, Telias A, Arbiza H, Espino M, Franco J, Rivas F, Gravina A. 2002. Creasing in 'Washington' navel orange in Uruguay. Incidence, severity and control. Agrociencia. 6 (2): 17-24.
- Gravina A, Arbiza H, Ferenczi A, Orlando L, Severino V, Gambetta G, Almela V, Agustí M. 2000. Alternate bearing in 'Salustiana' orange (*Citrus sinensis* (L.) Osb.) in different productive situations. Agrociencia. 4 (1): 17-22.
- Ferenczi A, Gambetta G, Franco J, Arbiza H, Gravina A. 1999. Fruit growth, final size and yield in 'Valencia' orange (*Citrus sinensis* L.Osb.) with 2,4-dichlorophenoxi propionic acid sprays. Agrociencia. 3 (1): 51-57.

# 4.1.2. OUTREACH PUBLICATIONS

- Gravina A, Gambetta G, Rey F, Guimaraes N. 2022. 'Afourer' mandarin productivity improvement in isolation of cross-pollination. Revista de Citricultura Eureka, 3 (1): 29-38
- Mesejo C, Reig C, Martínez-Fuentes A, Gambetta G, Gravina A, Agustí M. 2016. Fruit splitting in Citrus. Levante Agrícola, 433: 229 234
- Gravina A, Pardo E, Soria L, Galiger S, Fornero C, Fasiolo C, Inzaurralde C, Gambetta G, Cataldo J, Durañona V, Pienika R, Pais P. 2011. Wind damage in citrus fruit. Study of causes and technology development. INIA, SERIE 27, 9-22.
- Rivas F, Arbiza H, Borges A, Gambetta G, Gravina A. 2006. Reproductive behaviour of 'Nova' mandarin southern Uruguay. Todo Citrus, 32: 22-31.

### 4.1.3. BOOK CHAPTER

Gravina A, Gambetta G, Rivas F. 2012. Nutrient-Hormone Interactions in Citrus: Physiological implications. In: Srivastava, A K ed. Advances in *Citrus* Nutrition. Springer, pp 303-320.

# 4.2.1. International Congress (10 most relevant)

- Gambetta G, Frondoy C, Gravina A. 2024. Essential oil concentration in lemon fruits at different harvest dates. XV International Citrus Congress. Jeju, Korea. Poster.
- Guimaraes N, Mautone A, Rivas F, Gambetta G. 2024. Bee-proof net: effect on floral phenology. XV International Citrus Congress. Jeju, Korea. Poster.
- Zócalo P, Da Luz C, Rey F, Speroni G, Gravina A, Gambetta G. 2016. Okitsu Satsuma post-harvest rind breakdown: relationship with environmental conditions, fruit degreening and waxing. XIII International Citrus Congress, Foz do Iguacu, Brazil. Abstract book: 64. Poster.
- Fernández G, Gambetta G, Gravina A, Mautone A, Rey F. 2016. Soil water status influence on Nova mandarin splitting. XIII International Citrus Congress, Foz do Iguacu, Brazil. Abstract book: 140-141. Poster.
- Mautone A, Pereira Das Neves V, Rey F, Fasiolo C, Guimaraes N, Gambetta G, Gravina A. 2016. Self-incompatibility, parthenocarpic ability and cross-pollination in three new citrus cultivars in Uruguay. XIII International Citrus Congress, Foz do Iguacu, Brazil. Abstract book: 142. Poster.
- Gambetta G, Gravina A, Fasiolo A, Martínez-Fuentes A, Reig C, Mesejo C, Bentancur O, Agustí M. 2012. Endogenous factors affecting fruit color development in navel sweet oranges. XII International Citrus Congress, Valencia, España. Abstracts, 97. Oral.
- Gambetta G, Espino M, Pardo E, Alberti V, Arbiza H, Gravina A. 2008. 'Montenegrina' mandarin: characterization of the agronomic behaviour and fruit size improvement. Proc Int Soc Citriculture, Wuhan, China. I: 561-566. Oral.
- Gravina A, Pardo E, Soria L, Gambetta G, Durañona V, Cataldo J. 2008. Wind damage of citrus fruit in southern Uruguay: study and characterization. Proc Int Soc Citriculture, Wuhan, China. I: 754-758. Poster.
- Van Rensburg PJJ, Cronje P, Joubert J, Gambetta G, Bruwer M. 2004. Factors influencing rind breakdown in *Citrus* fruit. Proc Int Soc Citriculture: 1051-1061. Oral.
- Gambetta G, Arbiza H, Ferenczi A, Gravina A, Orlando L, Severino V, Telias A. 2000. Creasing in 'Washington' navel orange [*Citrus sinensis* (L.) Osbeck.] in Uruguay: study and control. Proc Int Soc Citriculture: 453-455. Poster.

# 4.2.2. REGIONAL CONGRESS (8 MOST RELEVANT)

- Gambetta G, Guimaraes N, Fernández G, Ramos S, Ocampos M, Ferrando M, Gravina A. 2021. N and K requirements in high-yield Afourer mandarin and lemon orchards. V Nacional Symposium on Research and Technological Development in Citrus (8-12/11/2021). Oral.
- Guimaraes N, Gambetta G, Fernández G, Gravina A. 2021. Nutritional status determination in Afourer mandarin and Fino 49 lemon. V Nacional Symposium on Research and Technological Development in Citrus (8-12/11/2021). Oral.
- Gambetta G., Guimaraes N, Gravina A. 2021. Afourer mandarin productive behaviour under non-cross-pollination conditions in Uruguay: A review. V Nacional Symposium on Research and Technological Development in Citrus (8-12/11/2021). Oral.
- Mautone A, Gambetta G, Guimaraes N, Hernández F, Ramos S, Rivas F, Gravina A. 2021. Fruit set improvement in national hybrids of mandarin isolated from cross-pollination. V Nacional Symposium on Research and Technological Development in Citrus (8-12/11/2021). Oral.
- Lado J., Pintos P., Luque E., Moltini A., Manzi M., Gambetta M., Salvo M., Arruabarrena A. 2021. Challenges and opportunities of the low-temperature treatment in the Uruguayan Citrus export. V Nacional Symposium on Research and Technological Development in Citrus (8-12/11/2021). Oral.

- Salvo M, Arruabarrena A, Luque E, Pintos P, Gambetta G, Lado J. 2019. CBFs as potential regulators of low-temperature tolerance in Citrus fruits. X Latin American and Caribbean Meeting on Agricultural Biotechnology REDBIO Uruguay and XII REDBIO Argentina Symposium (12-15/11/2019) Montevideo, Uruguay: 134. Poster.
- Gambetta G, Martínez-Fuentes A, Mesejo C, Reig C, Gravina A, Agustí M. 2014. Hormonal regulation of orange colour break. I Latin American Congress on Research and Technological Development in Citrus (3-5/11/2014), Salto, Uruguay. CD-ROM, 1-4. Oral.
- Gambetta G, Gravina A, Bentancur O, Martinez-Fuentes A, Mesejo C, Reig C, Agustí M. 2010. Colour break in navel oranges and its relationship with flavedo soluble carbohydrates and nitrogen. IV Argentine Congress of Citriculture (2-4/6/2010), Tucumán, Argentina: 1-3. Poster.

## 4.3. INVITED LECTURER

- Gambetta, G. 2024. Productive behaviour and agronomical practices of the new *INIA-FAGRO* mandarin cultivars (28/06/2024). INIA Las Brujas, Canelones, Uruguay
- Gambetta, G. 2023. Citrus seedless fruit production: fundaments and agronomical practices. (18/04/2023). XI International Citrus Seminar, Lima, Perú. Peru Citrus Producers Association (PROCITRUS).
- Gambetta, G. 2023. Physiological response of mandarin crops to environmental conditions in the Chepén area, Lamabayeque, Perú. 20-21/04/2023. San Miguel Fruits Perú SA.
- Gambetta G., Gravina A. 2022. Study of wind damage in mandarins and oranges and windbreak nets evaluation for fruit losses mitigation (6/05/2022) Webinar. San Miguel Integra.
- Gambetta G., Gravina A. 2021. Physiological bases and agricultural strategies for the seedless citrus fruits production. Virtual course (3 sessions of 2 hours) with written evaluation. (06/22 to 06/30/2022). Peru Citrus Producers Association (PROCITRUS).
- Gambetta G, Gravina A. 2019. Growth, ripening and physiological disorders of citrus fruits. Agronomic and Training Conferences on Citrus Physiology in the Central Coast of Peru. (24-28/06/2019, Lima, Cañete, Chincha Alta, Huaral, Santa Rosa, Peru). Peru Citrus Producers Association (PROCITRUS).

## 4.4. SCIENTIFIC EVENT ORGANISATION

- 2021. V Nacional Symposium on Research and Technological Development in Citrus. Facultad de Agronomía, Udelar INIA. Virtual. Transmisión en vivo: YouTube de INIA Uruguay y de Facultad de Agronomía (Udelar)
- 2014. IV Nacional, I Latin American Congress on Research and Technological Development in Citrus. Facultad de Agronomía, Udelar INIA. Salto, Uruguay
- 2010. V Nacional Symposium on Research and Technological Development in Citrus. Facultad de Agronomía, Udelar INIA. Salto, Uruguay
- 2005. Nacional Symposium on Research and Technological Development in Citrus. Facultad de Agronomía, Udelar INIA. Montevideo, Uruguay.

# 4.5. RESEARCH PROJECTS

- 2019 to date. Reproductive biology, productive behaviour and agronomical techniques for the new hybrid mandarins generated in Uruguay. Funding: DT, UDELAR. Responsible: G. Gambetta
- 2023-2025. Incompatibility systems in new mandarin hybrids and the role of auxins and gibberellins in the expression of parthenocarpy. Funding: Fondo Clemente Estable, ANII. Responsible N. Guimaraes.
- 2022-2025. The relationship between climatic factors and endogenous hormonal and genetic

- inhibitors in the regulation of Citrus flowering. Funding: State Research Agency, Ministry of Science and Innovation, Government of Spain. Responsible C. Mesejo
- 2019-2022. Essential oils in lemon fruits. Funding: DT, UDELAR. Responsible: G. Gambetta
- 2017-2020. New tools to characterise the sensitivity/tolerance of citrus to low temperatures. Funding: Fondo Clemente Estable, ANII. Responsible J. Lado.
- 2017-2021. Nutritional diagnosis and development of competitive citrus farming fertilisation programs. Funding: Agreement between SAMIFRUIT SA, AZUCITRUS SA, FEA, UDELAR. Responsible: G. Gambetta
- 2017-2019. Parthenocarpic capacity of new national mandarin hybrids: study and management. Funding: CSIC I+D, Udelar. Responsible: G. Gambetta y A. Gravina
- 2016-2017. High-density citrus orchard fertilisation. Funding: Lanafil SA. Donation, Law 16.462 Article 213. Responsible: G. Gambetta
- 2015-2016. The mineral nutrient requirement to optimise 'Fino 49' lemon and 'Afourer' mandarin productivity. Funding: Lanafil SA. Donation, Law 16.462 Article 213. Responsible: G. Gambetta
- 2013-2015. Study of the reproductive behaviour of new citrus cultivars. Funding: Fondo María Viñas, ANII (I +D). Responsible: A.Gravina.
- 2011-2016. Improving fruit size and controlling alternate bearing in 'Montenegrina' mandarin. Funding: Lanafil SA. Donation, Law 16.462 Article 213. Responsible: A.Gravina
- 2013-2015. Improvement of 'Afourer' mandarin productivity under bee-excluded netting. Funding: Lanafil SA. Donation, Law 16.462 Article 213. Responsible: A.Gravina
- 2012-2014. Recovering productivity of frost-affected citrus orchards. Funding: INIA. Responsible: C. Goñi C, A. Gravina.
- 2011-2012. Study of endogenous and exogenous factors related to the post-harvest rind breakdown of Satsuma mandarin. Funding: UPEFRUY Donation Law 16.462 Article 213. Responsible: G. Gambetta
- 2011-2012. Advancement of citrus fruits colour break of early-ripening cultivars. Funding: CSIC-Program VUSP (Udelar), Mod. 2. Citrus Producer Support: Antonio De Souza e hijos, URUDOR. Responsible: G. Gambetta
- 2009-2010. Effect of copper sulphate and gibberellic acid applications on the inhibition of seed formation in Afourer mandarin. Funding: URUDOR Donation Law 16,462 Article 213. Responsible: A.Gravina
- 2007-2010. Yield and quality in citrus cultivars. Physiological and entomological management. CSIC-Productive Sector (Udelar), Mod. 1. Citrus Producer Support Azucitrus. Responsible: A. Gravina.
- 2007-2009. Study of endogenous factors affecting the external ripening of citrus fruits. Funding: CSIC Initial Program, Modality I, Udelar. Responsible: G. Gambetta
- 2006-2009. Wind damage in citrus: Study and control. Funding: INIA-FPTA, N° 211. Responsible: A.Gravina.
- 2004-2007. Evaluation of 3,5,6 trichloro pyridyl oxyacetic acid on the size and quality of Montenegrina and Clementina de Nules mandarin fruits. Funding Lanafil Donation Law 16,462 Article 213. Responsible: A.Gravina.
- 2004-2007. Evaluation of 3,5,6 trichloro pyridyl oxyacetic acid on Washington navel orange preharvest drop and post-harvest life. Fu ding: Lanafil Donation Law 16,462 Article 213. Responsible: A.Gravina.
- 2003-2007. Technological practices to optimise 'Valencia' orange and 'Ortanique' tangor productivity. Funding: CSIC-Productive Sector, Mod. 1, Udelar. Responsible: A.Gravina.
- 2004-2005. Wind, windbreaks, and their effects on the citrus fruit quality. F. de Agronomía F. de Ingeniería. Funding: LanafilL Donation Law 16,462 Article 213. Responsible: A.Gravina.
- 2003-2005. Technology development to improve 'Montenegrina' mandarin, 'Nova' and

- 'Ortanique' hybrids productivity. Funding: CSIC-Productive Sector, Mod. 2 (Udelar). Responsible: G. Gambetta
- 2004. Endogenous control of fruit development in citrus. Growth regulators alternative agronomical techniques establishment. Funding: AECI, Spanish International Cooperation Program. Responsible: M. Agustí (España), A. Gravina (Uruguay).
- 2002-2004. Study of the phenological-reproductive behaviour of the 'Lisbon' and 'Fino 49' lemon cultivars. Funding: CSIC, I+D (Udelar). Responsible: H. Arbiza.
- 2000-2003. Flowering and fruit set control in 'Nova' mandarin. Funding: Technology Validation Project No. 64, PREDEG, JUNAGRA, Ministry of Livestock, Agriculture and Fisheries, Uruguay. Responsible: H. Arbiza.
- 2000-2003. Yield regulation in citrus orchards of 'Valencia' and 'Washington' oranges and 'Ellendale' tangor. Funding: CSIC-Productive Sector, (Udelar). Contraparte Milagro S.A. Responsible: A. Gravina.
- 2000-2003. Efect of the pruning date and intensity on the productivity of the mandarin 'Clementina de Nules' and the tangor 'Ortanique'. Funding: Applied Research Line INIA-BID, Responsible: A. Gravina.
- 2000-2002. Physiological and productive response to pruning of the mandarin 'Nova' (*C. reticulata* Hort. x (*C.paradisi* Macf. x *C.tangerina* Hort.)) and the lemon 'Lisbon' (*Citrus limon* L. Burm.f.). Funding: CSIC I+D. Responsible: H. Arbiza.
- 1997-2000. Citrus varieties productivity improvement through the phenological-reproductive cycle management. Funding: CSIC-Productive Sector, (Udelar). Producer Support Uruguayan Citrus Producers Association (A.P.C.U.). Responsible: A. Gravina.

## 4.6. PROJECT REFEREEING AND EVALUATION

- 2024. Research and Development Programme, CSIC-UDELAR, Uruguay. Agricultural Area Advisory Committee.
- 2022. Internal Projects C.E.P.I., INIA Uruguay. Evaluation.
- 2019. Foreign Postgraduate Studies: doctoral scholarships, ANII, Uruguay. Evaluation.
- 2019. Research Initiation Programme, CSIC, UDELAR, Uruguay. Evaluation.
- 2017. Research Initiation Programme, CSIC UDELAR, Uruguay. Evaluation.
- 2015. Research Initiation Programme, CSIC-UDELAR, Uruguay. Evaluation.
- 2014. Undergraduate Project Competition. National Academy of Engineering, Uruguay. Evaluation.
- 2013. Research Initiation Programme, CSIC-UDELAR, Uruguay. Agricultural Area Advisory Commission.

## 4.7. SCIENTIFIC JOURNALS ARTICLE REVIEWER

- 2024. Environmental and Experimental Botany
- 2023. Agrociencia Uruguay
- 2023. Journal of Plant Growth Regulation
- 2021. Biodiversitas Journal of Biological Diversity
- 2020. Journal of Plant Growth Regulation
- 2019. Scientia Agricola
- 2018. Ciencia e Investigación Agraria
- 2018. Ciência Rural
- 2018. Acta Horticulturae
- 2018. IV International Symposium on Citrus Biotechnology
- 2017. Journal of Plan Growth Regulation

# 2017. Journal of Agricultural Science and Technology

### 4.8. Postgraduate activities

2013-2019. Coordination and Court of the Plant Science Option Master Seminars. MSc in Agricultural Science, Facultad de Agronomía, UDELAR.

## 4.8.1. Thesis direction

- 2020 to date. PhD in Agricultural Science, Facultad de Agronomía, UDELAR. Guimaraes, N. Incompatibility systems of the new mandarin hybrids and the role of gibberellins in the parthenocarpy expression.
- 2017-2019. MSc in Agricultural Science, Facultad de Agronomía, UDELAR. Guimaraes, N. Mineral nutrient absorption in Afourer mandarin.
- 2011-2016. MSc in Agricultural Science, Facultad de Agronomía, UDELAR. Zócalo, P. Endogenous and exogenous factors associated with post-harvest rind breakdown Satsuma Okitsu mandarin.

### 4.8.2. Monitoring Committee

- 2020-2024. PhD in Agricultural Science, Facultad de Agronomía, UDELAR. Cabot, MI. Evaluation of the environmental sustainability of citrus production in Uruguay through life cycle analysis.
- 2016-2017. MSc in Agricultural Science, Facultad de Agronomía, UDELAR. Mautone, AP Characterisation of the reproductive behaviour of the new mandarin hybrids and Valencia orange cultivars.
- 2016-2017. MSc in Agricultural Science, Facultad de Agronomía, UDELAR. González, VD. Storage potential and cold damage susceptibility of different peach varieties.

# 5. HUMAN RESOURCE TRAINING AND RESEARCH GROUP CONTRIBUTION

## 5.1. Comprehensive training

- 2017 2023. Responsible for academic decisions of the Ecophysiology and Agricultural Management of Fruit Trees group members: Mercedes Arias (Grade 3, 40 HW), Vivian Severino (Grade 3, 40 HW), Julia Salvarrey (Grade 2, 40 HW), Ana Paula Mautone (Grade 2, 30 HW), Alfredo Gravina (retired, Grade 5 Free Teacher), Milka Ferrer (retired, Grade 5 Free Teacher)
- 2023 to date. Comprehensive training (teaching, research, outreach). S. Juncal. Assistant (Grade 1, 30 HW).
- 2019-2023. Comprehensive training (teaching, research, outreach). N. Guimaraes. Assistant (Grade 2, 30 HW).
- 2020-2023. Comprehensive training (teaching, research, outreach). G. Medina. Assistant (Grade 1, 20 HW).
- 2020. Teaching support assistant. L. Bentancur. (Grade 1, 10 HW).

## 5.2. RESEARCH TRAINING

2003-2020. Training on experimental field, laboratory and data analysis in the following projects: The relationship between climatic factors and endogenous hormonal and genetic inhibitors in the regulation of Citrus flowering, 2022-2025 (2 assistants), Nutritional diagnosis and development of competitive citrus farming fertilisation programs, 2017-2021 (3 assistants), Parthenocarpic capacity of new national mandarin hybrids: study and management, 2017-2019 (2 assistants),

- High-density citrus orchard fertilisation, 2016-2017 (2 assistants), The mineral nutrient requirement to optimise Fino 49 lemon and Afourer mandarin productivity, 2015-2016 (2 assistants), Advancement of citrus fruits colour break of early-ripening cultivars, 2011-2012 (3 assistants), Study of endogenous and exogenous factors related to the post-harvest rind breakdown of Satsuma mandarin, 2011-2012 (2 assistants), Technology development to improve Montenegrina mandarin, Nova and Ortanique hybrids productivity, 2003-2005 (4 assistants).
- 2023. Coordination and tutoring of the 3-month stay of N. Guimaraes, at the Mediterranean Agroforestry Institute of the Polytechnic University of Valencia (IAM, UPV, Spain), in Incompatibility systems of the new mandarin hybrids and the role of gibberellins in the parthenocarpy expression. Funding CSIC and AUIP.
- 2014-2015. Optimisation of the Afourer mandarin yield isolated from cross-pollination. Guimaraes, N. Funding: Research Initiation, ANII. Co-tutor.
- 2013-2014. Effect of trunk girdling on the colour break of Clementina de Nules mandarin. Pereira das Neves, V. Funding: Research Initiation, ANII. Tutor.
- 2013-2014. Reduction of seeds in Afourer mandarin fruits. Rey, F. Funding: Research Initiation, ANII. Co-tutor.

### 5.3. COURTS AND ADVISORY COMMITTEE MEMBER FOR COMPETITIONS AT UNIVERSITY

- 2023. Assistant teaching competition, Grade 2, Ecophysiology and Agricultural Management of Fruit Trees, Department of Plant Production.
- 2023. Full position Associate Professor competition, Grade 4, Ecophysiology and Agricultural Management of Fruit Trees, Department of Plant Production.
- 2023. Research Assistant competition, Grade 1, Ecophysiology and Agricultural Management of Fruit Trees, Department of Plant Production
- 2022. Full position Adjunct Professor competition, Grade 3, Ecophysiology and Agricultural Management of Fruit Trees, Department of Plant Production.
- 2021. Assistant teaching and research competition, Grade 1, Ecophysiology and Agricultural Management of Fruit Trees, Department of Plant Production.
- 2020. Full position Adjunct Professor competition, Grade 3, Crop Production Systems, Department of Plant Production.
- 2019. Full position Assistant competition, Grade 2, Ecophysiology and Agricultural Management of Fruit Trees, Department of Plant Production.
- 2018. Assistant competition, Grade 1, Department of Plant Production
- 2018. Honorary Research Assistant competition, Ecophysiology and Agricultural Management of Fruit Trees, Department of Plant Production.
- 2017. Research Assistant competition, 2 Grade 1, Ecophysiology and Agricultural Management of Fruit Trees, Department of Plant Production.
- 2017. Research Assistant competition, Grade 1, Ecophysiology and Agricultural Management of Fruit Trees, Department of Plant Production.
- 2017. Honorary Research Assistant competition, 10 Ecophysiology and Agricultural Management of Fruit Trees, Department of Plant Production.
- 2006 2016. Assistant competition for 4 teaching assistants, Ecophysiology and Agricultural Management of Fruit Trees, Department of Plant Production.
- 2002 2016. Assistant competition for 14 research assistants, Ecophysiology and Agricultural Management of Fruit Trees, Department of Plant Production.

### 5.4. RESEARCH AND TEACHING INTERNATIONAL COOPERATION

- 24/06/2023 30/06/2023. Coordination of the research stay of PhD Amparo Martínez-Fuentes, from the Mediterranean Agroforestry Institute, Polytechnic University of Valencia, Spain. Field and laboratory activities in Uruguay. Funding: UPV, Spain.
- 27/09/2022 6/10/2022. Coordination of the stay of Professor PhD Paula Alayón Luaces, from the Agricultural Sciences of the National University of the Northeast, Argentina. Teaching, research and extension activities in Uruguay. Founding: ESCALA-Professor Programme, Association of Universities of the Montevideo Group (AUGM).
- 1/11/2014 11/11/2014. Coordination of the research and teaching stay of PhD Carlos Mesejo, from the Mediterranean Agroforestry Institute, Polytechnic University of Valencia (Spain) in Uruguay. Founding: Nacional Symposium on Research and Technological Development in Citrus, 2014, Uruguay.
- 1/12/2013 15/12/2013. Coordination of the teaching stay of PhD. Lorenzo Zacarías, from the Institute of Agrochemistry and Food Technology (IATA), CSIC, Valencia (Spain) in Uruguay. Funding: Human Resources Programme, CSIC, UDELAR, Uruguay.
- 7/01/2002 -15/02/2002. Research and Teaching Stay at the Department of Plant Production, Polytechnic University of Valencia, Spain. Responsible: PhD. M. Agustí, Director of the Department of Plant Production, Polytechnic University of Valencia. Funding: Stays at the Polytechnic University of Valencia for Prestigious Researchers, Research Incentive Programme of the UPV, Spain.
- 01/05/2000 30/06/2000. Research Stay at the Department of Horticultural Science, University of Stellenbosch, South Africa and the Department of Plant Physiology and Horticulture. Capespan (PTY) LTD, Stellenbosch, South Africa. Responsible: PhD. D.M. Holcroft (University of Stellenbosch) and M.Sc. P. van Rensburg (CAPESPAN, Stellenbosch). Funding: Human Resources Programme, CSIC, UDELAR, Uruguay.

# 6. INSTITUTIONAL REPRESENTATION AND SCIENTIFIC ASSOCIATION MEMBERSHIP

- 2023 to date. UDELAR Representant at the Advisory Committee for HLB for the General Directorate of Agricultural Services, Ministry of Livestock, Agriculture and Fisheries (MGAP), Uruguay. Contingency plan for the detection of the disease in Uruguay.
- 2021-2022. UDELAR Representant at the Advisory Committee for the HLB, for the General Directorate of Agricultural Services, Ministry of Livestock, Agriculture and Fisheries (MGAP), Uruguay. Prevention of the Huanglongbing entry, dispersion and establishment in Uruguay.
- 2022 to date. Investiga uy Uruguayan Researcher Association
- 2000 to date. International Society of Citriculture

# 7. Courses and Seminars

# 7.1. SCIENTIFIC COURSES AND SEMINARS

- 2023. Predatory journals. Their definition and how to identify them. Library, Facultad de Agronomía, UDELAR, Uruguay. 11/30/2023.
- 2023. Cultivar Breeding and Protection: Essentially derived varieties. Organised by INASE-INIA, Uruguay. 11/17/2023.
- 2023. SpringerLink platform training for Timbó. Springer Nature
- 2021. Integrated management of citrus pests and diseases at family farms. Workshop for researchers, technicians and producers. 04/07/2021.
- 2015. Workshop Science Direct, Scopus, Medeley. ANII-Portal Timbó. Facultad de Agronomía, UDELAR, Uruguay.
- 2013. Fruit quality and physiological disorders during post-harvest of citrus fruits: causes and

- perspectives. Conference Dr. L. Zacarías, Principal Investigator, IATA, Spain.
- 2013. Carbon footprint and its impact on Uruguay's exports. AECID, Embassy of Spain and Uruguay XXI (ROU), Uruguay. Workshop, 4 hours.
- 2007. Nitrogen metabolism in plants. Department of Plant Biology, within the framework of the Master's Degree in Agricultural Sciences of the Facultad de Agronomía. UDELAR. Montevideo, Uruguay. 30-hour course. 04/24 05/11/07.
- 2001. Scientific paper preparation and publication. Drs. G. Slafer and M. Oesterheld. Graduate School, Facultad de Agronomía, Universidad de Buenos Aires, Argentina. Course approved, 40 hours. 05/28 06/01/2001.
- 1998. SAS (Statistical Analysis System) programme training. Ing.Agr. (Ph.D.) Jorge Franco. Facultad de Agronomía. UDELAR. Montevideo, Uruguay. 1998.

## 7.2. PEDAGOGICAL COURSES AND SEMINARS

- 2023. Flipped classroom at the University. Teachers' Pedagogical Development Program. Sectoral Commission on Teaching, UDELAR. Course approved, 38 hours, 2.5 credits. 09/26/2023-11/14/2023.
- 2022. The inclusive UDELAR that we imagine: current challenges and projections. Thematic Network on Disability. Universidad de la República. 12/15/2022.
- 2022. Inclusive education: Wanting it is creating it. Documentary from Cecilia Barriga. Inclusive Education Working Group. 12/6/2022.
- 2021. Online education. Union of Universities of Latin America. International Network of Researchers on Online Education (RIIEL), 04/14/2021.
- 2021. Training of student tutors New Curricula 2020, Teaching Unit, Facultad de Agronomía, UDELAR.
- 2019. Institutional conference for the implementation of the Study Plan: Formulation of course programs. Teaching Unit, Faculty of Agronomy, UDELAR. 10-11/9/2019
- 2019. Institutional conference for the implementation of the New Curricula: Training competencies at Agricultural Engineer. Teaching Unit, Facultad de Agronomía, UDELAR. 13/8/2019
- 2010. Course Workshop: Teaching in Agros. Dr. Claudia Borlido, Lic. Marta Vilar del Valle. Department of Education, Facultad de Veterinaria. Teaching Unit, Facultad de Agronomía, UDELAR. Course approved, 40 hours. 7-28/07/2010.
- 2004. Workshop Methodologies. Lic. Angela Rista. Pedagogical Counseling Unit, Facultad de Veterinaria, UDELAR. 16 hours. 6/09/04 20/10/04.
- 2003. First National Meeting on Teaching for Understanding, Montevideo, Uruguay. 17-18/10/03.
- 2003. Seminar-Workshop on Teaching Methodologies for Understanding. Lic. Julia Leymonié. Pedagogical Counseling Unit, Facultad de Veterinaria, UDELAR. Course approved, 30 hours. 31/03 23/04/2003.
- 1999. Learning Evaluation. Psychologist Alicia Kachinovsky. Facultad de Agronomía, UDELAR. Montevideo, Uruguay. Course approved, 40 hours. 08/16-18/1999.

# 8. TEACHING ACTIVITIES

- 8.1. Undergraduate Teaching at Facultad de Agronomía, UDELAR
- 2024 to date. Uruguayan Citriculture. Agronomist degree, 4<sup>th</sup> and 5<sup>th</sup> course, optional. Montevideo and Salto, Uruguay. Responsible.
- 2024 to date. Compulsory Training Area (AFO III): Fruit tree production in Uruguay. Agronomist degree 4° and 5° course. Montevideo, Uruguay. Participant.
- 2022 to date. Crop Ecophysiology. Agronomist degree, 3<sup>rd</sup> course. Montevideo and Salto, Uruguay. Participant.

- 2022 to date. Fruit tree physiology. Agronomist degree 2<sup>nd</sup> and 3<sup>rd</sup> course, optional. Montevideo and Salto, Uruguay. Responsible.
- 2016 up to date. Fruit Tree Production. Agronomist degree, 4<sup>th</sup> course. Montevideo, Uruguay. Participant in the Initial General Concepts Module. Responsible for the Citriculture Module.
- 2020-2023. General Biology: research approach. Agronomist degree, 1<sup>st</sup> course. Montevideo, Uruguay. Participant.
- 2022. Citriculture. Agronomist degree, 2<sup>nd</sup> and 3<sup>rd</sup> course, optional. Montevideo and Salto, Uruguay. Responsible.
- 2022. Postharvest of Citrus fruit. Agronomist degree, 5<sup>th</sup> course, optional Montevideo and Salto, Uruguay. Participant.
- 2002-2022. Compulsory Training Area: Citrus. Agronomist degree, 3<sup>rd</sup> course. Montevideo, Uruguay. Responsible
- 2016-2021. Crop Physiology. Agronomist degree, 3<sup>rd</sup> course. Montevideo and Salto, Uruguay. Responsible.
- 2015, 2017, 2019, 2021. Citrus biology, physiology and agronomical techniques. Agronomist degree, 4<sup>th</sup> and 5<sup>th</sup> course, optional. Montevideo, Uruguay. Responsible.
- 2014-2015. Fruit Tree Production. Agronomist degree, 4<sup>th</sup> course. Montevideo, Uruguay. Responsible.
- 2010-2015. Crop Physiology. Agronomist degree, 3<sup>rd</sup> course. Montevideo and Salto, Uruguay. Participant in Fruit tree physiology.
- 2012. Citrus fruit ripening: physiological and agronomical aspects. Agronomist degree, 4<sup>th</sup> and 5<sup>th</sup> course, optional. Montevideo, Uruguay. Responsible.
- 2012, 2011, 2009, 2007. Citrus physiology and productive techniques. Agronomist degree, 4<sup>th</sup> and 5<sup>th</sup> course, optional. Montevideo, Uruguay. Participant.
- 2006-2009, 2003. Crop Physiology. Agronomist degree, 3<sup>rd</sup> course. Montevideo and Salto, Uruguay. Participant in Fruit tree physiology.
- 1998-2001. Compulsory Training Area: Citrus. Agronomist degree, 3<sup>rd</sup> course. Montevideo, Uruguay. Assistant.

# 8.2. POSTGRADUATE TEACHING AT FACULTAD DE AGRONOMÍA, UDELAR

- 2022. Postharvest of Citrus fruit. Participant
- 2021, 2019, 2017, 2015. Citrus biology, physiology and agronomical techniques. Responsible
- 2014. Citrus fruit set and growth. Co-Responsible. Invited Professor: Dr. C. Mesejo (IAM, UPV, Spain)
- 2013. Genetic and hormonal regulation of fruit ripening. Responsible. Invited professor: Dr. L. Zacarías (IATA, Spain)
- 2012. Citrus fruit ripening: physiological and agronomical aspects. Responsible.
- 2012, 2011. Citrus physiology and production. Participant.

## 8.3. Undergraduate thesis direction

- 2024 in progress. Juncal S. Endogenous factors affecting flower induction in lemon trees.
- 2024 in progress. Silvestri, L., Peña, S. Essential oils in lemon fruits located in the canopy inner and outer zone of pruned and unpruned trees.
- 2023. Caraballo, M., Vignolo, N. Synthetic auxin sprays and hand thinning effect on the Afourer mandarin fruit size.
- 2022. Frondoy, C. Essential oil concentration during the Lisbon lemon fruits ripening.
- 2021. Sosa, M. Afourer mandarin physiological response to different type of pruning
- 2020. Di Lorenzi, A. Self- and inter-compatibility study of two new national mandarin hybrids.

- 2018. Ocampos, M. Productive response of Afourer mandarin to increasing nitrogen and potassium fertilization doses.
- 2017. Hernández, F. Vegetative and productive response of Afourer mandarin to different types of pruning.
- 2016. Fernández, G. Fruit splitting of Nova mandarin ((*Citrus reticulata* Blanco x (*Citrus paradisi* Macf. x *Citrus tangerina* Hort. ex Tan.)) related to northern and southern Uruguayan soil water regimes.
- 2016. Guimaraes, N. Yield improvement in non-cross-pollination Afourer mandarin production (*Citrus reticulata* Blanco).
- 2015. Möller, M. Study of pre-harvest factors associated with post-harvest rindbreakdown of Satsuma 'Okitsu' mandarin (*Citrus unshiu* Marc.).
- 2014. Pereira das Neves, V. Effect of trunk girdling on the Clementina de Nules mandarin colour break.
- 2013. Fasiolo, C. and Rey, F. Reproductive biology of Afourer mandarin: knowledge contribution.
- 2013. Polti, S. Improving fruit size and reducing alternate bearing of Montenegrina mandarin (*Citrus deliciosa* Tenore).
- 2012. Areosa, M. Phenological-reproductive study of the INIA-Ana Claudia lemon tree.

### 9. UNIVERSITY OUTREACH ACTIVITIES

## 9.1. PRODUCTIVE SECTOR

1998 to date. The main outreach activities have been developed under the *Ecophysiology and agricultural management of citrus* research line context, under a collaborative work between the University and the productive sector, through a dynamic integration of producers, agronomists and researchers. Conferences or meetings are yearly held with Citrus sector actors to discuss productive sector needs and experimental results.

## 9.2. GENERAL SOCIETY

Main activities developed with general society have the primary school children and their families, as the target audience.

- 2024 up to date. Healthy food promotion at primary school. 60 hours a year developed in 2 primary schools in Montevideo, Uruguay. Project Funding: 5-a-day and MAES Uruguay. Responsible: Gambetta, G. Bas, C
- 2007 to date. Citrus, the in-season fruit: production in our country and positive impact on our health. An activity carried out during winter in 3-6 primary schools in Montevideo and Canelones (Uruguay). Funding: 5-a-day and MAES Uruguay. Responsible: Gambetta, G, Bas, C
- 2023. World Fruit and Vegetables Day. Promotion of consumption and sustainable production of fruits and vegetables. Interactive activity developed with primary school children at Unidad Agroalimentaria Metropolitana (UAM), Uruguay.

## 10. University Government Activities

- 2017 2023. Member of the Technical Commission of the Department of Plant Production, Facultad de Agronomía, UDELAR.
- 2021 2024. Facultad de Agronomía Representant at the Professoriate Development Group, at Nature and Habitat Technology and Science Area of the Universidad de la República (UDELAR).
- 2012 2024. Member of the Council Advisory Professoriate Development Commission, Facultad

de Agronomía, UDELAR.

2019 - 2022. Substitute member of the Council Advisory Career Commission, Facultad de Agronomía, UDELAR

2024. Substitute member of the Senate Assembly, Facultad de Agronomía, UDELAR 2022-2023. Titular member of the Senate Assembly, Facultad de Agronomía, UDELAR

2014-2015. Titular member of the Senate Assembly, Facultad de Agronomía, UDELAR

2010-2011. Substitute member of the Senate Assembly, Facultad de Agronomía, UDELAR

2003. Substitute member of the Senate Assembly, Facultad de Agronomía, UDELAR