



## CURRICULUM VITAE ABREVIADO (CVA)

**IMPORTANT** – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

### Part A. PERSONAL INFORMATION \*

First name	Mireia		
Family name	Corell González		
e-mail		URL Web	<a href="https://bibliometria.us.es/prisma/investigador/925">https://bibliometria.us.es/prisma/investigador/925</a>
Open Researcher and Contributor ID (ORCID) (*)	<a href="https://orcid.org/0000-0001-5955-0048">0000-0001-5955-0048</a>		

#### A.1. Current position

Position	Associate Professor		
Initial date	03/04/2018		
Institution	Universidad de Sevilla		
Department/Center	Agronomía/ETSIA		
Country	Spain		
Key words	Deficit Irrigation, Water Relations, Plant Production		

#### A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
01/04/2005-31/03/2009	Predocctoral fellow/ IFAPA/ Spain/ contract termination
22/12/2009-27/01/2014	Assistant profesor/Univ. of Seville/ Spain/ contract termination
28/01/2014-21/12/2017	Assistant Lecturer/Univ. of Seville/ Spain/ contract termination
22 /12/2017-02/04/2018	Associate Professor temporary /Univ.Seville/Spain/ promotion
03/04/2018-05/11/2019	Associate Professor/Univ. of Seville/Spain/promotion
06/11/2019- present	Associate Professor/Univ. of Seville/Spain/

#### A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Doctor in Agronomic Engineering	University of Seville/Spain	2009
Agricultural Engineer	University of Almeria/Spain	2004
Agricultural Technical Engineering	University of Seville/Spain	1999

### Part B. CV SUMMARY (max. 5000 characters, including spaces)

My research explores sustainable crop production under water-limited conditions, with a particular focus on regulated deficit irrigation, plant-based sensing, and the integration of digital tools and agrovoltaic solutions to support resilient agriculture. Over the years, I have consolidated a multidisciplinary research profile that bridges horticultural and ornamental species, Mediterranean woody crops, and emerging agrovoltaic systems. This trajectory has enabled me to develop coherent research lines addressing water-use efficiency, crop quality, and food functionality, while fostering collaborations across agronomy, plant physiology, and digital agriculture.

I have progressively assumed leadership roles in competitive research environments, serving as Principal Investigator and coordinator in national initiatives and multi-actor collaborations. My work also includes sustained engagement with industry through technology-transfer activities on smart irrigation, sensor validation, and agrovoltaic optimisation. These experiences have strengthened my capacity to design, manage, and deliver complex research tasks, as well as to guide interdisciplinary teams working at the interface between science and application. My scientific output—75 JCR publications, most in Q1 journals, and a strong citation record—reflects both continuity and impact in my research area.

I have supervised three PhD theses (all Cum Laude) and currently co-supervise three additional doctoral projects in advanced irrigation management, functional quality, and

sustainable production systems. At the Master's and Bachelor's levels, I have directed 12 Master's theses, 23 Bachelor's theses, and 3 final degree projects, many of them awarded with top distinctions. These activities have allowed me to mentor early-career researchers, foster new lines of inquiry, and support students in developing rigorous scientific and technical skills.

As Associate Professor at the University of Seville, I teach across horticulture, organic farming, integrated crop management, and postharvest courses, coordinating several modules and multi-instructor teams within both undergraduate and Master's programmes. My commitment to educational leadership includes participation in 10 teaching-innovation initiatives, coordination of collaborative learning projects, and the creation of support structures for early-career faculty. Student evaluations consistently reflect high satisfaction and engagement with my teaching.

Across research, teaching, and outreach, my objective is to contribute to a more sustainable agricultural sector by integrating scientific evidence, technological innovation, and collaborative approaches. Looking ahead, my goal is to contribute to ongoing efforts in agrovoltatics, smart irrigation, and resilient cropping systems, while fostering an environment where students, young researchers, and partners from academia and industry can work together effectively.

## Part C. RELEVANT MERITS

### C.1. Publications

**1 Scientific paper.** Sánchez-Piñero, Marta; (2/10) Corell, Mireia (AC); de Sosa, Laura L.; et al; Pérez-López, David. 2024. Assessment of water stress impact on olive trees using an accurate determination of the endocarp development. *IRRIGATION SCIENCE*. SPRINGER. 42-3, pp.461-476. ISSN 0342-7188, ISSN 1432-1319. SCOPUS (0), WOS (0) <https://doi.org/10.1007/s00271-024-00914-w>

**2 Scientific paper.** Alomari-Mheidat, Munia; (2/7) Corell, Mireia (AC); Martín-Palomo, María José; Castro-Valdecantos, Pedro; Medina-Zurita, Noemí; de Sosa, Laura L.; Moriana, Alfonso. 2024. Moderate water stress impact on yield components of greenhouse tomatoes in relation to plant water status. *Plants*. MDPI. 13-1. ISSN 2223-7747. SCOPUS (1), WOS (1) <https://doi.org/10.3390/plants13010128>

**3 Scientific paper.** Alomari-Mheidat, Munia; (2/6) Corell, Mireia (AC); Castro-Valdecantos, Pedro; Andreu, Luis; Moriana, Alfonso; Martín-Palomo, María José. 2023. Effect of water stress and rehydration on the cluster and fruit quality of greenhouse tomatoes. *Agronomy*. MDPI AG; MDPI. 13-2. ISSN 2073-4395. SCOPUS (4), WOS (3) <https://doi.org/10.3390/agronomy13020563>

**4 Scientific paper.** Alomari-Mheidat, Munia; Martín-Palomo, María José; Castro-Valdecantos, Pedro; Medina-Zurita, Noemí; Moriana, Alfonso; (6/6) Corell, Mireia. 2023. Effect of water stress on the yield of indeterminate-growth greenbean cultivars (*Phaseolus vulgaris* L.) during the autumn cycle in southern Spain. *Agriculture (Switzerland)*. MDPI. 13-1. ISSN 2077-0472. SCOPUS (0), WOS (0) <https://doi.org/10.3390/agriculture13010046>

**5 Scientific paper.** Sánchez-Piñero, M.; Martín-Palomo, M. J.; Andreu, L.; Moriana, A.; (5/5) Corell, M. 2022. Evaluation of a simplified methodology to estimate the CWSI in olive orchards. *Agricultural Water Management*. Elsevier Science Bv; Elsevier. 269. ISSN 0378-3774, ISSN 1873-2283. SCOPUS (5), WOS (4) <https://doi.org/10.1016/j.agwat.2022.107729>

**6 Scientific paper.** Corell, M. (1/8); Pérez-López, D.; Andreu, L.; Recena, R.; Centeno, A.; Galindo, A.; Moriana, A.; Martín-Palomo, M. J. 2022. Yield response of a mature hedgerow oil olive orchard to different levels of water stress during pit hardening. *Agricultural Water Management*. Elsevier Science Bv; Elsevier. 261. ISSN 0378-3774, ISSN 1873-2283. SCOPUS (12), WOS (12) <https://doi.org/10.1016/j.agwat.2021.107374>

**7 Scientific paper.** Martín-Palomo, MJ; Andreu, L.; Pérez-López, D.; Centeno, A.; Galindo, A.; Moriana, A.; (7/7) Corell, M. 2022. Trunk growth rate frequencies as water stress indicator in

almond trees. *Agricultural Water Management*. Elsevier Science Bv; Elsevier. 271. ISSN 0378-3774, ISSN 1873-2283. SCOPUS (4), WOS (4)  
<https://doi.org/10.1016/j.agwat.2022.107765>

**8 Scientific paper.** Shackel, Ken; Moriana, Alfonso; Marino, Giulia; et al; Searles, Peter; (4/13) Corell, Mireia. 2021. Establishing a Reference Baseline for Midday Stem Water Potential in Olive and Its Use for Plant-Based Irrigation Management. *Frontiers in Plant Science*. Frontiers Media Sa. 12. ISSN 1664-462X. SCOPUS (20), WOS (16)  
<https://doi.org/10.3389/fpls.2021.791711>

**9 Scientific paper.** Lipan, Leontina; Issa-Issa, Hanán; Moriana, Alfonso; et al; (10/10) Corell, Mireia (AC). 2021. Scheduling regulated deficit irrigation with leaf water potential of cherry tomato in greenhouse and its effect on fruit quality. *Agriculture (Switzerland)*. MDPI. 11-7. ISSN 2077-0472. SCOPUS (15), WOS(15)  
<https://doi.org/10.3390/agriculture11070669>

**10 Scientific paper.** Corell, M. (AC) (1/8); Martín-Palomo, M. J.; Girón, I.; Andreu, L.; Galindo, A.; Centeno, A.; Pérez-López, D.; Moriana, A.2020. Stem water potential-based regulated deficit irrigation scheduling for olive table trees. *Agricultural Water Management*. Elsevier Science Bv; Elsevier. 242. ISSN 0378-3774, ISSN 1873-2283. SCOPUS (20), WOS (15)  
<https://doi.org/10.1016/j.agwat.2020.106418>

**11 Scientific paper.** Corell, M. (1/10); Martín-Palomo, M. J.; Girón, I.; et al; Moriana, A.2019. Approach using trunk growth rate data to identify water stress conditions in olive trees. *Agricultural Water Management*. Elsevier Science Bv; Elsevier. 222, Pp.12-20. Issn 0378-3774, Issn 1873-2283. Scopus (11), Wos(8) <https://doi.org/10.1016/j.agwat.2019.05.029>

**12 Scientific paper.** Coyago-Cruz, Elena; Meléndez-Martínez, Antonio J.; Moriana, Alfonso; et al; (10/10) Corell, Mireia (AC). 2019. Yield response to regulated deficit irrigation of greenhouse cherry tomatoes. *Agricultural Water Management*. Elsevier Science Bv; Elsevier. 213, pp.212-221. ISSN 0378-3774, ISSN 1873-2283. SCOPUS(58), WOS (46)  
<https://doi.org/10.1016/j.agwat.2018.10.020>

**13 Scientific paper.** Corell, M. (1/14); Martín-Palomo, M. J.; Sánchez-Bravo, P.; et al; Moriana, A.2019. Evaluation of growers' efforts to improve the sustainability of olive orchards: development of the hydroSOSustainable index. *Scientia Horticulturae*. Elsevier Science Bv; Elsevier. 257. ISSN 0304-4238, ISSN 1879-1018. SCOPUS (11), WOS (10)  
<https://doi.org/10.1016/j.scienta.2019.108661>

**14 Scientific paper.** Coyago-Cruz, Elena; (2/7) Corell, Mireia (AC); Moriana, Alfonso; Hernanz, Dolores; Benítez-González, Ana M.; Stinco, Carla M.; Meléndez-Martínez, Antonio J.2018. Antioxidants (carotenoids and phenolics) profile of cherry tomatoes as influenced by deficit irrigation, ripening and cluster. *Food Chemistry*. Elsevier SCI LTD. 240, pp.870-884. ISSN 0308-8146, ISSN 1873-7072. SCOPUS (53), WOS (51)  
<https://doi.org/10.1016/j.foodchem.2017.08.028>

### C.3. Research projects.

**1 Project.** PID2021-122772OB-I00, Producción sostenible de hortalizas basada en sistemas Agrovoltáicos. Ministerio de Ciencia e Innovación. Moriana Elvira, Alfonso. Corell González, Mireia. 01/09/2022-31/08/2026. 151.250 €.

**2 Project.** PLSQ\_00162, Sistema de riego deficitario en olivar con dendrómetros y gemelos digitales inteligentes (SENSOLIVE). Junta de Andalucía: Consejería de Universidad, Investigación e Innovación. Moriana Elvira, Alfonso. 19/12/2024-18/12/2026. 238.075,67 €.

**3 Project.** GOPG-SE-23-0011, AqualA - Sistema de programación de riego deficitario para cultivos Grupo Operativo (Funcionamiento). Junta de Andalucía. Corell González, Mireia. 01/04/2023-30/06/2025. 92.999 €.

**4 Project.** AEI-010500-2022B-244, Ajustes y validación industrial, mediante monitorización avanzada, de algoritmos basados en IA para estimar el rendimiento y conocer la calidad del tomate de industria, "TOMATIA". Ministerio de Industria, Comercio y Turismo. Pérez Ruíz, Manuel. 27/07/2022-29/04/2023. 92.372 €.

**5 Project.** P20\_00492, Alternativas de manejo para asegurar la sostenibilidad del olivar de mesa en Andalucía. Consejería de Economía, Conocimiento, Empresas y Universidad. Moriana Elvira, Alfonso. 05/10/2021-31/12/2022. 70.000 €.

**6 Project.** AGL2016-75794-C4-4-R, Optimización de Recursos Hídricos Limitados en Cultivos Leñosos Mediterráneos Principales: Olivo y Almendro. Ministerio de Economía y Competitividad. Moriana Elvira, Alfonso. 30/12/2016-31/12/2020. 169.400 €.

**7 Project.** AGL2013-45922-C2-1-R, Manejo de la Duración y el Nivel de Déficit Hídrico en Diferentes Estados Fenológicos para la Mejora de la Funcionalidad y Calidad Sensorial de la Fruta en Olivo y Pistachero. Ministerio de Economía y Competitividad. Moriana Elvira, Alfonso. 01/01/2014-30/11/2017. 96.800 €.

#### **C.4. Contracts, technological or transfer merits.**

**1 Contract.** Asesoramiento agronómico experto para la optimización de sistemas agrivoltaicos (APV) en el marco del Proyecto de investigación DIGI-GROW Bettergy S.L.. Corell González, Mireia. 05/06/2025-04/02/2028. 24.200 €.

**2 Contract.** Smart-O-live: Verificación del efecto de un bioestimulante en olivar Agroindustrial Kimitec, S.L.. Corell González, Mireia. 14/06/2024-14/04/2025. 12.100 €.

**3 Contract.** Manejo de riego deficitario controlado en olivar empleando la dendrometría IG4 Andalucía, S.L.. Moriana Elvira, Alfonso. 01/01/2024-01/01/2025. 8.470 €.

**4 Contract.** Evaluación y calibración de un sensor de riego en continuo para olivar y almendro. Gálvez Productos Agroquímicos, S.L. (GALPAGRO). Corell González, Mireia. 28/06/2021-27/01/2022. 6.050 €.

**5 Contract.** Evaluación y calibración de un sensor de riego en continuo para olivar y almendro y evaluación de nodos de comunicación en campo. DEUSER TECH GROUP. Corell González, Mireia. 28/06/2021-27/01/2022. 6.050 €.

**6 Contract.** Programación de riego en base a medidas en Planta y Evaluación de la Certificación Hidrosos Soberola, S.L.. Corell González, Mireia. 14/04/2021-13/11/2021. 2.399,43 €.

**7 Contract.** Evaluación de respuesta de la cosecha de un olivar superintensivo al riego deficitario controlado en una aplicación plurianual Gálvez Productos Agroquímicos, S.L. (GALPAGRO). Corell González, Mireia. 18/01/2019-18/01/2022. 20.570 €.

**8 Contract.** Caracterización de manejos hidrosténiles en olivar Gálvez. Productos Agroquímicos, S.L. (GALPAGRO). Moriana Elvira, Alfonso. 17/02/2017-17/02/2018. 11.858 €.

**9 Contract.** Programación de riegos en olivar empleando la cámara de presión Gálvez Productos Agroquímicos, S.L. (GALPAGRO). Moriana Elvira, Alfonso. 17/02/2017-17/02/2018. 9.317 €.

#### **C.5. Experience supervising doctoral thesis**

Sostenibilidad del olivar superintensivo Manzanilla de Sevilla, Sánchez Piñero, Marta  
Date of reading: 28/11/2024. Co-director of thesis: Martín-Palomo García, María José. Entity: Universidad de Sevilla. Obtained qualification: Sobresaliente "Cum Laude".

Programación del riego deficitario controlado en hortícolas de crecimiento indeterminado. Tomate y judía. 2024. Alomari Mheidat, Munia. Co-director of thesis: Moriana Elvira, Alfonso  
Entity: Universidad de Sevilla. Obtained qualification: Sobresaliente "Cum Laude"  
Date of reading: 19/07/2024.

Estudio sobre el contenido en carotenoides y compuestos fenólicos de tomates y flores en el contexto de la alimentación funcional. Coyago Cruz, Elena Del Rocio Date of reading: 28/09/2017. Co-director of thesis: Melendez Martinez, Antonio Jesus. Entity: Universidad de Sevilla Obtained qualification: Sobresaliente "Cum Laude".