

**Part A. Personal Information**

**Cv date**

05/09/2022

Surname(s)	DELGADO GARCÍA	
Forename	ANTONIO	
Social Security, Passport, ID number		
Sex	Male	
Age		
Researcher codes	WoS Researcher ID (*)	A-8936-2011
	SCOPUS Author ID(*)	7201675937
	Open Researcher and Contributor ID (ORCID)	0000-0002-1854-9224

(\*) At least one of these is mandatory

**A.1. Current position**

Post/ Professional Category	Full Professor (catedrático de Universidad)	
UNESCO Code	310313, 310305, 251104	
Key Words	Soil fertility, fertilization, crop management, nutrient dynamics, phosphorus, iron, zinc	
Name of the University/Institution	Universidad de Sevilla	
	Department/Centre	Dpto. Agronomía
	Full Address	ETSIA Ctra Utrera km 1, 41013 Sevilla
	Email Address	adelgado@us.es
	Phone Number	
Start date	13 February 2009	

**A.2. Education (title, institution, date)**

Year	University	Degree	Title
1991	Universidad de Córdoba	First degree	Agricultural Engineer
		Masters (if appropriate)	
1996	Universidad de Córdoba	PhD	Agricultural Engineer

**A.3. Indicators of Quality in Scientific Production (See the instructions)**

Total publications: 86 (JCR); 44 Q1; h-index: 28 (Scopus)  
 Publications in the last 5 years: 25 publications (JCR); 15 Q1; publications in the last 10 years 47 publications JCR; 23 Q1  
 2060 cites (May 2022); average cites per year (5 last years): 160; average cites per article: 21; 10 articles with more than 50 cites.  
 Thesis supervised: 6 (all with the maximum score; 2 with national award); 4 thesis supervised in the last 10 years

**Part B. Free Summary of CV (Max. of 3.500 characters, including spaces)**

Research activity mainly focused on soil fertility and fertilization management (mainly P, Fe, Zn), and the interaction of organic matter and microorganisms with plant nutrients. He has also expertise in studies on the environmental impact of fertilization, soil amendments, and soil salinization. In the future, the aim is to continue with the research lines that contribute to a more competitive agriculture with less environmental impact by means of an efficient use of resources. The lines of research to achieve these objectives are focused on: a better knowledge of nutrient geochemistry, the definition of models for nutrient availability, recycling at different scales, and the use of biological resources (e.g. inoculation with microorganisms). Author of 86 articles in international indexed journals (JCR), 4 articles in other journals, 9 book chapters, 4 invited keynotes in conferences (III Iberian Congress of Soil Science, 2008, XIII Congress of the European Society of Agronomy, 2014; XLVIII Convegno Nazionale Società Italiana di Agronomia, 2019; 58º Reunión Científica de la Sociedad Española de Pastos, 2019), and 95 communications to congresses. Member of the scientific committee of XV congress of

the European Society for Agronomy (ESA) (2018) and the Wageningen Soil conference (2018). President of the organizing committee of the XVI ESA congress (2020). Inventor in 5 patents of invent. Principal investigator in 12 projects of competitive calls (4 EU-H2020, 9 National / State Plan, 1 Andalusian Government - total amount of 2.35 million €) and in 11 research contracts with companies (0.25 million €). Investigator in 11 other projects or contracts, 1 European EU (FP3) and 2 COST actions (832 and 869, in the latter as a member of the "management committee"). Principal investigator in 5 scientific infrastructure projects (0.68 million €)

He has been associate editor-in-chief of the European Journal of Agronomy (2014-2020). He has been Associate Editor in two other JCR journals (J. Environ. Qual. and SJAR). Reviewer for different agencies and national and international institutions. President of the European Society of Agronomy Network (ESA) for 2018-2020, and member of its steering committee 2017-2022.

Professor of Agronomy at the ETSIA of the University of Seville since 1996. Deputy Coordinator of the Doctoral Program in Agrarian, Forestry, and Food Engineering and Sustainable Rural Development of the Universities of Córdoba and Seville. Member of the teaching board of the PhD course in Mediterranean Agricultural, Food and Forest Systems (SAAFM) of the University of Palermo. Invited Professor at the Universities of Turin, Palermo, Florence, and Autónoma de Tamaulipas (Mexico), guest speaker in University of Purdue (Dpt. Agronomy). Mentor in the teaching project FLORECE! of the University of Clemson (USA) funded by the US Department of Agriculture. External PhD examiner in the universities of Limerick (Ireland), Reggio Calabria, and Palermo (Italy). As services for the University of Sevilla, he was the Head of the Office of Transfer of Research Results (2005-2008), and of the Doctoral School of the University of Seville (2008-2015), and Head of the Agricultural Research Service of the University of Seville since February 2008.

## **Part C. Relevant accomplishments**

### **C.1. Publications**

Most relevant publications (selection of 10 publications)

1. Moreno M.T., Carmona E., de Santiago A., Ordovás J. y Delgado A. 2016. Olive husk compost improves the quality of intensively cultivated agricultural soils. *Land Degradation and Development* 27:449–459. DOI: 10.1002/ldr.2410 Q1
2. Recena R., Torrent J., del Campillo M.C. y Delgado A. 2016. Calculation of threshold Olsen P values for fertilizer response from soil properties. *Agronomy for Sustainable Development* 36:54. DOI: 10.1007/s13593-016-0387-5 Q1
3. Laudicina V.A., Palazzolo E., Catania P., Vallone M., Delgado A., Badalucco L. 2017. Soil quality indicators as affected by shallow tillage in a vineyard grown in a semiarid Mediterranean environment. *Land Degradation and Development* 28: 1048-1056. DOI: 10.1002/ldr.2581 Q1
4. Recena, R., Díaz, I., y Delgado A. 2017. Estimation of total plant available phosphorus in representative soils from Mediterranean areas. *Geoderma* 297:10-18. DOI:10.1016/j.geoderma.2017.02.016 Q1
5. Ghaley, B.B, Rusu, T., Sandén, T., Spiegel, H., Menta, C., Visioli, G., O'Sullivan, L., Leibig, M.A., Vrebos, D., Szegi, T., Michéli, E., Cacovean, H., Henriksen, C.B. 2018. Assessment of Benefits of Conservation Agriculture on Soil Functions in Arable Production Systems in Europe. *Sustainability* 10: 794. doi:10.3390/su100307947 Q2
6. Recena, R., Fenández-Cabanás V.M., Delgado A. 2019. Soil fertility assessment by Vis-NIR spectroscopy: Predicting soil functioning rather than availability indices. *Geoderma* 337: 368-74. doi.org/10.1016/j.geoderma.2018.09.049
7. Barrón V., Méndez J.M., Cruz-Yusta M., Sánchez L., Giménez C., Sacristán D., González-Guzmán A., Sánchez-Rodríguez A.R., Skiba, U.M., Inda A.V., Marqués J., Recio J.M., Delgado A., del Campillo M.C., Torrent J. 2020. Photochemical emission and fixation of NOx gases in sils. *Science of Total Environment* 702:134982. doi.org/10.1016/j.scitotenv.2019.134982 Q1
8. Moreno-Lora A., Delgado A. 2020. Factors determining Zn availability and uptake by plants in soils developed under Mediterranean climate. *Geoderma* 376: 114509. doi.org/10.1016/j.geoderma.2020.114509 Q1

9. García-López A., Recena R., Delgado A. 2020. The adsorbent capacity of growing media does not constrain myo-inositol hexakisphosphate hydrolysis but its use as a phosphorus source by plants. *Plant and Soil* 459: 277-288. <https://doi.org/10.1007/s11104-020-04764-1> Q1
10. Recena R., García-López A., Delgado A. 2021. Zinc uptake by plants as affected by fertilization with Zn sulfate, phosphorus availability, and soil properties. *Agronomy* 11 . 390. [doi.org/10.3390/agronomy11020390](https://doi.org/10.3390/agronomy11020390) Q1

## C.2. Research Projects and Grants

Most relevant in the last five years

1. Proyecto PID2020-118503RB-C21. Fertilización fosfatada sostenible basada en recursos reciclados. Investigador Principal: Antonio Delgado García. Ministerio de Ciencia e Innovación. Plan Estatal. Financiación: 185000 €. Duración 1/01/2021-31/12/2023.
2. Project No 101084398. Agro-ecological strategies for resilient farming in West Africa. CIRAWA. Investigador Principal: Antonio Delgado. Comisión Europea Horizon Europe-CL6-2022-FARM2FORK-01. Financiación: 800000 €. Duración: Julio 2022-Junio 2026.
3. Project No 813438. Diffuse phosphorus input to surface waters - new concepts in removal, recycling and management (P-TRAP). Investigador principal: Antonio Delgado; Comisión Europea H2020-MSCA-ITN. Financiación: 251000 €. Duración 1/03/2019-28/02/2023.
4. Project No 818309 Optimizing Bio-based Fertilisers in Agriculture – Knowledgebase for New Policies (LEX4BIO). Investigador principal: Antonio Delgado; Comisión Europea H2020-RUR-2018-2020 (H2020-RUR-2018-2). Financiación: 450750 €. Duración: 1/07/2019-30/06/2023
5. AGL-2017-87074-C2-1-R. Estrategias de Mejora de las Funciones del Suelo en el Ciclo y Disponibilidad del Fósforo; Investigador principal: Antonio Delgado García; Ministerio de Economía y Competitividad. Plan Estatal. Financiación: 108900 €. Duración: 1/01/2018 – 31/12/2020.
6. Project No 635201. LAND Management: Assessment, Research, Knowledge base: LANDMARK; Investigador principal: Antonio Delgado García; Comisión Europea; H2020. Financiación 45554 €. Duración: 01/05/2015 – 31/12/2019

## C.3. Contracts

1. Título: Estudio de nuevas fuentes de fósforo y hierro residual para su uso en la producción de fertilizantes. Investigador principal: Antonio Delgado García. Entidad financiadora: Fertiberia S.A. Financiación recibida: 20000 €. Duración: 1/01/2021-31/12/2023
2. Referencia del Contrato: FIUS PRJ 202003838. Título: European Journal of Agronomy. Investigador principal: Antonio Delgado García. Entidad financiadora: Elsevier B.V. Financiación recibida: 19800 €. Duración: 01/01/2020-31/12/2022
3. Referencia del contrato: FIUS 201000618. Título: Valoración de nuevos fertilizantes para prevención de carencias nutricionales en plantas. Investigador Principal: Antonio Delgado García. Entidad financiadora: Fertiberia S.A. Financiación recibida: 33176 €. Duración: Enero 2009-Junio 2011
4. Referencia del contrato: FIUS 200900130. Título: Estudio del efecto de la aplicación de ácidos húmicos en la fijación de fósforo en suelos agrícolas. Investigador principal: Antonio Delgado García. Entidad financiadora: Tradecorp Internacional S.A. Financiación recibida 11600 €. Duración: 01/09/2008-28/02/2009
5. Referencia del contrato: OG-004/08. Título: Desarrollo de los programas Europatent, Europroyekt e Innoebt. Investigador principal: Antonio Delgado García. Entidad financiadora: Red de espacios tecnológicos de Andalucía. Financiación recibida 79500 €. Duración: 16/07/2007-31/12/2007.

## C.4. Patents and other IPR

1. P200803749. del Campillo M.C., Sánchez I., Torrent J., Barrón V. y Delgado A. Método para corregir la clorosis férrica de las plantas. España.
2. P200703204. de Santiago A., Delgado A., Carmona E., y Quintero J.M. Utilización de ácido fosfórico enriquecido en Fe en la prevención y control de la clorosis férrica en plantas. España.

3. P200702426. Delgado A., de Santiago A., Carmona E., Quintero J.M., del Campillo M.C., Barrón V. y Torrent J. Utilización de mezcla de compost y vivianita en la prevención y control de la clorosis férrica en plantas. España.
4. P200600263. Delgado A., de Santiago A. Utilización de vinazas de azucarera en la prevención de la clorosis férrica de plantas. España.
5. P200401472. Delgado A., de Santiago A., del Campillo M.C., S. Kasem, L. Andreu, Barrón V. y Torrent J. Método de la corrección de la clorosis férrica en plantas. España.

### **C.5. Editorial Boards**

1. Associate editor in chief of the European Journal of Agronomy (JCR Q1) 1/01/2014 to 31/12/2021
2. Associate editor of the Journal of Environmental Quality (JCR Q2) from 01/01/2009 to 01/01/2015
3. Associate editor of the Spanish Journal of Agricultural Research (JCR Q3) from 01/01/2013 to 31/12/2013
4. Member of the editorial board of the European Journal of Agronomy from 01/01/2013 to 31/12/2013
5. Guest editor for special issue of Soil Use and Management in 2013

### **C.6 Management of scientific activities**

1. Member of the steering committee of the European Society for Agronomy Network since January 2017
2. President of the European Society for Agronomy Network September 2018-September 2020
3. Head of the office for technology transfer of the University of Sevilla from 14 January 2005 to 2 April 2008
4. Head of the Doctoral School of the University of Sevilla from April 2008 to Feb 2016

### **C.7 Organization of scientific conferences**

1. 6th Internacional Phosphorus Workshop (IPW6). Member of the organizing and scientific committee. Sevilla, 27 September to 1 October 2010.
2. General Assembly of the European Geosciences Union. Sesión SSS34, Phosphorus biogeochemistry in soils and waters: implications and constraints for sustainable development. Organizer. Viena (Austria), 3 to 7 May 2010.
3. Phosphorus mobilization and modelling at the field and catchment scales - dealing with uncertainty across the transfer continuum (COST 869). Member of the organizing and scientific committee. Sevilla, 29 September to 1 October de 2010.
4. V Meeting of the Composting Spanish Network. Member of the organizing and scientific committee. Sevilla 16 to 18 November 2016.
5. XVI Congress of the European Society for Agronomy (ESA). President of the organizing committee. Sevilla 1 to 3 September 2020.

### **C.8 Awards**

1. Award "Young Researchers" Spanish Society for Horticultural Sciences. 1991
2. Second prize "Fertiberia to the best PhD thesis in agriculture" 2017 (as supervisor of the thesis)
3. First prize "Fertiberia to the best PhD thesis in agriculture" 2018 (as supervisor of the thesis)

### **C.9 Reviewer for scientific agencies**

1. ERA-NET European Union; review in English
2. BARD - The US-Israel Agricultural Research & Development Fund; project reviewer; Review in English
3. CONICET - National Agency of Scientific Promotion of Argentina ; project reviewer; review in Spanish
4. Agencia Estatal de Evaluación - National Agency of Evaluation of Spain; project reviewer and member of expert commission; review in Spanish and English
5. University of Verona (Italy); project reviewer; reviews in English