

Part A. Personal Details		Date		09-05-2023
First and Last names	María Piedad Campelo Rodríguez			
Identification number	44433619 B	Age	43	
Codes for investigator identification	Researcher ID	A-8566-2016		
	Orcid Code	0000-0003-3614-7525		

A.1. Current Professional Position

Institution	University of León (Spain)			
Department/ Host institution	Agrarian Sciences and Engineering /School of Forestry and Agricultural Engineering (EIAF)			
Postal address	Avda. de Portugal, 41, 24071, León, Spain			
Phone	34 987291000 Ext. 5605	Email:	mpcamr@unileon.es	
Current position	Doctor Contracted Professor	Starting date	12-04-2018	
UNESCO codes	531201 - 310802 - 310805			
Keywords	Agrarian Economy, <i>Trichoderma</i> , Integrated pest management, Fungi soil, Hops, Bean			

A.2. Education (Degree, Host Institution, Year Completed)

Degree	University	Year
Technical Agricultural Engineer	University of León (Spain)	1998
Agricultural Engineer	University of León (Spain)	2002
Master Business Administration (MBA)	University of León (Spain)	2003
Master in occupational risk Prevention	Association of Technical Industrial Engineers of León (Spain)	2005
Ph.D. in Agricultural Engineering	University of León (Spain)	2011

A.3. Quality of the scientific production

- Six-year period evaluated positively: **1** (2010-2020)
- Total citations: **92** (Web of Science)
- Publications in the 1st Quartil (Q1): **4** (JCR), **7** (SCI) Publications in SCI journals: **13**
- H-index: **3** (Web of Science)

Parte B. Free summary of the *Curriculum vitae* (3.500 characters, including spaces)

Former positions

- 2018-present Doctor Contracted Professor, Department of Agrarian Sciences and Engineering, University of León (Spain).
- 2010-2018 Assistant Professor, Department of Agrarian Sciences and Engineering, University of León (Spain).
- 2005-2009 Autonomous Agricultural Engineer, Foundation Chicarro-Canseco-Banciella, under the auspices of the Ministry of Agriculture and Fisheries, Food and Environment.
- 2007-2010 Associate Professor, Department of Agrarian Sciences and Engineering, University of León (Spain).
- 2001-2005 Research fellow of the University of León, Diagnostic Laboratory of Vegetable Pests and Diseases. Foundation Chicarro-Canseco-Banciella – School of Forestry and Agricultural Engineering, University of León (Spain).

Professional career

I am a member of the multidisiplinary Research Group “Sustainable Agriculture and Engineering” of the University of León (Spain) from 2009.

As an agricultural engineer working on agrarian economy and phytopathology, I have published 13 SCI-journals in relevant scientific publications in this areas. Likewise, I have

been the author of 6 books, 24 chapters of books and 11 popular scientific articles. I have directed 16 end-of-degree and also 12 end-of-master works related to agrarian economy and plant health. In the last 10 years I am co-author of 52 communications to congresses and seminars, both national and international. I have participated in 35 research projects and contracts with different public entities and companies, mostly related to the protection of the crops and oriented to the integrated control of them, economy viability of energy crops and education innovation.

In 2001 I start to work at the Laboratory of Vegetable Pests and Diseases in the School of Forestry and Agricultural Engineering of the University of León (Spain), financed by the Foundation Chicarro-Canseco-Banciella, whose objectives are the detection of health problems in crops and the search for integrated control methods. In this laboratory I developed my research activity for more than ten years, continuing with it from the position of contracted professor, which today I occupy. As a result of this activity, important results have been transferred to my sector, maintaining a continuous relationship with other researchers, professionals and farmers.

Finally, I also develop an important university management activity about EHEA degrees design and implementation, business internships coordination and I am associate direction at School of Agricultural and Forestry Engineering at the University of León.

Parte C. MOST REMARKABLE MERITS (last 10 years).

- Between **2013** and **2023**: **12** SCI articles.
- Author of **6** books, **24** book chapters, and **11** non-SCI journal articles.
- **52** communications to Scientific Congress (**33** international and **19** national).
- **33** projects and contracts.

C.1. Publications (10 Selected in the last 10 years).

1. Cardoza, R. E, Mayo-Prieto S., Martínez-Reyes, N., McCormick, S. P., Carro-Huerga, G., Campelo, M. P., Rodríguez-González, A., Lorenzana, A., Proctor, R. H., Casquero, P. A. and Gutiérrez, S. (2022). Effects of trichothecene production by *Trichoderma arundinaceum* isolates from bean-field soils on the defense response, growth and development of bean plants (*Phaseolus vulgaris*). *Frontiers in Plant Science*, 13:1005906. doi: 10.3389/fpls.2022.1005906. JCR: 6,627, *Plant Science* (20/239), Q1.
2. Rodríguez-González, A., Carro-Huerga, G. Guerra, M., Mayo-Prieto, S., Porteous-Álvarez, A. J., Lorenzana, A., Campelo, M. P., Fernández-Marcos, A., Casquero, P. A. and Gutiérrez, S. (2022). Spores of *Trichoderma* strains over *P.vulgaris* beans: direct effect on insect attacks and indirect effect on agronomic parameters. *Insects*. doi: 10.3390/insects13121086. JCR: 3,141, Category: Entomology (17/100), Q1.
3. Martín, A., Recio, C., **Campelo, M. P.** (Coords.) (2021). *Integrated Pest Management Guide: Legumes*. Ministry of Agriculture, Fishery and Food of Spain. 233 pp. ISBN: 978-84-491-1574-5.
4. Mayo-Prieto, S., **Campelo, M. P.**, Lorenzana, A., Rodríguez-González, A., Reinoso, B., Gutiérrez, S., & Casquero, P. A. (2020). Antifungal activity and bean growth promotion of *Trichoderma* strains isolated from seed vs soil. *European Journal of Plant Pathology*, 158(4), 817-828. doi:10.1007/s10658-020-02069-8. JCR: 1,907, *Agronomy* (41/91), Q2.
5. Rodríguez-González, Á., **Campelo, M. P.**, Lorenzana, A., Mayo-Prieto, S., González-López, Ó., Álvarez-García, S., Gutiérrez, S., & Casquero, P. A. (2020). Spores of *Trichoderma* strains sprayed over *Acanthoscelides obtectus* and *Phaseolus vulgaris* L. beans: Effects in the biology of the bean weevil. *Journal of Stored Products Research*, 88 doi:10.1016/j.jspr.2020.101666. JCR: 2,643, *Entomology* (20/102), Q1.
6. Lorenzana, A., Hermoso De Mendoza, A., Seco, M. V., **Campelo, M. P.**, & Casquero, P. A. (2017). Within-plant distribution of *Phorodon humuli* (Hemiptera: Aphididae) and natural enemies on hops with implications for sampling and management. *Entomological Science*, 20(1), 443-450. doi:10.1111/ens.12273. JCR: 1,069, *Entomology* (45/96), Q2.
7. Lorenzana, A., Hermoso de Mendoza, A., Seco, V., **Campelo, P.**, & Casquero, P. A. (2017). Within-field distribution of the damson-hop aphid *Phorodon humuli* (Schrank) (Hemiptera: Aphididae) and natural enemies on hops in Spain. *Spanish Journal of*

- Agricultural Research, 15(2) doi:10.5424/sjar/2017152-10221. JCR: 0,811, Agriculture Multidisciplinary (29/57), Q3.
8. Mayo, S., Gutiérrez, S., Malmierca, M. G., Lorenzana, A., **Campelo, M. P.**, Hermosa, R., & Casquero, P. A. (2015). Influence of *Rhizoctonia solani* and *Trichoderma* spp. in growth of bean (*Phaseolus vulgaris* L.) and in the induction of plant defense-related genes. *Frontiers in Plant Science*, 6. doi:10.3389/fpls.2015.00685. JCR: 4,495, Plant Science (15/209), Q1.
 9. **Campelo, M. P.** (2015): Marketing in local agri-food systems (book chapter in: Food, religion and cultural diversity). Tirant lo Blanch - Tirant Humanidades. 371-378. 371-378. ISBN: 978-84-16062-67-6.
 10. **Campelo, M. P.** (2013). Rural development and entrepreneurship: The entrepreneurial potential of students of agricultural engineering of the University of León in Spain. *Historia y Comunicacion Social*, 18, 717-731. doi:10.5209/rev-HICS.2013.v18.44361

C.2. Research projects

1. **PID2021-123874OB-I00** "Isolation of bacterial strains capable of de-epoxidating trichotecenes from bean and hops cultures colonized by *Trichoderma* strains producing these mycotoxins". Financing Institution: State Investigative Agency-Ministry of Science and Innovation (Spain). PI: Santiago Gutiérrez Martín and Pedro A. Casquero Luelmo. University of León. 2022-2025. Role: Member of the research team.
2. **2019/00179/001** "Operative Group Quality Hops". Financing Institution: Ministry of Agriculture, Fishing and Food (Spain). PI: Pedro A. Casquero Luelmo. University of León. 2019-2021, 30.428,75 €. Role: Member of the research team.
3. **RTI2018-099600-B-I00** "Isolation of *Trichoderma* strains producing trichotecenes from bean crops and study of their effect on the defense of the plant against fungal diseases". Financing Institution: State Investigative Agency-Ministry of Science and Innovation (Spain). PI: Santiago Gutiérrez Martín. University of León. 2019-2021, 84.700 €. Role: Member of the research team.
4. **2019/00004/001** "Operative Group Spanish Quality Hops". Financing Institution: Ministry of Agriculture, Fishing and Food (Spain). PI: Pedro A. Casquero Luelmo. University of León. 5.313,5 €. Role: Member of the research team.
5. **IDI-20160750** "Global approach to improve wine production against the climate change based on robotics, IR technology and on biotechnological and wine-yard handling strategies. Effect of *Xylotrechus arvicola* in the transmission of vine-wood diseases: use of *Trichoderma* in biological control of the insect and the disease". Financing Institution: Center for the Industrial-technological development (CDTI-Spain). University of León (Spain). 2016-2020. 197.593 €. Role: Member of the research team.
6. **RF2010-00005-C05-03** "Regeneration and documentation of the national collections of bean for its conservation: Characterization of the Natural Collection of the CRF, design and implementation of web page for its diffusion". Financing Institution: Ministry of Science and Innovation (Spain). PI: Pedro A. Casquero, University of León. 2010-2013, 21.000 €. Role: Member of the research team.
7. **LE033A10-2** "Economic and commercial viability of energy crops under the new CAP: implications for the agri-food sector and the rural development". Financing Institution: Castilla y León Regional Government. PI: Rita Robles. University of León. 2010-2012, 33.786 €. Role: Member of the research team.
8. **1999/00053/001** "Creation and maintenance of a Laboratory for the diagnosis of diseases and pests". Financing Institution: Foundation Chicarro-Canseco-Banciella. PI: Eva M^a Gómez-Bernardo, University of León. 1999-2018, 377.989 €. Role: Member of the research team.

C.5. Direction of scientific works

2011-today Director of **16** end-of-degree projects and **12** end-of-master, University of León (Spain).

C.6. Participation in evaluation of scientific articles

2015 - Today Reviewer of 4 manuscripts for 3 scientific journals: 2 *Plant Disease*, 1 *Revista de Investigación Agraria y Ambiental*, 1 *Información Técnica y Económica* (ITEA).

C.7. Organization of scientific meetings

2007-08 Member of the Scientific Committee for the control of agricultural pests in Castilla y León (Spain) (Decree 11/2008, 14 February. BOCYL, 35: 2998-2999).

2006 Member of the Organizing Committee of the XII Meeting of the Working Group of Diagnostic and Phytosanitary Surveys Laboratories, organized by the Ministry of Agriculture, Fisheries and Food, which was held in Leon (Spain).

2001 Member of the Organizing Committee of the VII National Congress of the Spanish Society of Weed Science (SEMh), which was held in León (Spain).

C.8. Awards

2023 Honorary Mention Educational Innovation Award (Social Council of the University of León), edition 22.

2018 First Education Innovation Award (Social Council of the University of León), edition 17.

2014 First Education Innovation Award (Social Council of the University of León), edition 13.