MINISTERIO
DE CIENCIA, INNOVACIÓN
Y UNIVERSIDADES

CURRICULUM VITAE

CV date	04-12-2023

Part A. PERSONAL INFORMATION

First and Family name	**Álvaro Rodríguez González**		
Social Security, Passport, ID number	**09803597P**	Age	**42**
Researcher numbers	Researcher ID	**V-2768-2017**	
	Orcid code	**0000-0002-2117-593X**	

A.1. Current position

Name of University/Institution	**University of León (Spain)**			
Department	**Engineering and Agricultural Science (Plant Production) /School of Agricultural and Forestry Engineering**			
Address and Country	**Avda. de Astorga, 24400, Ponferrada (León, Spain)**			
Phone number	**34 987442075 / 34 987291843**	E-mail	alrog@unileon.es	
Current position	**Contract Professor Doctor**		From	**18-02-2023**
Espec. cód. UNESCO	**3101.- Agroquímica; 3103.- Agronomía; 3108.- Fitopatología.**			
Palabras clave	**insect pest, vineyard pests, biological control, *Trichoderma* spp., integrated pest management, insect ecology, volatile compounds, agricultural entomology, applied entomology, crop protection, insect - plant interaction**			

A.2. Education

PhD	University	Year
Engineering Agricultural Technical	University of León (Spain)	2006
Engineering Agronomy	University of León (Spain)	2010
Research Master in Biosystems Engineering	University of León (Spain)	2011
Ph.D. in Biosystem engineering	University of León (Spain)	2014

A.3. JCR articles, h Index, supervised degree and/or master projects

- Direction of degree and master projects (in the last six years): **13**
- Publications in SCI journals: **46**
- Total citations: **361** citations by **251** documents
- H-index: **10** (source: Scopus - ElSevier)

Part B. CV SUMMARY *(max. 3500 characters, including spaces)*

Former positions

2023-Today	Contract Professor Doctor (University of León)
2020-2023	Assistant Professor Doctor (University of León)
2018-2020	Technical Support Personnel (Ministry of Science, Innovation and Universities)
2016-2018	Higher Qualified Technician (University of León)
2014-2016	Laboratory Specialist Technician (University of León)
2011-2014	Research Personnel in Training Assimilated (University of León)
2010-2011	Research Personal (University of León)
2010	Researcher at the Escola Superior Agraria in Polytechnic Institute of Bragança (Portugal) (3 months)

Professional career

The curriculum vitae that I expose below is characterized for a great research experience that translates into numerous research articles (46 at present) made during the last years, either as main author or as co-author. Within my research experience it is also worth highlighting the high contribution made in congresses (national and international), with a total of 58 communications in the last 10 years, as well as participation as a collaborating researcher in 29 projects and/or research contracts at the University of León.

I have taught at the Higher School Agrarian of Bragança (Portugal), teaching through courses and seminars given at the "Regional Investigation and Agro-Food Development "(SERIDA) in Villaviciosa, Asturias (Spain), and in the Interuniversity Program of the Experience of University of León.

I have done predoctoral research stays and postdoctoral studies at the agrarian school of Bragança (Portugal), focusing my research activity on the biological control of pests that affect the cultivation of vines and olive groves.

I am currently a teaching and research staff (Contract Professor Doctor) on the campus of Ponferrada of the University of León, where I teach since February 2023.

Part C. RELEVANT MERITS (Between 2017-2023)

- Author of **1** book chapters.
- **55** Communications to Scientific Congress (**22** International and **33** National)
- **Co-inventor** of **5** National Patent
- Member of the Consolidated Research Unit (UIC) number 264 (2018-today) of the "Junta de Castilla y León" (Spain)
- Member of the teaching innovation group at the University of León "Ule Teaching Innovation Group – Agricultural Engineering" (INDIA)

C.1. Publications (*= corresponding author) **(**Q1= first quartile)

1. Carro-Huerga, G.; Mayo-Prieto, S.; **Rodríguez-González, Á*.**; Cardoza, R.E.; Gutiérrez, S.; Casquero, P.A. 2023. Vineyard management and physicochemical parameters of soil affect native *Trichoderma* populations, sources of biocontrol agents against *Phaeoacremonium minimum*. *Plants-Basel*. 12(4): 887. IF: 4.800. Q1-Plant Science.
2. Alvarez-García, S.; **Rodríguez-González, A***.; Zanfaño, L.; Gutiérrez, S.; Casquero, P.A. 2022. Volatile-mediated interactions between Trichoderma harzianum and Acanthoscelides obtectus: A novel in vitro methodology to evaluate the impact of microbial volatile compounds on dry grain storage pests. *Biological Control*. 169: 104868. IF: 4.100. Q1-Entomology.
3. **Rodríguez-González, A*.;** Malvar, R.A.; Guerra, M.; Sánchez-Maíllo, E.; Peláez, H.J.; Carro-Huerga, G.; Casquero, P.A. 2022. *Xylotrechus arvicola* (Coleoptera: Cerambycidae) capture in vineyards in relation to climatic factors. *Pest Management Science*. 78(7): 3030-3038. IF: 4.400. Q1-Agronomy.
4. **Rodríguez-González. Á*.;** Carro-Huerga, G.; Guerra, M.; Mayo-Prieto, S.; Porteous-Álvarez, A.J.; Lorenzana, A.; Campelo, M.P.; Fernández-Marcos, A.; Casquero, P.A.; Gutiérrez. S. 2022. Spores of *Trichoderma* strains over *Phaseolus vulgaris* beans: direct effect on insect attacks and indirect effect on agronomic parameters. *Insects*. 13(12). IF: 3.100. Q1-Entomology.
5. Álvarez-García, S.; Mayo-Prieto, S.; Carro-Huerga, G.; **Rodríguez-González, A*.;** González-López, O.; Gutiérrez, S.; Casquero, P.A. 2021. Volatile organic compound chamber: a novel technology for microbiological volatile interaction assays. *Journal of Fungi*. 7(4): 248. Impact Factor (IF) 6.499. Q1- Microbiology
6. Carro-Huerga, G.; Mayo-Prieto, S.; **Rodríguez-González, A.**; González-López, O.; Gutiérrez, S.; Casquero, P.A. 2021. Influence of fungicide application and vine age on *Trichoderma* diversity as source of biological control agents. *Agronomy-Basel*. 11(3): 446. IF: 3.640. Q1-Agronomy.
7. Mayo-Prieto, S.; Porteous-Álvarez, A.J.; Mezquita-García, S.; **Rodríguez-González, A.**; Carro-Huerga, G.; del Ser-Herrero, S.; Gutiérrez, S.; Casquero, P.A. 2021. Influence of physicochemical characteristics of bean crop soil in *Trichoderma* spp. development. *Agronomy-Basel*. 11(2): 274. IF: 3.640. Q1-Agronomy.
8. **Rodríguez González, A.***; Campelo, M.P.; Lorenzana, A.; Mayo-Prieto, S.; González-López, O.; 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: 101666. IF: 2.829. Q1-Entomology.
9. **Rodríguez González, A.***; Casquero, P.A.; Cardoza, R.E.; Gutiérrez, S. 2019. Effect of trichodiene synthase encoding gene expression in *Trichoderma* strains on their effectiveness in the control of *Acanthoscelides obtectus*. *Journal of Stored Products Research*. 83: 275-280. IF: 2.829. Q1-Entomology.
10. **Rodríguez González, A.***; Casquero, P.A.; Suárez-Villanueva, V.; Carro-Huerga, G.; Álvarez-García, S.; Mayo-Prieto, S.; Lorenzana, A.; Cardoza, R.E.; Gutiérrez, S.; 2018. Effect of trichodiene production by *Trichoderma harzianum* on *Acanthoscelides obtectus*. *Journal of Stored Products Research*. 88: 101666. IF: 2.829. Q1-Entomology.

11. **Rodríguez-González, A.***; Sánchez-Maíllo, E.; Peláez, H.J.; Mayo, S.; González-López, O.; Carro-Huerga, G.; Casquero, P.A. 2018. Evaluation of commercial and prototype traps for *Xylotrechus arvicola* (Coleoptera: Cerambycidae), an insect pest in Spanish vineyards. *Australian Journal of Grape and Wine Research*, 24(2): 190 – 196. IF: 3.257. Q1- Horticulture.
12. **Rodríguez-González, A.***; Sánchez-Maíllo, E.; Peláez, H.J.; González-Núñez, M.; Hall, D.R.; Casquero, P.A. 2017. Field evaluation of 3-hydroxy-2-hexanone and ethanol as attractants for the cerambycid beetle pest of vineyards, *Xylotrechus arvicola. Pest Management Science*, 73(8): 1598-1603. IF: 4.674. Q1-Entomology.
13. **Rodríguez-González, A.***; Peláez, H.J.; González-Núñez, M.; Casquero, P.A. 2017. Control of egg and neonate larvae of *Xylotrechus arvicola* (Coleoptera: Cerambycidae), a new vineyard pest, under laboratory conditions. *Australian Journal of Grape and Wine Research*. 23(1): 112-119. IF: 3.257. Q1- Horticulture.

C.2. Research projects and grants

1. "Analysis of the effectiveness of traps and semiochemicals for the mass capture of disparate *Anisandrus* (= *Xyleborus*) as a method of sustainable control of their populations in fruit plantations". **Funding Institution**: Cooperativa Frutibierzo SAT. Principal Researcher (PR): Fernando Castedo, Universidad de León. 2021 (March) - 2021 (December). **Role**: Team Member.
2. LOWPH-WINE 2020. "Application of *Trichoderma* strains in sustainable vine production: effects on pH regulation and improvement of wine quality "as part of the CDTI-CIEN project". Study of new factors related to the soil, the plant and the oenological microbiota that influence the acidity balance of wines and their guarantee of quality and stability in hot climates". **Funding Institution**: Center for the Industrial-technological development (CDTI-Spain). PR: Pedro A. Casquero, Universidad de León. 2020 - 2024. **Role**: Team Member.
3. LE251P18. "Application of *Trichoderma* strains in the sustainable production of high quality beans". **Funding Institution**: "Junta de Castilla y León" (Spain). PR: Pedro A. Casquero. Universidad de León. 2019 - 2021., 120.000 €. **Role**: Team Member
4. 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". **Funding Institution**: Center for the Industrial-technological development (CDTI-Spain). PR: Pedro A. Casquero, Universidad de León. 2016 - 2020. **Role**: Team member.
5. "Application of bacteriophages in the control of the fat (*Pseudomonas syringae* pv *phaseolicola*) of the bean (*Phaseolus vulgaris*)". **Funding Institution**: MINECO (Spain). PR: Pedro A. Casquero, Universidad de León. 2020 (January) - 2020 (March). **Role**: Team member.
6. "Quality Hops Operational Group". **Funding Institution**: MAPA (Spain). PR: Pedro A. Casquero. Universidad de León. 2019 - 2021, 5.313,50 €. **Role**: Team member.
7. Phytosanitary problems: diagnosis and control recommendations according to "GIP" principles in León province". **Funding Institution**: "Diputación de León". PI: Pedro. A. Casquero, Universidad de León. 2019 - 2020, 20.700 €. **Role**: Team member.
8. "Analysis of the evolution of the state of maturity perithecas of mottled in pear, year 2019". **Funding Institution**: Junta de Castilla y León. PI: Pedro. A. Casquero, Universidad de León, 2019 (April) - 2019 (December), 2.178 €. **Role**: Team member.
9. "Analysis of the evolution of the state of maturity perithecas of mottled in apple tree, year 2019". **Funding Institution**: Junta de Castilla y León. PI: Pedro. A. Casquero, Universidad de León, 2019 (April) - 2019 (December), 1.815 €. **Role**: Team member.
10. GLOBALVITI. "Global solution to improve wine production against climate change based on robotics, IT technology and biotechnological and vineyard management strategies". Center for the Industrial-technological development (CDTI-Spain). PR: Pedro A. Casquero, Universidad de León. 2016 - 2020, 197.593 €. **Role**: Team member.

C.3. Patents

1. **Registered industrial property title: "**Device for capture, retention and control of insects pest on woody species". **Inventors/authors/breeders:** Rodríguez-González, A.; Casquero, P.A.; Del Val Martínez, M.; González-López, O.; Carro-Huerga, G.; Del Ser-Herrero, S.; Mayo-Prieto, S.; Porteous-Álvarez, A.J.; Álvarez-García, S. **Rights-holding entity:** Universidad de

León**. Application number:** P202030883. **Country of registration:** Spain, Castilla y León. **Registration date:** 08/21/2020.

2. **Registered industrial property title: "**Volatile compounds for use in the control of pests of *Oxythyrea funesta*, *Tropinota hirta* And *Tropinota squalida*". **Inventors/authors/breeders:** Rodríguez-González, A.; Casquero, P.A.; Carro-Huerga, G.; Del Val Martínez, M.; Mayo-Prieto, S.; Porteous-Álvarez, A.J.; Álvarez-García, S.; González-López, O.; Ortíz-Hernádez, A. **Rights-holding entity:** Universidad de León. **Application number:** P202030394. **Country of registration:** Spain, Castilla y León. **Registration date:** 05/05/2020.
3. **Registered industrial property title: "**Seed coating containing an agent from biocontroly *Sargassum muticum*"**. Inventors/authors/breeders:** Casquero, P.A.; Mayo-Prieto, S.; Rodríguez-González, A.; Carro-Huerga, G.; Álvarez-García, S.; Porteous Álvarez, A.J.; Del Ser-Herrero, S.; Flórez-Fernández, N.; Domínguez-Fernández, H.; Torres-Pérez, M.D. **Rights-holding entity:** Universidad de León**. Application number:** P202030365. **Country of registration:** Spain, Castilla y León. **Registration date:** 29/04/2020.
4. **Registered industrial property title: "**Seed coating that includes a biocontrol agent and hops cones"**. Inventors/authors/breeders:** Casquero, P.A.; Mayo-Prieto, S.; Rodríguez-González, A.; Carro-Huerga, G.; Álvarez-García, S.; Porteous Álvarez, A.J.; Del Ser-Herrero, S. **Rights-holding entity:** Universidad de León**. Application number:** P202030362. **Country of registration:** Spain, Castilla y León. **Registration date:** 28/04/2020.
5. **Registered industrial property title:** "Culture chamber for competition microbiological tests by volatile compounds". **Type of industrial property:** Invention patent. **Copyright:** Yes. **Inventors/authors/breeders:** Casquero, P.A; Gutiérrez, S.; Mayo- Prieto, S.; González-López, O.; Carro-Huerga, G.; Suárez-Villanueva, V.; Rodríguez-González, A. **Rights-holding entity:** Universidad de León. **Code reference/registration:** 2018/129115**. Application number:** P201830817. **Country of registration:** Spain, Castilla y León. **Registration date:** 08/10/2018. **Grant Date:** 04/11/2019. **Patent number:** P201830817. **Spanish patent:** Yes. **EU patent:** Yes. **Non-EU international patent:** Yes. **PCT patent:** Yes.

C.4. Participation in Evaluation of scientific articles and grants proposals

2016 - today Reviewer of **91** manuscripts for 30 different International Scientific Journals (*PLoS ONE, Applied Science, Insects, Plants, Bulletin of Entomological Research, Pest Management Science, Journal of Applied Entomology, Agronomy, Scientia Agricola*, …)

C.5. Organization of scientific meetings

2012 Member of the organizing of the Organizing Committee of the IX Conference on Teaching and Research in Agroforestry Engineering organized by the School of Agricultural and Forestry Engineering (EIAF) of University of León (ULE), which was held in Leon (Spain) on September 2012.

C.6. Awards

2011 Award of the "Center for Studies and Research for the Management of Agricultural and Environmental Risks (CEIGRAM) of the Polytechnic University of Madrid (UPM), for the final research master's degree project entitled "Incidence of *Xylotrechus arvicola* on pruning performance and on the useful life of the vine in Castilla y León".

2016 First "Accesit" to the Research award of the Economic and Social Conseil of "Castilla y León" and the Public Universities of Burgos, León and Valladolid, which integrate the "Triangular E^3" Campus of International Excellence, 2016 edition, with the project entitled "Biological control of diseases of vine wood: a challenge for the sustainability of the wine sector in Castilla y León" .

2017 Extraordinary award of PhD in the area of engineering and architecture from the University of León, for the doctoral thesis entitled "Improvement in the strategies of cerambicids control in vine crop"

2018 XXII "Mariano Rodriguez" award convened by the "Carolina Rodríguez" foundation of the University of León, in the area of natural sciences and techniques for the research work entitled "*Xylotrechus arvicola*, a new threat to the vineyards of León province".