



**CURRICULUM VITAE (CVA, maximum 4 pages)**

**Part A. PERSONAL INFORMATION**

**CV date**

13/09/2022

First name	Antonio		
Family name	Trapero Casas		
Open Researcher and Contributor ID (ORCID) (*)	0000-0003-3089-8301		

(\*) *Mandatory*

**A.1. Current position**

Position	Catedrático de Universidad		
Initial date	2004		
Institution	University of Córdoba (UCO)		
Department/Center	Department of Agronomy/ ETSIAM		
Country	Spain	Teleph. number	957218529
Key words	Plant pathology; Plant pathogenic fungi; Epidemiology; Integrated pest management; Olive diseases; Diseases of mediterranean crops and forests.		

**A.2. Previous positions (research activity interruptions, art. 14.2.b))**

Period	Position/Institution/Country/Interruption cause
1978-1982	Prof. Ayudante. Univ. Córdoba
1979-1982	Becario FPI. Univ. Córdoba.
1982-1984	Prof. Contratado. Univ. Córdoba
1986-1987	Visiting Scientist. Whashington State Univ. (EE.UU.)
1985-2003	Prof. Titular. Univ. Córdoba
2004-actualidad	Catedrático. Univ. Córdoba

**A.3. Education**

PhD, Licensed, Graduate	University/Country	Year
Ingeniero Agrónomo	E.T.S.I.A., Univ. Córdoba	1978
Dr. Ing. Agrónomo	E.T.S.I.A., Univ. Córdoba	1983

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

Antonio Trapero Casas is professor of Plant Pathology at the ETSIAM of the University of Córdoba (UCO) since 1978 and Full professor since 2004. He has been a scientific member of various Panels of Experts on "Plant Health" in the Junta de Andalucía (1997-2003) and in the Ministry of Science and Technology (1999-2003), as well as director of the Department of Agronomy at the UCO (2010-2016). He is currently the scientific head of the Agroforestry Pathology research group (AGR-216, PAIDI) and of the Phytopathological Diagnosis and Analysis Service at the UCO (SeDAF-UCO). He has been granted six 6-year research tranches (1980-2015) and one 6-year transfer tranche (1991-2000).

Professor Trapero's research career has been oriented towards applied research in Plant Pathology, covering all the essential parts of this discipline, such as etiology, biology, epidemiology and control of plant diseases, with especial emphasize on plant pathogenic fungi. His main research line has been olive diseases; but he has also developed research on plant diseases in many other Mediterranean crops and forest species. He has published more than 400 scientific-technical papers, including 120 in JCR journals (most of them in Q1 as first or last author), 64 in other international journals, 108 books and book chapters, 130 technical papers and 4 patents. The scientific impact of these publications is high considering that they have been published in journals of the highest quality within crop protection (4703 citations,  $H_i = 36$ ). This research has also been disseminated by communications presented at national (265) and international (142) congresses. All this research activity has also resulted in numerous collaborations with international centers around the world, highlighting the Washington State University in Pullman, where he also spent a year as a visiting scientist. He has participated in 57 national or

international research projects and has led most of them, which has involved funding of about 10 million euros. Throughout this research career, his group has become world leader in research on epidemiology and disease control of some crops and forest species, such as chickpea, olive, holm and cork oaks, and more recently nuts (almond, pistachio and walnut).

Since professor Trapero has conducted applied research, all the advances have been transferred to the corresponding agricultural and forestry sectors, crystallizing in practical and effective applications for farmers and farm advisors through many technical publications and more than 300 courses, seminars and talks. As part of the transfer activity, it is worth highlighting the creation of the SeDAF-UCO, which has allowed the establishment of more than a hundred contracts with private and public companies on the diagnosis and modeling of plant diseases and the evaluation of biological and chemical products for their control. This activity has involved financing mainly from private companies of more than 3 million euros.

Regarding his academic career, professor Trapero has taught Plant Pathology to 43 promotions of Agricultural Engineers and 20 promotions of Forest Engineers, and he has supervised 18 PhD theses, 36 Master's theses, and 60 Final Degree theses. The vast majority of the young people trained in his research group have joined R+D+I activities in private companies and the rest as researchers in public research centers in Spain and other countries. Throughout his academic and research career he has received 32 awards, among the most recent, the "V Galileo Prize for Knowledge Transfer" from the University of Córdoba (2019). This award recognizes the research career of Professor A. Trapero related to innovation and the transfer of knowledge to society.

## **Part C. RELEVANT MERITS** (sorted by typology)

### **C.1. Publications** (see instructions)

1. Moral J, Agustí-Brisach C, Raya MC, ..., **Trapero A.** 2021. Diversity of *Colletotrichum* species associated with olive anthracnose worldwide. *Journal of Fungi* 7, 741.
2. López-Moral A, Agustí-Brisach C, **Trapero A.** 2021. Plant Biostimulants: New Insights into the Biological Control of Verticillium Wilt of Olive. *Frontiers in Plant Science* 12: 662178.
3. Mulero-Aparicio A, Varo A, Agustí-Brisach C, Lopez-Escudero FJ, **Trapero A.** 2020. Biological control of Verticillium wilt of olive in the field. *Crop Protection* 128. doi.org/10.1016/j.cropro.2019.104993.
4. López Moral A, Agustí-Brisach C, Lovera M, Luque F, Roca LF, Arquero O, **Trapero A.** 2019. Effects of cultivar susceptibility, fruit maturity, leaf age, fungal isolate and temperature on infection of almond by *Colletotrichum* spp. *Plant Disease* 103: 2425-2432.
5. Mulero-Aparicio A, Agustí-Brisach C, Varo A, López-Escudero FJ, **Trapero A.** 2019. A non-pathogenic strain of *Fusarium oxysporum* as a potential biocontrol agent against Verticillium wilt of olive. *Biological Control* 139: 104045.
6. Mulero-Aparicio A, Cernava T, Turrà D, Schaefer A, Di Pietro A, López-Escudero FJ, **Trapero A**, Berg G. 2019. The role of volatile organic compounds and rhizosphere competence in mode of action of the non-pathogenic *Fusarium oxysporum* FO12 towards Verticillium wilt. *Frontiers in Microbiology* 10: 1808.
7. Ollero-Lara O, Agustí Brisach C, Lovera M, Roca LF, Arquero O, **Trapero A.** 2019. Field susceptibility of almond cultivars to the four most common aerial fungal diseases in southern Spain. *Crop Protection*, 121: 18 – 27.
8. Varo A, Raya-Ortega MC, Agustí-Brisach C, García-Ortiz-Civantos C, Fernández-Hernández A, Mulero-Aparicio A, **Trapero A.** 2018. Evaluation of organic amendments from agro-industry waste for the control of Verticillium wilt of olive. *Plant Pathology* 67: 860–870.
9. Lozano-Tovar MD, Garrido-Jurado I, Quesada-Moraga E, Raya-Ortega MC, **Trapero A.** 2017. *Metarhizium brunneum* and *Beauveria bassiana* release secondary metabolites with antagonistic activity against *Verticillium dahliae* and *Phytophthora megasperma* olive pathogens. *Crop Protection* 100: 186-195.
10. Varo A, Mulero-Aparicio A, Adem M, Roca LF, Raya-Ortega MC, López-Escudero FJ, **Trapero A.** 2017. Screening water extracts and essential oils from Mediterranean plants against *Verticillium dahliae* in olive. *Crop Protection* 92: 168-175.

### **C.2. Congress**

1. Agustí-Brisach C, López-Moral A, Lovera M, Roca LF, Raya MC, Luque F, Arquero O, **Trapero, A.** 2021. Enfermedades emergentes del almendro en Andalucía: causas de su emergencia. Encuentro

- Internacional 2020-Año Internacional de la Sanidad Vegetal. *Phytoma*. Córdoba, Spain, 1-2 December (*Phytoma*, 334: 133). Poster.
- López-Moral A, Agustí-Brisach C, Mulero-Aparicio A, Varo A, Roca LF, Raya MC, Romero J, López-Escudero FJ, **Trapero A**. 2021. Massive screening of natural and biological compounds to select the best candidates for biocontrol of Verticillium Wilt of Olive in the Mediterranean basin. 8<sup>th</sup> IOBC Meeting on Integrated Protection of Olive Crops, Lisboa, Portugal, 26-29 October. Oral presentation.
  - Trapero A**, López Escudero FJ. 2018. Avances en la gestión integrada de la Verticilosis del Olivo. 40° Congreso Argentino de Horticultura. ASAH-ISHS, Córdoba, Argentina, 2- 5 October. Guest lecture.
  - Trapero A**, Agustí-Brisach C, Romero J, Moral J, Roca LF. 2018. Enfermedades emergentes en los olivares de la cuenca mediterránea. 40° Congreso Argentino de Horticultura. ASAH-ISHS, Córdoba, Argentina. 2-5 October. Guest lecture.
  - Lovera M, Ollero A, López-Moral A, Roca LF, Arquero O, **Trapero A**. 2017. Susceptibility of almond cultivars to the main foliar fungal diseases in southern Spain. VII International Symposium on Almonds and Pistachios. ISHS, Adelaide, South Australia, 5-9 November. Poster.
  - Zúñiga E, Luque J, Miarnau X, Arquero O, Lovera M, Ollero A, Roca LF, **Trapero A**. 2017. Epidemiology of almond red leaf blotch caused by *Polystigma amygdalium* in Spain. VII International Symposium on Almonds and Pistachios. ISHS, Adelaide, South Australia, 5-9 November. Poster.

### C.3. Research projects

- Proyecto CPP INNOLIVAR. Ministerio de Economía y Competitividad-UCO. 2017-2021. Línea 8: Formulados pre-comerciales de microorganismos antagonistas para el control biológico de la Verticilosis del olivo. PI: **Antonio Trapero Casas**. 1.492.800,00 €.
- Proyecto AGL2016-76240-R. Gestión Integrada de la Verticilosis del olivo mediante resistencia genética, prácticas agronómicas y control biológico. Ministerio de Economía y Competitividad-UCO. 2017-2020. PI: **Antonio Trapero Casas**, Fco. Javier López Escudero. 200.000 €.
- Proyecto: 658579 (H2020-MSCA-IF-2014\_GF). Biocontrol of aflatoxin contamination using atoxigenic strains from almond and pistachio orchards. European Commission. 2016-2019. PI: **Antonio Trapero Casas**. 235.675 €.
- Proyecto: PPTRATRA-2016.00.6. Transforma de Fruticultura Mediterránea. IFAPA, Consejería de Agricultura, Pesca y Desarrollo Rural, Junta de Andalucía. 2016-2018. PI: Octavio Arquero Quiles. 230.000,00 €.
- Proyecto: 22011003 CONV 129/11. Control biológico de la verticilosis del olivo. Interprofesional del Aceite de Oliva Español. 2011-2015. PI: **Antonio Trapero Casas**. 120.000,00 €.
- Proyecto: ALG2011-30137 Control de la verticilosis del olivo mediante cultivares resistentes. Ministerio de Ciencia e Innovación. 2012-2015. PI: Fco. Javier López Escudero. 170.000,00 €.
- Proyecto: AP/037045/11 Enfermedades emergentes del cultivo del olivo en la Cuenca Mediterránea. AECID. 2012. PI: **Antonio Trapero Casas**. 18.000,00 €.

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

- Proyecto PDC2021-121765-I00. Eficacia de nuevos genotipos y tratamientos biológicos para el control de la verticilosis del olivo en campo. (VERTOLEA). Referencia del proyecto de origen: AGL2016-76240-R. Ministerio de Economía y Competitividad-UCO. (Pruebas de Concepto 2021). 2021-2023. PI: **Antonio Trapero Casas**, Fco. Javier López Escudero. 115.000,00 €.
- Contrato Prestación de Servicios. 12021192. Evaluación de la eficacia de fungicidas frente a la Tuberculosis y la Antracnosis del olivo. Bioibérica, S.A. 2021-2023. PI: **Antonio Trapero Casas**. 16.000,00 €.
- Contrato Prestación de Servicios. 12021161. Evaluación de productos fungicidas frente al Repilo y la Antracnosis del olivo. Innoplant Tecnología e Investigación Agrícola S.L. 2021-2022. PI: **Antonio Trapero Casas**, Antonio Santos Rufo, Luis F. Roca Castillo. 37.310,00 €.
- Contrato Prestación de Servicios. 12021160. Evaluación de fungicidas frente a la Tuberculosis y la Lepra del olivo. Agricultura y Ensayo S.L. 2021-2022. PI: **Antonio Trapero Casas**, Antonio Santos Rufo, Luis F. Roca Castillo. 37.460,00 €.
- Contrato Prestación de Servicios. 12021086. Proyecto de investigación y plan de formación para al gestión integrada de las enfermedades de la madera de la vid en nuevas plantaciones. Bodegas Fundador. 2021-2022. PI: **Antonio Trapero Casas**, Carlos Agustí Brisach. 13.274,00 €.

6. Contrato Prestación de Servicios. 12021064. Evaluación de fungicidas para el control de enfermedades de olivo. Bayer Crop Science. 2021-2022. PI: **Antonio Trapero Casas**, Luis F. Roca Castillo. 20.100,00 €.
7. Proyecto GOP2I-SE-16-0043. Estrategias innovadoras para detección precoz y control de *Sclerotium rolfsii* en patata en Andalucía. Consejería de Agricultura, Pesca y Desarrollo rural. Línea 2. Ayudas al funcionamiento de los grupos operativos de la AeI en materia de productividad y sostenibilidad agrícolas (operación 16.1.2). 2017-2019. PI: **Antonio Trapero Casas**. 39.446,56 €.
8. Contrato Prestación de Servicios. 12019114. Evaluación de fungicidas frente a Repilo, emplomado y antracnosis del olivo. Syngenta S.A.U. 2019-2020. PI: **Antonio Trapero Casas**. 19.670,00 €.
9. Contrato Prestación de Servicios. 12021029. Asesoramiento y gestión de ensayos sobre el control de la antracnosis del olivo. Olivos Naturales, S.L. 2021-2022. IP: **Antonio Trapero Casas**. 18.000,00 €.
10. Contrato Prestación de Servicios. Validación del modelo epidémico “Repilos”. BAYER CROPSCIENCE, 2012-2021. PI: **Antonio Trapero Casas**. 330.000,00 €.

#### C.4. Contracts, technological or transfer merits: Patents

Two research patents are being processed by the University of Córdoba:

1. A *Fusarium* strain for the biological control of verticillium wilt in agricultural crops. **Trapero A**, Varo A, Mulero-Aparicio A, Santos A, Roca LF.
2. A specific PCR technique for the detection in olive plants of *Fusicladium oleagineum*, the causal agent of olive leaf spot. **Trapero A**, Roca LF, Raya MC.

#### C.4. Contracts, technological or transfer merits: Outreach publications

1. **Trapero A**, Roca LF, Segura R, Luque F, Romero J, Raya MC, López-Moral A, Agustí-Brisach C, 2021. Hacia el control biológico de las enfermedades aéreas del olivar. *Vida Rural*, 504: 50 - 56.
2. **Trapero, A.** 2021. Entrevista. Plagas y enfermedades que afectan actualmente al olivar. Anuario AOVE (Sanidad Vegetal) 2021: 124-125.
3. Agustí-Brisach, C., Jiménez-Urbano, J.P., Raya, M.C., López-Moral, A., **Trapero, A.** 2021. Hongos vasculares asociados a la ‘seca’ de ramillas en olivar superintensivo en Andalucía. *Phytoma* 329: 74-80.
4. Mulero A, Romero J, Varo A, López-Moral A, Agustí-Brisach C, Roca LF, Raya MC, Santos A, López-Escudero FJ, Narrillos C, Besse S, Salido L, **Trapero, A.** 2020. Diseño y evaluación de formulados precomerciales para el control biológico de la Verticilosis del olivo. *Phytoma* 321: 30-36.
5. Agustí-Brisach C, Roca LF, Antón-Domínguez BI, López-Moral A, Raya MC, Lovera M, Arquerro, O, **Trapero A.** 2020. Decaimiento del almendro en plantaciones jóvenes en Andalucía. *Vida Rural*, 476: 36 - 43.
6. **Trapero, A.** 2019. Micosis aéreas del olivar: 25 años de investigaciones (1994-2019). *Mercae* 100: 30-32
7. **Trapero, A.** 2018. *Xylella fastidiosa*, mitos y realidad. *Vida Rural* 453: 58-64.
8. **Trapero A**, Agustí-Brisach C, Romero J, Moral J, Roca LF. 2017. Enfermedades emergentes en el olivar. *Phytoma* 293: 26-32.
9. López-Moral A, Agustí-Brisach C, Raya-Ortega MC, Lovera M, Roca LF, Luque F, Arquerro O, **Trapero A.** 2016. La antracnosis del almendro, susceptibilidad varietal en Andalucía. *Vida Rural*, 423: 56-62.
10. Ollero-Lara A, López-Moral A, Lovera M, Raya MC, Roca LF, Arquerro O, **Trapero A.** 2016. Las enfermedades del almendro en Andalucía. *Fruticultura* 49: 166-183.