

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	M ^a Concepción		
Family name	Muñoz Díez	Date	04/12/2025
Gender (*)			
Social Security, Passport, ID number			
e-mail		URL Web	
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-1888-3628		

(*) Mandatory

A.1. Current position

Position	Associate Professor		
Initial date	21/08/2021		
Institution	University of Córdoba		
Department/Center	Agronomy	School of Agricultural and Forest Engineering (ETSIAM)	
Country	Spain	Teleph. number	
Key words	Olive tree, Olea europaea, Plant breeding, Plant genetics		

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

Period	Position/Institution/Country/Interruption cause
2014-2021	Associate Professor, Department of Agronomy, University of Cordoba, Spain
2010-2014	Postdoctoral fellow. Ecology and Evolutionary Biology Department, University of California Irvine, USA.
2008-2010	Postdoctoral fellow. Agronomy Department of the University of Cordoba, Spain.
2003-2008	Ph.D student. Agronomy Department of the University of Cordoba, Spain.
2001-2003	Scholarship holder. Genetics Department of the University of Cordoba, Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD. Agronomy (European PhD., Cum Laude),	University of Córdoba, Spain.	2008
Agronomist Engineer. Specialist in Plant Biotechnology	University of Córdoba, Spain.	2003

(Include all the necessary rows)

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

- Number of six-year periods of research: 3
- Number of Doctoral Thesis (Phd) supervised: 3
- Number of scientific publications included in JCR: 57
- Number of scientific publications in Q1: 47
- Total citations: 3379 (Academic Google)
- Average citations/year in the last 5 years: 402 (Academic Google)
- h-index: 27; i10-index: 49 (Academic Google); h-index: 25 (Scopus)
- ResearchGate profile: <https://www.researchgate.net/profile/Concepcion-Diez>
- Google citations profile: <https://scholar.google.com/citations?user=rHyNjPgAAAAJ>

I graduated in Agricultural Engineering from the University of Cordoba (UCO). Subsequently, I completed my Ph.D. thesis at the same university, specializing in genetic resources and breeding of olive (*Olea europaea* L.). I completed my postdoctoral training for 3 years as a researcher at the University of California-Irvine under the supervision of Prof. Brandon Gaut. My career has focused on two main lines of research: the study of genetic resources of cultivated species and their wild relatives, with emphasis on olive (*Olea europaea* L.), and the genetic breeding of this species. I am co-breeder of 25 new olive varieties in the registration phase. Currently, my main interest is the application of new genomic sequencing technologies to characterize the regulation of agronomically valuable traits, such as the length of the juvenile period. During my career I have collaborated with prestigious national and international research groups. As a result of this activity, I have published 57 articles in international journals, participated in 16 public research projects (5 as PI) and 25 projects (15 as PI) with private companies. I have been coordinator of the European project GEN4OLIVE (H2020-SFS-2020-1; 2020-2024 - 7.385.558€ - UCO: 1.6 M €) and currently I am the coordinator of the public-private consortium PROLIVE (TransMisiones 2023-2028. 6.407.820,55€ - UCO: 1.4 M €).

Part C. RELEVANT MERITS (sorted by typology)

- Author of 57 articles in international journals, 47 of them in first quartile journals (Q1).
- Author of 2 full books and 4 chapters in collaborative books published by Springer.
- Participation in 16 research projects (5 as PI) and 25 applied research projects with companies (15 as PI).
- Six research stays, 3 of them postdoctoral, totaling 3 years and 5 months.
- Co-supervisor of 3 doctoral theses (Phd) and 3 in progress, 19 Master's Theses and 12 Final Degree Projects.

C.1. Publications (see instructions)

1. Miho, H., Pagnotta, G., Hitaj, D., De Gaspari, F., Mancini, L.V., Koubouris, G., Godino, G., Hakan, M. and **Diez, C.M.**, 2024. OliVaR: Improving olive variety recognition using deep neural networks. *Computers and Electronics in Agriculture*, 216, p.108530.
2. Rojas-Gómez, M., Moral, J., López-Orozco, R., Cabello, D., Oteros, J., Barranco, D., Galán, C. and **Diez, C.M.**, 2023. Pollen production in olive cultivars and its interannual variability. *Annals of Botany*, 132(6), pp.1145-1158.
3. Miho, H., Moral, J., Barranco, D., Ledesma-Escobar, C.A., Priego-Capote, F. and **Diez, C.M.**, 2021. Influence of genetic and interannual factors on the phenolic profiles of virgin olive oils. *Food Chemistry*, 342, p.128357.
4. Miho, H., Moral, J., López-González, M.A., **Diez, C.M*** and Priego-Capote, F*, 2020. The phenolic profile of virgin olive oil is influenced by malaxation conditions and determines the oxidative stability. *Food Chemistry*, pp.126183.
5. Roessler, K., Muyle, A., **Diez, C.M.**, Gaut, G.R., Bousios, A., Stitzer, M.C., Seymour, D.K., Doebley, J.F., Liu, Q. and Gaut, B.S., 2019. The genome-wide dynamics of purging during selfing in maize. *Nature plants*, 5(9), pp.980-990.
6. Miho, H., **Diez, C.M.**, Mena-Bravo, A., de Medina, V.S., Moral, J., Melliou, E., Magiatis, P., Rallo, L., Barranco, D. and Priego-Capote, F., 2018. Cultivar influence on variability in olive oil phenolic profiles determined through an extensive germplasm survey. *Food chemistry*, 266, pp.192-199.
7. **Diez C.M.**, Moral J, Cabello D, Morello P, Rallo L. and Barranco, D. 2016. Cultivar and tree density as key factors in the long-term performance of super high-density olive orchards. *Frontiers in Plant Science*, 7.
8. **Diez CM**, Trujillo I, Martínez-Urdiroz N, Rallo L, Barranco D, Marfil P, Gaut BS. 2015. Olive domestication and diversification in the Mediterranean Basin. *New Phytologist* 206: 236–247.
9. **Diez CM**, Meca E, Tenailon MI, Gaut BS. 2014. Three groups of transposable elements with contrasting copy number dynamics and host responses in the maize (*Zea mays* ssp. *mays*) genome. *PLoS genetics* 10: e1004298.



10. **Díez CM**, Roessler K, Gaut BS. 2014. Epigenetics and plant genome evolution. *Current Opinion in Plant Biology* 18: 1–8.

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)

More than 100 communications in national and international congress and symposiums. i.e:

- **Díez CM**. 2021. Olive genetic resources in the IOC network. 2021. International ISBER annual meeting – Biobanking networks. Oral *Communication*.
- **Díez CM**. 2021. The Gen4Olive project. The international olive council network of germplasm banks and phytosanitary management. IOC seminars. Oral *Communication*.
- **Díez CM**. 2016. Domestication in perennials vs. annuals. ETH Zurich. Ecology and evolution seminars. Oral *Communication*.

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

1. PROLIVE - PLEC2023-010225. Soluciones digitales y biotecnológicas para mitigar la crisis del cambio climático y acelerar el proceso de mejora genética en olivicultura. Proyectos de I+D en líneas estratégicas en colaboración entre organismos de investigación y difusión de conocimientos, en el marco de la iniciativa TransMisiones 2023-2028. 6.407.820,55€ (UCO: 1.4 M €). Role: PI
2. SYLVA - HE-CL6-GOV-IA-2022-101086109. A SYstem for reaL-time obserVation of Aeroallergens. European Commission. 2022-2026. 268.947€. Role: Researcher
3. FLOROLIVE+ - PDC2021-121701-I00. Validación e implementación de biomarcadores moleculares para la predicción del Periodo Juvenil en olivo. MINECO: Plan Estatal 2017-2020 de Investigación Científica y Técnica y de Innovación. Programa Estatal de I+D+i Orientada a los Retos de la Sociedad. 2021-2023. 138.000€. Role: PI
4. GEN4OLIVE - Mobilization of Olive GenRes through pre-breeding activities to face the future challenges and development of an intelligent interface to ensure a friendly information availability for end users. European Commission (H2020-SFS-2020-1). 2020-2024. 7.385.558€ (UCO: 1.6 M €). Role: PI
5. LIFE RESILIENCE - Prevention of *X. fastidiosa* in intensive olive & almond plantations applying productive green farming practices. 2018-2022. European Commission. 250.291€. Role: PI
6. FLOROLIVE - AGL2016-79236-R. Caracterización de genes y miRNAs como marcadores de la transición floral en plantas juveniles y adultas de olivo. 2017-2020. MINECO. 157.000€. Role: PI
7. INNOLIVAR: Nuevas variedades de olivo para olivar en seto. Ministerio de Economía y Competitividad. Compra Publica Innovadora 2017. 2017-2021. Role: Researcher.
8. Mantenimiento del reservorio público de variedades comerciales de olivo. 2017-2020. INIA. Coordinador: Diego Barranco. Role: Researcher. 50.502€
9. Genome size variation and transposable element content in wild subspecies of maize along altitudinal gradients (UC-Mexus Grant). 2010-2012. University of California-Government of Mexico Coordinador: Brandon S. Gaut (University of California, Irvine). Role: Postdoctoral Researcher.
10. Population genomics: study on the wild maize, the teosinte (*Zea mays* ssp. *parviglumis* y *Zea mays* ssp. *mexicana*). CONACYT - Gobierno de México. 2012-2016. Coordinador: Luis Eguiarte Fruns. Role: Postdoctoral Researcher.

C.4. Contracts, technological or transfer merits,

Participation in technological contracts with companies, i.e:

1. Obtención de variedades de olivo con alto contenido en oleocantal. Contrato con la empresa: Ingeniería Santa Cruz SAU. 2017-2020. 90.750€. Role: PI
2. Utilidad de compuestos de origen vegetal en Agronomía. Contrato con la empresa: TELLURIS SA. 2020-2024. 27.450€. Role: PI



3. Desarrollo de nuevas variedades de olivo adaptadas al sistema de cultivo en seto y con buenas características agronómicas. Contrato con la empresa: BALAM Agriculture SL. 2022-2032. 512.275€. Role: PI

Patents:

CULTIVAR	OBTENTOR	CULTIVAR	OBTENTOR	CULTIVAR	OBTENTOR
SULTANA	UCO				
SIKITITA 2	UCO-IFAPA	i-27	UCO+TODOLIVO S.L	i-50	UCO+TODOLIVO S.L
i-14	UCO+TODOLIVO S.L.	i-30	UCO+TODOLIVO S.L	i-51	UCO+TODOLIVO S.L
i-15	UCO+TODOLIVO S.L	i-31	UCO+TODOLIVO S.L	i-72	UCO+TODOLIVO S.L
i-16	UCO+TODOLIVO S.L	i-40	UCO+TODOLIVO S.L	i-74	UCO+TODOLIVO S.L
i-17	UCO+TODOLIVO S.L	i-41	UCO+TODOLIVO S.L	i-79	UCO+TODOLIVO S.L
i-20	UCO+TODOLIVO S.L	i-42	UCO+TODOLIVO S.L	i-99	UCO+TODOLIVO S.L
i-24	UCO+TODOLIVO S.L	i-45	UCO+TODOLIVO S.L	i-100	UCO+TODOLIVO S.L
i-26	UCO+TODOLIVO S.L	i-46	UCO+TODOLIVO S.L	i-101	UCO+TODOLIVO S.L

I am breeder of **25 new olive cultivars**: one from the Olive Breeding Program of the University of Cordoba (Sultana), another in collaboration with IFAPA (Sikitita2) and 23 varieties in collaboration with the company Todolivo SA (i-XX). The application to protect these cultivars was submitted to Spanish Plant variety Office varieties (OEVV). All these cultivars are being commercialized under license by several companies (Balam, Todolivo, Plantas Contiental, Agromillora).

Also, in November 2023, the **patent P202330963** was submitted for registration: "Method for identifying the stage of development of a plant and method for selecting plants with a short juvenile period through the use of miRNAs".

Entrepreneurial and transfer activity

From 2010 to 2015 I was a partner in IDolive S.L. (<http://www.idolive.es>), a spin-off (start up) company developed in the UCOLIVO research group of the Agronomy Department of the University of Cordoba. IDolive SL met the demand for identification of olive varieties of the nursery and table olive industry at national and international level. IDolive S.L ceased its activity in 2015 and its functions and commitments were assumed by the UCOLIVO group.

C.5. Stays in international research centers

- Ecology and Evolutionary Biology Department, University of California-Irvine (USA). Postdoctoral Stay. September 2013 - October 2014 (10 months). Supervisor: Prof. Brandon Gaut.
- Ecology and Evolutionary Biology Department, University of California-Irvine (USA). Postdoctoral Stay. September 2010 - October 2012 (24 months). Supervisor: Prof. Brandon Gaut.
- Cavanilles Institute of Evolutionary Biology. University of Valencia. Postdoctoral Stay. September 2009 - March 2010 (7 months). Supervisor: Prof. Eladio Barrio.
- Kearny Agricultural Center, University of California-Davis (USA). Predoctoral Stay. August-September 2007 (2 months). Supervisor: Prof. Themis Michailides.
- Cavanilles Institute of Evolutionary Biology. University of Valencia. Predoctoral Stay. March-May 2007 (3 months). Supervisor: Prof. Eladio Barrio.
- CNR - Institute of Plant Genetics, Perugia (Italy). Predoctoral Stay. October 2005 - January 2006 (3 months). Supervisor: Dr. Luciana Baldoni.