



### CURRICULUM VITAE (CVA)

**IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.**

#### Part A. PERSONAL INFORMATION

<b>CV date</b>	11/1202020
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<b>First name</b>	Jorge		
<b>Family name</b>	de las Heras Ibáñez		
<b>Gender (*)</b>	Male	<b>Birth date</b>	22/03/1963
<b>ID number</b>	05164430X		
<b>e-mail</b>	Jorge.heras@uclm.es		
<b>Open Researcher and Contributor ID (ORCID) (*)</b>	<a href="http://orcid.org/0000-0003-2374-7097">http://orcid.org/0000-0003-2374-7097</a>		

(\*) Mandatory

#### A.1. Current position

<b>Position</b>	Full Professor (Catedrático de Universidad)		
<b>Initial date</b>	6-5-2009		
<b>Institution</b>	Universidad de Castilla-La Mancha		
<b>Department/Center</b>	Producción Vegetal y Tecnología Agraria	Facultad de Farmacia	
<b>Country</b>	Spain	<b>Teleph. number</b>	967599200
<b>Key words</b>	Postfire management; ecological restoration; erosion control; Fire ecology		

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

Period	Position/Institution/Country/Interruption cause
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#### A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Licenciado CC Biológicas	Murcia	1986
Doctor CC. Biológicas	Murcia	1992

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

Full Professor since 2009, head of the ECOFOR research group (Universidad de Castilla-La Mancha) and director of the area of Limnology and hydrobiology for the Regional Center of Water Studies at the UCLM since 2001. Academic Director of Entrepreneurial Projects of the UCLM (2008-2010), Dean of the Pharmacy Faculty (2010-11) and head of the Department of Plant Production and Agriculture Technology (1997-2001). During the period: 2005-2008 I was the International Affairs Office Coordinator at Albacete Campus (UCLM). My research focus on ecology of fire-prone ecosystems, and specifically on the dynamics of Mediterranean vegetation after fire. Management of pine forests and holm oak forests after fire has been my main research for the last 25 years. During this time, I have gained broad experience in both



field and forest management studies. My research activities have produced 175 publications, 105 peer-review articles SCI in top journals in the fields of Forestry, Agricultural, Water Resources, Soil Sciences and Environmental Sciences (Q1= 55%), 8 books, 41 chapters of book and >30 invited talks in national and international centers (France, Cuba, Panama, Costa Rica, Italy). I have served as co-editor for 2 international books on post fire ecology of Mediterranean Ecosystems (WIT Press, Springer). I have supervised 17 PhD Thesis and currently I'm supervisor of 4 PhD Thesis students. I have contributed to the training of 17 doctors, four of whom are currently permanent professors at UCLM. One more PhD is researcher at Wilfrid Lurie University in Canada and currently granted by the María Zambrano program; An FPU, and a Postdoc UCLM complete the ECOFOR Group. I have participated in 30 research projects, 21 of them as principal investigator (PI) in the fields of fire ecology, water resources and limnology. I've been PI in three European Projects: EQUAL\_ACTIVIA, MEPROWARE (JPI) and ADAPTALEPPO (LIFE 20-CCA-ES-001809) and participated in one SUDOE project (SOE1/P1/F169). It is relevant my participation in the Urban Forest Innovation Lab (Urban Innovative Actions, UE) project for entrepreneurship in forest bioeconomy in Cuenca (Spain). UFIL combines project-based learning, mentoring, incubation and acceleration of innovative ideas around the forest bioeconomy and more than 20 business projects have been developed since 2019. I've been Spanish representative in one COST action (FP0701). I've been the UCLM group coordinator in one CONSOLIDER-INGENIO project (MONTES). Since 2008, I've been the coordinator of the Sustainability Observatory of the Albacete Province, and PI of 10 projects dealing with 21 Agenda implementation and A2030 localization in Albacete province. I've been invited (since 2021) to be member of the advisory panel group of the 2030 network of the Federación Española de Municipios y Provincias. Additionally, I have participated in another 20 research contracts (17 as coordinator) with different enterprises and institutions such as: Castilla-La Mancha Environment and Agriculture Councilings; Confederación Hidrográfica del Guadiana; Gesremán, Junta Central de Regantes del acuífero Mancha Oriental, Diputación de Albacete, Ayuntamiento de Albacete. Reviewer for the 5 top journals in the field of Forestry. R+D Management: (2011- Present): Expert for project evaluation panels for the ANECA; 2009-Present; Expert for research-period evaluation of Extremadura (ANECA, 2018). Expert for project evaluation panels for the ANEP (2015-present). Expert for the FPU grants during 2017-2018. Expert for project evaluation panels for the FONDECYT Regular, Chile; 2008: Expert for project evaluation panels for the Regional Government of Galicia in the field of Forestry, Spain. Founding partner of the Sociedad Española de Agricultura Ecológica (1992). I've obtained 5 Six-years research periods (last one obtained in 2020); 1 six-years transfer tech.; h-index (Google Scholar): 38; Citations (Scopus): 1913. Awards: Hromadka Medal Award of the Wessex Institute of Technology 2007 (RU); Award from the Pinar del Río University, Cuba (2009).

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

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

1. Lucas-Borja, Manuel Esteban, Xin Jing, John T. Van Stan II, Pedro Antonio Plaza Álvarez, Javier Gonzalez-Romero, Esther Peña, Daniel Moya, Demetrio Antonio Zema, Jorge de las Heras, 2021. Changes in soil functionality eight years after fire and post-fire hillslope stabilization in Mediterranean forest ecosystems, *Geoderma*, 115603. <https://doi.org/10.1016/j.geoderma.2021.115603>
2. González-Romero, M. López-Vicente, E. Gómez-Sánchez, E. Peña-Molina, P. Galletero, P.A. Plaza-Alvarez, D. Moya, J. De las Heras, M.E. Lucas-Borja, 2021. Post-fire management effects on sediment (dis)connectivity in Mediterranean forest ecosystems: channel and catchment response. *Earth Surface Processes and Landforms*, <https://doi.org/10.1002/esp.5202>
3. Lucas-Borja, M.E., Delgado-Baquerizo, M., Muñoz-Rojas, M., Plaza-Álvarez, P.A., Gómez-Sánchez, M.E., González-Romero, J., Peña-Molina, E., Moya, D., de las Heras, J. 2020. Changes in ecosystem properties after postfire management strategies in wildfire affected Mediterranean forests. *Journal of Applied Ecology*, <https://doi.org/10.1111/1365-2664.13819>



4. Lucas-Borja, M.E., Plaza-Álvarez, P.A., González-Romero, J., Miralles, I., Sagra, J., Molina-Peña, E., Moya, D., De las Heras, J., Fernández, C. 2020. Post-wildfire straw mulching and salvage logging affects initial pine seedling density and growth in two Mediterranean contrasting climatic areas in Spain. *Forest Ecology and Management*, 474: 118363, <https://doi.org/10.1016/j.foreco.2020.118363>
5. Moya D, González-De Vega S, García-Orenes F., Morugán-Coronado M, Arcenegui V, Mataix-Solera J, Esteban Lucas-Borja M, De las Heras J (2018) Temporal characterization of soil-plant natural recovery related to fire severity in burned *Pinus halepensis* Mill. *Forests. Science of the Total Environment* 636C, 737-750. DOI: 10.1016/j.scitotenv.2018.04.339
6. Lucas-Borja ME, Tíscar PA, Plaza Alvarez PA, Sagra J, González Romero J, Moya D, De las Heras J (2018) Prescribed burning lowers the initial recruitment rates of three pine species that inhabit a mid-altitude Mediterranean mountain. *Forest Ecology and Management* 427, 325-332 DOI: /10.1016/j.foreco.2018.06.015
7. Gonzalez-De Vega S, De las Heras J, Moya D (2016) Resilience of Mediterranean terrestrial ecosystems and fire severity in semiarid areas: Responses of Aleppo pine forests in the short, mid and long term. *Science of the Total Environment* 573: 1171-1177 DOI:10.1016/j.scitotenv.2016.03.115
8. Alfaro-Sánchez R, Camarero JJ, López-Serrano FR, Sánchez-Salguero R, Moya D, De las Heras J (2015) Positive coupling between growth and reproduction in young post-fire Aleppo pines depends on climate and site conditions. *International Journal of Wildland Fire* 24(4) 507-517 DOI: 10.1071/WF14045
9. Hedo J, Lucas-Borja ME, Wic C, Andres-Abellán M, De Las Heras J (2015): Effects of thinning and induced drought on microbiological soil properties and plant species diversity at dry and semiarid locations. *Land Degradation & Development* 27(4): 1151-1162 DOI: 10.1002/ldr.2361
10. De las Heras J, Moya D, López-Serrano FR, Rubio E (2013) Carbon sequestration of naturally regenerated Aleppo pine stands in response to early thinning. *New Forests* 44(3) 457- 470. DOI: 10.1007/s11056-012-9356-2

## C.2. Congress

- 2018: Avances científicos en los tratamientos de emergencia post-incendio. Resultados y Experiencias en el Sureste español. Conferencia Invitada. III Taller Lecciones aprendidas (Universidad de Córdoba)
- 2016: Post-fire restoration of Mediterranean forests: helping autosuccession. Ponencia invitada (XV OPTIMA Meeting, Montpellier, France).
- 2013. Qué hacer después del fuego? Principales retos y algunas respuestas. Conferencia Magistral VI Congreso Forestal Español (Vitoria-Gasteiz).
- 2009: Member of the Scientific Panel V Congreso Forestal Español (Incendios forestales). Avila.

## C.3. Research projects

2020-2024 **ADAPTALEPPO**. Adaptive management of *Pinus halepensis* forests in the face of climate change. (LIFE 20-CCA-ES-001809). PI UCLM group: J. de las Heras. Budget: 2,606.779 €

2020-2023 **PRESFIRE** Oportunidad y efectividad de medidas de actuación preventiva y restauración de grandes incendios forestales en Castilla-La Mancha. (SBPLY/19/180501/000130). Funding Agency: CLM Regional Government. PI: J. de las Heras. Budget: 96.533 €

2018-2020 **VIS4FIRE**. Vulnerabilidad integral de los sistemas forestales frente a incendios: implicaciones en las herramientas de gestión forestal (RTA2017-00042-C05-00). Funding agency: Spanish Ministry of Science and Innovation. PI: J. Madrigal; P.I (subproject): J. De las Heras (UCLM). Budget: 110.000 €



2015-2018 **GEPRIF**. Reducción de la Severidad del Fuego Mediante Nuevas Herramientas y Tecnologías para la Gestión Integrada de la Protección contra los Incendios Forestales (RTA 2014-00011-C06-05). Funding agency: Spanish Ministry of Science and Innovation. PI: C. Hernando; P.I (subproject): J. De las Heras (UCLM). Budget: 100.000 €

2016-2017 **MEPROWARE**. New methodology for the promotion of the reuse of wastewater in the improvement of Mediterranean crops (PCIN-2015-247). JPI Water. PI: A. Pollice; P.I (subproject): J. De las Heras (UCLM). Budget: 110.000 €

2009-2013 **MONTES**. Los montes españoles y el cambio global: amenazas y oportunidades (CSD2008-00040). Funding agency: Spanish Ministry of Science, PI: J. Retana, I: J. De las Heras (UCLM). Budget: 4.5M €

2008-2012 **COST FP0701**. Post-fire forest management in Southern Europe. PI: F. Moreira. PI Spain group (MC and SC): Jorge de las Heras & Ramón Vallejo. Budget: 80.000 €

2009-2012 Influencia antropogénica en el desarrollo de pinares xerófilos mediterráneos. Manejo forestal sostenible de regenerados tras incendio y de repoblaciones de pino carrasco (**POII09-0096-3367**). Funding agency: Consejería de Educación y Ciencia JCCM. PI: J. De las Heras (UCLM). Budget: 130.000 €

2010-2012 **MedFor-ECOTRON**. Funding agency: FEDER. PI: J. De las Heras (UCLM). Budget: 250.000 €

#### **C.4. Contracts (knowledge transfer)**

2008-2023 Convenio de colaboración entre la UCLM y la Diputación de Albacete para la continuación del Observatorio Provincial de Desarrollo Sostenible. Funding agency: Diputación de Albacete. PI: J. De las Heras (UCLM). Budget: 450.000 €

2011-2014 Biometanización en EDARS: Gestión energética y de residuos, Biodar. Funding agency: Aguas de Alcázar -GESREMAN (CDTI). PI: J. PI: J. De las Heras (UCLM). Budget: 86.000 €

2010-2012 Estudio del estado ecológico de los ríos de Castilla-La Mancha y determinación de caudales ecológicos de interés regional. Funding agency: Agencia del Agua de Castilla-La Mancha. PI: J. De las Heras (UCLM). Budget: 200.000 €

2008-2010 Caracterización y valorización de los lodos de depuración de la cuenca alta del guadiana; aprovechamiento de lodos de depuradora y agua residual depurada para cultivos energéticos. Type of contract: Development of scientific and technological support activities. Funding agency: Confederación Hidrográfica del Guadiana. PI: J. De las Heras (UCLM). Budget: 240.000 €

2008-2010 Asesoramiento en materia de recursos hídricos: Estudio de calidad del agua subterránea para abastecimiento urbano en el Dominio de El Salobral-Los Llanos y asesoría en materia de elaboración del PH del río Júcar. Type of contract: Development of scientific and technological support activities. Funding agency: Council of Albacete. Participatory entities: UCLM-ITAP. PI: J. PI: J. De las Heras (UCLM). Budget: 96.000 €

2008-2010 Caracterización y valorización de los lodos de depuración de la Cuenca Alta del Guadiana para cultivos energéticos Type of contract: Development of scientific and technological support activities. Funding Agency: Confederación Hicrográfica del Guadiana IP: Jorge de las Heras. Budget: 240.000 €

2007-2008 Estudio de viabilidad y potencialidad de cultivos energéticos destinados a la producción de biomasa y biocombustibles en Castilla-La Mancha. Type of contract: rato: Development of scientific and technological support activities. Funding agency: Agencia regional de la Energía (AGECAM). PI: J. De las Heras (UCLM). Budget: 30.000 €