

**Part A. PERSONAL INFORMATION**

**CV date**

11/11/2021

First and Family name	Enrique Mateos Naranjo		
Social Security, Passport, ID number	██████████	Age	██
Researcher codes	Open Researcher and Contributor ID (ORCID**)	0000-0001-6276-5664	
	SCOPUS Author ID (*)	23025044800	
	WoS Researcher ID (*)	F-1782-2016	

(\*) *Optional*

(\*\*) *Mandatory*

**A.1. Current position**

Name of University/Institution	Universidad de Sevilla		
Department	Biología Vegetal y Ecología		
Address and Country	Avda. Reina Mercedes s/n, 41012 Sevilla, Spain		
Phone number	+34 654591124	E-mail	emana@us.es
Current position	Full Professor	From	03/12/2020
Key words	Abiotic stress, Ecophysiology, Halophytes, Phyto-tools, Phytomicrobiome, Plant-microbial interactions applications		

**A.2. Education**

PhD, Licensed, Graduate	University	Year
PhD in Biology	Universidad de Sevilla	2008
University Expert Plant Ecophysiology Methods	Universidad Islas Baleares	2014

**A.3. General indicators of quality of scientific production (see instructions)**

Investigation sexennium number: 2 (31/12/2017)

Transfer sexennium number: 1 (31/12/2019)

Thesis supervised since 2010: 4 (+2 ongoing)

Total nº of publications (JCR): 99 (Scopus)

Average nº of publications last five years (2016-20): 8.4 (80% Q1; 18% Q2 and 2% Q4)

Total nº of publications in the first quartile (Q1): 66 (59 since January 1, 2010)

Total nº of publications in the first decile (D1): 21

Total nº of citations / average nº of citations last five years (2015-21): 2407/ 295 (Scopus)

h-index: 28 (Scopus) and M-index (h/years since first publication): 1.8

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

In the year 2004 I obtained an FPI scholarship (Junta de Andalucía) for the realization of my PhD Thesis, which I finished in 2008, obtaining the University of Seville Award for the Best Doctoral Thesis. From the beginning, my training as a researcher has been approached from a multidisciplinary approximation, through the learning of eco-physiological, biochemical and molecular techniques both in the US and other research centers, thanks to financed stays with various programs, such as Prog. José Castillejo. Thus, under the direction of Dr. Rui Santos (Univ. Faro, Portugal), Dr. Susana Felman (Univ. Rosario, Argentina) and Dr. Anthony J. Davy (Univ. East Anglia, UK) I had the opportunity to deepen into the knowledge of the ecology of the marshes and the biology of the halophytes. During my stay in the group of Dr. Eric Deslandes (Univ. Bretagne Occidentale, France) I learned biochemical aspects related to the tolerance of plants. And the various stays developed in the University of Illes Balears, with Dr. Jaume Flexas, have allowed me to deepen the modelling of the photosynthetic response and the quantification of its limitations under environmental stresses. In recent years, I have focused on the study of the synergistic response of plants to environmental synergistic interactions, currently to halophytes as functional foods and the role of plant growth promoting bacteria and its application in the improvement of traditional

and alternative crops to climatic change scenarios. Thus, the research lines developed by my research group, Applied Vegetable Ecophysiology (RNM035), are: i) Interactions plant-microorganism: applications. ii) Conservation Ecophysiology. iii) Phytoremediation of pollutants. iv) Ecophysiology of crops and multifunctional halophytes.

I have published 114 research papers since 2006, 99 of them in scientific journals with impact indexes included in JCR. 61 have been published in the highest impact journals of their category (Q1), among which are: Bioresource Technology, Journal of Experimental Botany, New Phytologist, Desalination, Marine Pollution Research. In addition, I have made 88 contributions to scientific congresses (64 international and 24 national).

I have participated continuously, since 2006, in 14 research projects obtained in competitive calls, being IP of 6 of them highlighted the projects CGL2016-75550-R AEI / FEDER, UE and FEDER US-1262036, 15 research project of teacher innovation, being IP of 5 of them (PPID, US). I have also participated in 11 research contracts with the Public Administration, with Institutions or Companies. On the other hand, I am part of 4 international networks, one of which was constituted for the European COST Action FA0901 project, and others formed to apply the project of the European Union, PRIMA, ERA-CAPS, and BiodivERsA Calls, being partner IP for BiodivERsA Call (Conv. 2020; submitted). Also I am member of the University Institute of Studies on Latin America, research line: Biodiversity, Ecosystems and Natural Resources. I have directed 4 Doctoral Theses, 3 of them with the International Doctorate Mention and one also with Extraordinary Doctorate Award. I currently direct two more. I have also directed 9 master's theses, 1 DEAs. On June 2015, I won Young Research Award for Excellence in Research in Biological Sciences. (Real Academia Sevillana de Ciencias). And on February 19, 2020, I won the VII Losada Villasante Award for Excellence in Research in the Agrifood area.

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

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

1. **Mateos-Naranjo E**, López-Jurado J, Mesa-Marín J, Luque CJ, Castellanos EM, Pérez-Romero JA, Redondo-Gómez S (2021) Understanding the impact of a complex environmental matrix associated with climate change on the European marshes engineer species *Spartina maritima*. Environmental and Experimental Botany 182, 104304. (Q1: 26/234 Plant Sciences. IF 4.027).
2. **Mateos-Naranjo E**, López-Jurado J, Redondo-Gómez S, Mesa-Marín J (1/9) (2020). Uncovering PGPB *Vibrio spartinae* inoculation-triggered physiological mechanisms involved in the tolerance of *Halimione portulacoides* to NaCl excess. Plant Physiology and Biochemistry 154, 151-159. (Q1: 33/234 Plant Sciences. Índice de impacto 3.720).
3. López-Jurado J, **Mateos-Naranjo E**, Balao F (2019). Niche divergence and limits to expansion in the high polyploid *Dianthus broteri* complex. New Phytologist 222, 1076-1087. (D1: 8/228 Plant Sciences. Índice de impacto 7.299).
4. **Mateos-Naranjo E**, Pérez-Romero JA, Redondo-Gómez S, Mesa-Marín J, Castellanos EM, Davy AJ (2018). Salinity alleviates zinc toxicity in the saltmarsh zinc-accumulator *Juncus acutus*. Ecotoxicology and Environmental Safety 163, 478-48. (Q1: 44/250 Environmental Sciences. Índice de impacto 4.527).
5. Navarro-Torre S, Barcia-Piedra JM, Caviedes MA, Pajuelo E, Redondo-Gómez S, Rodríguez-Llorente ID, **Mateos-Naranjo E** (2017) Bioaugmentation with bacteria selected from the microbiome enhances *Arthrocnemum macrostachyum* metal accumulation and tolerance. Marine Pollution Bulletin 117, 340-347. (D1: 9/106 Marine & Freshwater Biology. Índice de impacto 3.241).
6. Mesa J, Rodríguez-Llorente ID, Pajuelo E, Barcia-Piedras JM, Caviedes MA, Redondo-Gómez S, **Mateos-Naranjo E** (2015) Moving closer towards restoration of contaminated estuaries: Bioaugmentation with autochthonous rhizobacteria improves metalrhizoaccumulation in native *Spartina maritima*. Journal of Hazardous Materials 300, 263-271. (D1: 19/225 Environmental Sciences. Índice de impacto 4.836).
7. **Mateos-Naranjo E**, Mesa j, Pajuelo E, Pérez-Martín A, Caviedes MA, Rodríguez-Llorente ID (2015). Deciphering the role of plant growth-promoting rhizobacteria in the tolerance of the invasive cordgrass *Spartina densiflora* to physicochemical properties of salt-marsh soils. Plant and Soil, 394:45-44. (D1: 8/81 Agronomy. IF: 2.952).

8. **Mateos-Naranjo E**, Castellanos E, Perez-Martín A (2014). Zinc tolerance and accumulation in the halophytic species *Juncus acutus*. *Environmental and Experimental Botany*, 100:114-121. (Q1: 30/204 Plant Sciences. IF: 3.359).
9. **Mateos-Naranjo E**, Perez-Martin A (2013). Effects of sub-lethal glyphosate concentrations on growth and photosynthetic performance of non-target species *Bolboschoenus maritimus*. *Chemosphere*, 93:2631-2638. (Q1: 32/216 Environmental Sciences. IF: 3.499).
10. **Mateos-Naranjo E**, Andrades-Moreno L, Redondo-Gómez S (2012) Tolerance to and accumulation of arsenic in the cordgrass *Spartina densiflora* Brongn. *Bioresource Technology* 104, 187-194. (D1: 1/12 Agricultural Engineering. Índice de impacto 4.750).
11. **Mateos-Naranjo E**, Redondo Gómez S, Álvarez R, Cambrollé J, Gandullo J, Figueroa M.E (2010). Synergic effect of salinity and CO<sub>2</sub> enrichment on growth and photosynthetic responses of the invasive cordgrass *Spartina densiflora*. *Journal of Experimental Botany*, 61:1643-1654. (D1: 12/188 Plant Sciences. IF: 4.818).

## C.2. Research projects

-TITLE: Improving the sustainability of strawberry cultivation using bio-tools (FEDER US-1262036)

FINANCIAL ENTITY AND CALL: competitive participation in R + D + i projects within the framework of the FEDER Andalusia Operational Program 2014-2020

MAIN RESEARCHER AND AFFILIATION: **Enrique Mateos Naranjo** and Ignacio D. Rodríguez Llorente, Univ. Sevilla

DURATION: 01/02/2020 – 31/01/2022

BUDGET: 79.701 €

TYPE OF PARTICIPACION: Principal researcher

-TITLE: The halophytes and their rhizospheric relationships: tools for the adaptation of traditional agriculture to Climate Change (CGL2016-75550-R AEI/FEDER, UE).

FINANCIAL ENTITY AND CALL: Ministry of Economy and Competitiveness / Convocatoria Retos, Plan Nacional.

MAIN RESEARCHER AND AFFILIATION: **Enrique Mateos Naranjo** y Susana Redondo Gómez, Univ. Sevilla.

DURATION: 30/12/2016 – 29/12/2019.

BUDGET: 215.380 €

TYPE OF PARTICIPACION: Principal researcher

-TITLE: Improvement of the tools for the conservation and management of the Patagonia marshes, Argentina: Scientific-technical strengthening of the Soil Laboratory of the Patagonian Institute for the Study of Continental Ecosystems (IPEEC-CCT CENPAT-CONICET) in the field of ecophysiology.

FINANCIAL ENTITY AND CALL: International Cooperation Research Projects (Development Cooperation Office-US).

MAIN RESEARCHER AND AFFILIATION: **Enrique Mateos Naranjo**, Univ. Sevilla.

DURATION: 01/01/2015-30/10/2017.

BUDGET: 12.079,02 €

TYPE OF PARTICIPACION: Principal researcher

-TITLE: Evaluation of the desalination capacity of *Arthrocnemum macrostachyum* (RTA2012-00006-C03-02).

FINANCIAL ENTITY AND CALL: Ministry of Economy and Competitiveness / Subprograma de Proyectos de Investigación Fundamental Orientada a los Recursos y Tecnologías Agrarias en Coordinación con las CCAA.

MAIN RESEARCHER AND AFFILIATION: Susana Redondo Gómez, Univ. Sevilla.

DURATION: 13/05/2013-12/05/2016.

BUDGET: 31.000,8 €

TYPE OF PARTICIPACION: Researcher

-TITLE: Low cost ecological strategies for the recovery of Andalusian estuaries contaminated with heavy metals. Rhizostabilization with native plants and inoculants (P11-RNM-7274).

FINANCIAL ENTITY AND CALL: Consejería de Innovación, Ciencia y Empresa, Junta de Andalucía / Proyectos de Excelencia.



MAIN RESEARCHER AND AFFILIATION: Eloísa Pajuelo Domínguez, Univ. Sevilla.  
DURATION: 16/05/2013-15/05/2016.  
BUDGET: 185.847 € TYPE OF PARTICIPACION: Researcher

-TITLE: Putting halophytes to work: from genes to ecosystems (FA0901).  
FINANCIAL ENTITY AND CALL: European Union / COST Action.  
MAIN RESEARCHER AND AFFILIATION: Timothy John Flowers / University of Sussex.  
DURATION: 15/10/2009 – 30/05/2014.  
BUDGET: 507.936 € TYPE OF PARTICIPACION: Researcher

-TITLE: Weak points for the knowledge of the carbon cycle in estuary systems: sink-emission relationships (CTM2008-04453).  
FINANCIAL ENTITY AND CALL: Ministry of Science and Innovation / Plan Nacional.  
MAIN RESEARCHER AND AFFILIATION: Xavier Niell Castanera, Univ. Málaga.  
DURATION: 01/01/2009 – 31/12/2015.  
BUDGET: 350.000 € TYPE OF PARTICIPACION: Researcher

### **C.3. Contracts, technological or transfer merits**

*Conservation project of Dianthus inoxianus in the Macía quarry: Translocation and reinforcement of populations.* Agreement for the realization of a scientific application between Áridos la melera, S.L and Universidad de Sevilla. Main researcher (MR): Francisco Balao Robles, Univ. Sevilla. Duration: 23/04/2014-22/11/2017. Budget: 28.748 €

### **C.4. Patents**

**C.5. Stays in research Centers:** Universidad del Algarve (Portugal) 3 months. Université la Bretagne Occidentale (France) 3 months. National University of Rosario (Argentina). University of the Balearic Islands (UIB, Spain) 6 months. University of East Anglia (UK) 3 months.

**C.6. Awards:** i) Young Research Award for Excellence in Research in Biological Sciences. Real Maestría de Caballería de Sevilla (Real Academia Sevillana de Ciencias, 2015). ii) VII Losada Villasante Award for Excellence in Research in the Agrifood área (Foro interalimentario, 2020)

**C.7.** Member of the Editorial Committee of PeerJ Journal (ISSN: 2167-8359 y eISSN 2167-8359) PEERJ INC 341-345 OLD ST, THIRD FLR, LONDON EC1V 9LL, ENGLAND

**C.8.** Reviewer more than 50 times for publications of 38 journals indexed in JCR.

**C.9.** Evaluator of the projects of the Calls for Excellence and Challenges of the State Plan since 2012.

**C.10.** Evaluator of the projects of the 2017 Calls for Excellence and Challenges of the State Plan 2013-2016 (BOE of June 13), as a member of the Commission of the Environmental science and technology (CTM-TECNO), of the Subdivision of Scientific-Technical Thematic Programs, State Research Agency (MINECO). November, 2018.

**C.11.** Member of the Organizing Committee of “VII Coloquio de Ecofisiología Forestal”. Abril, 2017 (El Rocio, Huelva)

**C.12.** Coordinator of PhD Program “Integrative Biology” of the University of Seville. From June 2021. And Coordinator of “Natural Resources Management Line” of the University Master “Advanced Biology: Research and Application” (Universidad de Sevilla).