

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	Susana		
Family name	Redondo Gómez		
Gender (*)		Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail		URL Web https://prisma.us.es/investigador/3490	
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-5280-9325		

(*) Mandatory

A.1. Current position

Position	Professor		
Initial date	31/10/2016		
Institution	Universidad de Sevilla		
Department/Center	Biología Vegetal y Ecología	Facultad de Biología	
Country	Spain	Teleph. number	
Key words	Halophytes, Ecophysiology, Abiotic stress, Phyto-tools, Synergy, Plant-microbial interactions, climate change		

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

Period	Position/Institution/Country/Interruption cause
2009-2016	Lecturer / Universidad de Sevilla / Spain
2005-2009	Hired teacher / Universidad de Sevilla / Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD in Biology	Universidad de Sevilla / Spain	2004
Licensed in Biology	Universidad de Sevilla / Spain	2000

(Include all the necessary rows)

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

Since the beginning of my research career, I have conducted ecophysiological studies of halophytes in response to different types of abiotic stresses, emphasizing their potential as bio-tools. In recent years, I have focused on the study of the synergistic response of halophytes to various stress factors and, more recently, to the role of plant-associated bacterial communities in the stress response of halophytes. Thus, the research lines developed by the research group that I lead, Applied Functional Ecology (RNM035), are: i) Interaction plant-microorganism. ii) Phytodesalination: recovery of salinized soils. iii) Phytoremediation of pollutants. iv) Ecophysiology of halophytes and crops.

Since 2015, I have published 70 research papers, 68 of them in scientific journals with impact indexes included in JCR. 53 have been published in the highest impact journals of their category (Q1), among which are: Bioresource Technology, Plant Stress, Environmental and Experimental Botany, Journal of Experimental Botany, Science of the Total Environment, Desalination, Ecology. Furthermore, I have published 5 book chapters. Throughout my entire career, I have published 136 research papers (121 JCR; *h-index* 37, 58% of documents in the top 25% most cited documents worldwide, 81.8% of

documents in the top 25% journals by CiteScore, all according to Scopus). Stanford University's 2024 High Impact Rankings included me among the top 2% of scientists in the world. In addition, I have made 125 contributions to national and international congresses. I have been a member of the scientific committee of the XX International Botanical Congress (21st to 27th of July 2024) and of the Organizing Committee 'MEDECOS XIV International Conference & XIII AEET Meeting' (Seville, 2017). I have participated continuously, since 2015, in 16 projects obtained in competitive calls: 5 international projects; 5 national projects, being PI of all of them, TED2021-131605B-I00 NextGeneration EU, PID2021-124750NB-I00, PDC2021-120951-I00 NextGenerationEU, CGL2016-75550-R AEI/FEDER, UE and RTA2012-00006-C03-02; 5 projects of the Junta de Andalucía; and 5 local projects. I have directly (as PI) raised funds for an amount of 712.741 €. I am part of 4 international networks, one of them constituted by the COST Action FA0901 project in which researchers from 30 countries participate, and the other three formed to request projects from the European Union: ERA-CAPS, BiodivERsA and PRIMA. In addition, I belong to the group of experts in charge of the preparation of the inventory 'Alien Invasive Species in Europe (DAISIE)', financed by the 6th Framework Program of the EU. Finally, on November 17, 2017, I won the V Losada Villasante Award for Excellence in Research in the Agrifood area.

Throughout my entire career, I have also participated in 23 research contracts with the Public Administration, with Institutions or Companies, being PI of five of them. This means that I have raised funds directly (as a contract IP) for an amount of 199.051,53 €; Which, added to the funds raised in public calls, represents a total of 911.792,53 €. After my PhD, I obtained an I3P-CSIC scholarship for training and specialization in research lines with interest for the industrial sector (Ref. I3P-BPG2004), where I could make a technology transfer, applying the techniques I developed in my doctorate to Agrarian Research. I complemented this national stay (6.5 months) with an 8-month stay at the University of the Algarve (Faro, Portugal). These activities allowed me to obtain a *Sexenio de Transferencia* of the CNEAI in 2019. I am currently responsible for the contract 'Papel del Consorcio MOO frente a estreses osmótico e hídrico' (2024-2025), signed with the Timac Agro España, S.A. company to determine the effect of the bacterial consortium MOO on two cultures subjected to water and osmotic stress. Finally, the purpose of the 'proof of concept' project, PDC2021-120951-I00 NextGenerationEU, mentioned above, is the direct transfer of the results obtained in a previous project (CGL2016-75550-R) to the companies.

Regarding the dissemination of the results of my research, I regularly participate in activities such as *Feria de la Ciencia*, *Noche Europea de los Investigadores*, *Café con Ciencia*, *QUIFIBIOMAT*, and scientific meetings '*Ciencia en Bulebar*'; as well as press releases on newspapers and interviews on television and radio programs (El Correo TV, Agropupular on Cadena COPE radio station, Latrilla on Capital Radio, Hora 25 - the radio program of Aimar Bretos, etc.).

I have directed 6 Doctoral Theses (3 from 2015), 5 with the European or International Doctorate Mention and three of them with Extraordinary Doctorate Award. I currently direct three more. I have also directed 1 bachelor's and 6 master's theses. Also, full member of Commission 4, Natural Sciences, of accreditation involved in state accreditation for access to university teaching bodies (ANECA Academy Program), from 12/22/2023. I have been Vice Dean of Students, Academic Organization and Infrastructure of the Faculty of Biology for a total of five years and Director of the US Admissions Secretariat for another two. I have also been Coordinator of the PhD Program in Integrated Biology at the University of Seville and member of the Editorial Committee of 'Agronomy' and guest editor of a special issue of the same journal. In addition, I have been evaluator of the programs: Torres Quevedo 17; InterTalentum 2018; Grants for Attracting Research Talent César Nombela 2023, 2024; projects of the 2017 Calls for Excellence and Challenges of the State Plan 2013-2016 (CGL-BOS Commission); Postdoctoral Training Programs, Juan de la Cierva Formation and Incorporation 2015; Ramón y Cajal, for the areas of AGR in 2015 and CTM in 2021.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications

1- Mateos-Naranjo E (CA), Pérez-Romero JA, Puglielli G, López-Jurado J, Mesa-Marin J, Pajuelo E, Rodríguez-Llorente I, **Redondo-Gómez S** (8/8) (2024) Soil microorganisms buffer the reduction in plant growth and physiological performance under combined abiotic stress in the halophyte *Salicornia*

- ramosissima*. Environmental and Experimental Botany 217, 105550. <https://doi.org/10.1016/j.envexpbot.2023.105550>.
- 2- Mesa-Marín J (CA), Mateos-Naranjo E, Carreiras J, ..., **Redondo-Gómez S** (11/11) (2023) Interactive temperature and CO₂ raise, salinity, drought and bacterial inoculation alter the nutritional profile of the edible halophyte *Salicornia ramosissima*. Plants 12, 1395. <https://doi.org/10.3390/plants12061395>
- 3- **Redondo-Gómez S (CA)**, Romano-Rodríguez E, Mesa-Marín J, Sola-Elías C, Mateos-Naranjo E (1/5) (2022) Consortia of plant-growth-promoting rhizobacteria isolated from halophytes improve the response of Swiss chard to soil salinization. Agronomy 12, 468. <https://doi.org/10.3390/agronomy12020468>.
- 4- **Redondo-Gómez S (CA)**, Mesa-Marín J, Perez-Romero JA, ..., Mateos-Naranjo E (1/11) (2021) Consortia of plant-growth promoting rhizobacteria isolated from halophytes improve response of eight crop to soil salinization and climate change conditions. Agronomy 11(8):1609. DOI:10.3390/agronomy11081609.
- 5- Mateos-Naranjo E (CA), López-Jurado J, Mesa-Marín J, Luque CJ, Castellanos EM, Pérez-Romero JA, **Redondo-Gómez S** (7/7) (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. DOI:10.1016/j.envexpbot.2020.104304.
- 6- Mesa-Marín J (CA), Pérez-Romero JA, Mateos-Naranjo E, Bernabeu-Meana M, Pajuelo E, Rodríguez-Llorente ID, **Redondo-Gómez S** (7/7) (2019) Effect of Plant Growth Promoting Rhizobacteria on *Salicornia ramosissima* seed germination under salinity, CO₂ and temperature stress. Agronomy 9:655. DOI:doi.org/10.3390/agronomy9100655.
- 7- Barcia-Piedras JM, Pérez-Romero JA, Mateos-Naranjo E, Camacho M, **Redondo-Gómez S (CA)** (5/5) (2019) Effect of prior salt experience on desalination capacity of the halophyte *Arthrocnemum macrostachyum*. Desalination 463:50-54. DOI:10.1016/j.desal.2019.03.006.
- 8- Mesa-Marín J (CA), Barcia-Piedras JM, Mateos-Naranjo E, ..., **Redondo-Gómez S** (11/11) (2019) Soil phenanthrene phytoremediation capacity in bacteria-assisted *Spartina densiflora*. Ecotoxicology and Environmental Safety 182:109382. DOI:10.1016/j.ecoenv.2019.109382.
- 9- Mesnoua M, Mateos-Naranjo E, Perez-Romero JA, Barcia-Piedra JM, Lotmani B, **Redondo-Gómez S (CA)** (6/6) (2018) Combined effect of Cr-toxicity and temperature rise on physiological and biochemical responses of *Atriplex halimus* L. Plant Physiology and Biochemistry 132:675-682. DOI:10.1016/j.plaphy.2018.08.025
- 10- Mesnoua M, Mateos-Naranjo E, Barcia-Piedras JM, Pérez-Romero JA, Lotmani B, **Redondo-Gómez S (CA)** (6/6) (2016) Physiological and biochemical mechanisms preventing Cd-toxicity in the hyperaccumulator *Atriplex halimus* L. Plant Physiology and Biochemistry 106:30-38. DOI:10.1016/j.plaphy.2016.04.041.

C.2. Congress.

- 1- Romano-Rodríguez E, Flores-Duarte NJ, Mateos-Naranjo E, Navarro-Torre S, Rodríguez-Llorente ID, Pajuelo E, **Redondo-Gómez S** (2024) *Halocnemum strobilaceum* as new source of potentially plant growth promoting endophytic bacteria. XX International Botanical Congress, IBC 2024. 21-27 julio, Madrid (Type of participation: oral communication).
- 2- Mesa-Marín J, Mateos-Naranjo E, Perez-Romero JA, Mariscal V, Molina-Heredia FP, Pajuelo E, Rodríguez-Llorente ID, **Redondo Gómez S** (2021) PGPR biofertilizers from halophytes for agriculture in a climate change scenario. 11th Symposium of the International Society of Root Research ISRR11/Rooting2021 “Root Biology Never Sleeps!” 9 June 2021. University of Missouri, Columbia, USA (Type of participation: oral, virtual communication).
- 2- Mesa-Marín J, Mateos-Naranjo E, Rodríguez-Llorente ID, **Redondo Gómez S** (2018) Halophyte – rhizobacteria for crop adaptation to Climate Change. 10th Symposium of the International Society of Root Research (ISRR10). 8-12 July 2018, Israel (Type of participation: oral communication).

C.3. Research projects.

- 1- TITLE: Development of a biotool based on bacterial inoculants for the restoration of wetland habitats of community interest (RENATURA) Ref. TED2021-131605B-I00 NextGeneration EU. FINANCIAL ENTITY AND CALL: Recovery, Transformation and Resilience Plan. Strategic Projects Oriented to the Ecological Transition and the Digital Transition. Call 2021. Ministry of Science and Innovation. MAIN RESEARCHER AND AFFILIATION: Enrique Mateos Naranjo and **Susana Redondo Gómez**,

Univ. Sevilla. DURATION: 01/12/2022–31/05/2025. BUDGET: 111.550 €. TYPE OF PARTICIPACION: Principal researcher.

2- TITLE: Analysis of the contribution of endophytic bacteria to the tolerance mechanisms of halophytes against salinity and climate change (HALO-ENDOBIOMA) (PDC2021-120951-I00) Ref. PID2021-124750NB-I00 Financiado por MCIN/ AEI /10.13039/501100011033/ y por FEDER Una manera de hacer Europa. FINANCIAL ENTITY AND CALL: State Plan for Scientific, Technical and Innovation Research 2021-2023, Ministry of Science and Innovation. MAIN RESEARCHER AND AFFILIATION: **Susana Redondo Gómez** and Enrique Mateos Naranjo, Univ. Sevilla. DURATION: 01/09/2022–31/08/2025. BUDGET: 217.800 € (+ Predoct contract). TYPE OF PARTICIPACION: Principal researcher.

3- TITLE: promoting Art-Science-Technology-Engineering Research by using collaborative methodologies and tools (ASTER) (US-1381015). FINANCIAL ENTITY AND CALL: Andalusian Government (Department of Economy, Knowledge, Business and University). MAIN RESEARCHER AND AFFILIATION: Rocío García Robles and Áurea Muñoz del Amo, Univ. Sevilla. DURATION: 01/01/2022–31/12/2022. BUDGET: 55.000 €. TYPE OF PARTICIPACION: Researcher.

4- TITLE: Proof of concept, with end users, of a bio-tool (generated in CGL2016-75550-R AEI/FEDER, EU) for the improvement of intensive agricultural practices (BIOFERSA) (PDC2021-120951-I00) Funded by the European Union. FINANCIAL ENTITY AND CALL: R+D+i Projects, Proof of Concept within the framework of the State R+D+i Program oriented to the Challenges of Society, the State Plan for Scientific and Technical Research and Innovation. Call 2021. MAIN RESEARCHER AND AFFILIATION: Enrique Mateos Naranjo and **Susana Redondo Gómez**, Univ. Sevilla. DURATION: 01/12/2021–30/11/2023. BUDGET: 92.000 €. TYPE OF PARTICIPACION: Principal researcher.

5- TITLE: MESEM-BOLOMA Valorization of the halophyte from the Andalusian coasts Mesembryanthemum crystallinum as a source of bioproducts of pharmaceutical and nutraceutical interest. From the microbiome to the metabolome (Ref. P20_00682). FINANCIAL ENTITY AND CALL: R+D+i projects, Andalusian Research, Development and Innovation Plan (PAIDI 2020). Junta de Andalucía. MAIN RESEARCHER AND AFFILIATION: Eloisa Pajuelo Domínguez, Univ. Sevilla. DURATION: 04/10/2021–31/12/2022. BUDGET: 80.000 €. TYPE OF PARTICIPACION: Researcher.

6- 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: Researcher.

7- 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 / Call Challenges, National Plan. MAIN RESEARCHER AND AFFILIATION: Enrique Mateos Naranjo and **Susana Redondo Gómez**, Univ. Sevilla. DURATION: 30/12/2016–29/12/2019. BUDGET: 215380 €. TYPE OF PARTICIPACION: Principal researcher.

8- 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: Counseling of Innovation, Science and Business, Junta de Andalucía / Projects of Excellence. MAIN RESEARCHER AND AFFILIATION: Eloísa Pajuelo Domínguez, Univ. Sevilla. DURATION: 16/05/2013–15/05/2016. BUDGET: 185847 €. TYPE OF PARTICIPACION: Researcher.

9- TITLE: Evaluation of the desalination capacity of *Arthrocnemum macrostachyum* (RTA2012-00006-C03-02). FINANCIAL ENTITY AND CALL: Ministry of Economy and Competitiveness / Subprogram of Fundamental Research Projects Oriented to Agricultural Resources and Technologies in Coordination with the Autonomous Communities. MAIN RESEARCHER AND AFFILIATION: **Susana Redondo Gómez**, Univ. Sevilla. DURATION: 13/05/2013–12/05/2016
BUDGET: 31000.8 € TYPE OF PARTICIPACION: Principal researcher.

C.4. Contracts, technological or transfer merits.

1- **Contract 68/83:** Role of the MOO Consortium against osmotic and water stresses. Financial entity: Timac Agro España, S.A. Duration: 01/09/2024–28/02/2025. Main researcher: **Susana Redondo Gómez**. Budget: 47.801,53 €.

2- **Contract 68/83:** ALBEDO, agreement for the realization of a scientific application. Financial entity: Company Esasur Energía Eficiencia e Instalaciones, S.L. Duration: 01/07/2021–01/06/2023. Main researcher: **Susana Redondo Gómez**. Budget: 25.000 €.