CURRICULUM VITAE (CVA)

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

CV date	14/01/2022

Part A. PERSONAL INFORMATION

First name	Susana		
Family name	Redondo Gómez		

(*) Mandatory

A.1. Current position

Position	Professor		
Initial date	31/10/2016		
Institution	Universidad de Sevilla		
Departament/Center	Biología Vegetal y Ecología		
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, art. 45.2.c))

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

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 halophytes as functional foods and the role of plant growth promoting bacteria (PGP) and its application in the improvement of traditional and alternative crops. 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 2012, I have published 57 research papers, 54 of them in scientific journals with impact indexes included in JCR. 39 have been published in the highest impact journals of their category (Q1), among

which are: Bioresource Technology, Journal of Agricultural and Food Chemistry, Journal of Experimental Botany, Science of the Total Environment, Desalination, Ecology. Furthermore, I have published 4 book chapters. Throughout my entire career, I have published 138 research papers (99 JCR; *h-index* 29 according to Scopus). In addition, I have made 110 contributions to national and international congresses. I am a member of the scientific committee of the XX International Botanical Congress (21st to 27th of July 2024) and I have been a Member of the Organizing Committee 'MEDECOS XIV International Conference & XIII AEET Meeting' (Seville, 2017). I have participated continuously, since 2012, in 19 projects obtained in competitive calls: 6 international projects, being PI project AP/039614/11 (AECID) with Tunisia; 5 national projects, being PI of PDC2021-120951-I00 NextGenerationEU, CGL2016-75550-R AEI/FEDER, UE and RTA2012-00006-C03-02; 4 projects of the Junta de Andalucía, being PI of project LITE; and 3 local projects, being PI of one of them (PPI, US). I have directly (as PI) raised funds for an amount of 383.391 €. I am part of 4 international networks, one of them constituted by the COST Action FA0901 project in which researchers from 26 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 22 research contracts with the Public Administration, with Institutions or Companies, being PI of four of them. 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 ALBEDO contract (2021-2023), signed with the ESASUR company to optimize the performance, through vegetation, of a photovoltaic panel plant. 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, etc.). Recently, on November 25 (21:40:48, 14:50 long), I participated in the radio program of Aimar Bretos, Hora 25 (Cadena Ser).

I have directed 5 Doctoral Theses (3 from 2012), all with the European or International Doctorate Mention and three of them with Extraordinary Doctorate Award. I currently direct one more. I have also directed 1 bachelor's and 6 master's theses. Also, I am Vice Dean of Students of the Faculty of Biology 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; 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 *(see instructions)*

1- **Redondo-Gómez S (AC)**, 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.

2- 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. DOI:10.1016/j.envexpbot.2020.104304.

3- Mesa-Marín J, Pérez-Romero JA, Mateos-Naranjo E, Bernabeu-Meana M, Pajuelo E, Rodríguez-Llorente ID, **Redondo-Gómez S** (2019) Effect of Plant Growth Promoting Rhizobacteria on *Salicornia ramosissima* seed germination under salinity, CO_2 and temperature stress. Agronomy 9:655. DOI:doi.org/10.3390/agronomy9100655.
4- Barcia-Piedras JM, Pérez-Romero JA, Mateos-Naranjo E, Camacho M, **Redondo-Gómez S** (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.
5- Mesa-Marín J (AC), 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.
6- Mesnoua M, Mateos-Naranjo E, Perez-Romero JA, Barcia-Piedra JM, Lotmani B, **Redondo-Gómez S** (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
7- Mesnoua M, Mateos-Naranjo E, Barcia-Piedras JM, Pérez-Romero JA, Lotmani B, **Redondo-Gómez S** (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.
8- **Redondo-Gómez S**, Petenello MC, Feldman SR (2014) Growth, nutrient status, and photosynthetic response to diesel-contaminated soil of a cordgrass, *Spartina argentinensis*. Marine Pollution Bulletin 79:34-38. DOI:10.1016/j.marpolbul.2014.01.009.
9- **Redondo-Gómez S** (2013) Bioaccumulation of heavy metals in *Spartina*. Functional Plant Biology 40:913-921. DOI:10.1071/FP12271.
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. DOI: 10.1016/j.biortech.2011.11.006.

C.2. Congress

1- 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).
3- Duarte B, Mateos Naranjo E, **Redondo Gómez S**, Marques JC, Caçador I. The tale continues: ecophysiological fitness of non-indigenous versus native *Spartina* species in Mediterranean salt marshes. XIV MEDECOS & XIII AEET meeting. Human driven scenarios for evolutionary and ecological changes. Sevilla (Spain). 31 January – 4 February 2017 (Type of participation: oral communication).
4- **Redondo-Gómez S**. Bioaccumulation of heavy metals in *Spartina*. COST WG2 Meeting 2012, Putting halophytes to work – genetics, biochemistry, physiology. Hannover (Germany), 29-31 August 2012 (Type of participation: **invited oral presentation**).

C.3. Research projects

1- 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.

2- 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.
3- 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.
4- 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.
5- TITLE: Regulation by arbuscular mycorrhizae of the integrated physiological response to salinity in rice plants (P11-CVI-7107). FINANCIAL ENTITY AND CALL: Counseling of Innovation, Science and Business, Junta de Andalucía / Projects of Excellence. MAIN RESEARCHER AND AFFILIATION: Juan Manuel Ruiz Lozano, Zaidín-CSIC. DURATION: 16/05/2013-15/05/2016. BUDGET: 131722.73 €. TYPE OF PARTICIPACION: Researcher.
6- 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.
7- 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.
8- TITLE: Phytodesalination assisted by microorganisms: a new strategy for the recovery of arid zones in the Mediterranean area (AP/039614/11). FINANCIAL ENTITY AND CALL: Spanish Agency for International Cooperation for Development (AECID) / Interuniversity Cooperation and Scientific Research Program. MAIN RESEARCHER AND AFFILIATION: **Susana Redondo Gómez**, Univ. Sevilla. DURATION: 01/01/2012-31/03/2013. BUDGET: 9500 €. TYPE OF PARTICIPACION: Principal researcher.
9- 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: 507936 €. TYPE OF PARTICIPACION: Researcher.
10- 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 / State Plan. MAIN RESEARCHER AND AFFILIATION: Xavier Niell Castanera, Univ. Málaga. DURATION: 01/01/2009 – 31/12/2015. BUDGET: 350000 €. TYPE OF PARTICIPACION: Researcher.

C.4. Contracts, technological or transfer merits

1- Contract: 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 €.