

Part A. PERSONAL INFORMATION		CV date	01/09/2020
First and Family name	Samira Ben-Menni Schuler		
Social Security, Passport, ID number		Age	
Researcher codes	WoS Researcher ID	AAA-9593-2020	
	SCOPUS Author ID		
	Open Researcher and Contributor ID (ORCID)	0000-0003-3198-6717	

A.1. Current position

Name of University/Institution	Universidad de Granada		
Department	Dpto. de Botánica/Facultad de Ciencias		
Address and Country	C/Severo Ochoa s/n 18071 Granada		
Phone number	958248882	E-mail	samira@ugr.es
Current position	Contrato Puente	From	10/02/2020
Key words	Population genetics, phylogeography, conservation genetics, ferns, species distribution modelling, plant evolution, pollen, EVO-DEVO		

A.2. Education

Degree/PhD	University	Year
Degree in Biology	Granada	2012
PhD by the University of Granada	Granada	2019

A.3. JCR articles, h Index, thesis supervised...

WOS: No. total cites: 10. Mean no. cites/year: 2.5; 6 total publications (3 in Q1; 1 in D1), including Journal of Experimental Botany (D1). h index (WoS): 2.

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

I have a PhD from the University of Granada (UGR) and since 2009 I have been participating in the research activities of the RNM-110 Research Group of the Andalusian Plan for Research, Development and Innovation (PAIDI), of which I have been a member since 2012, in the Department of Botany at the UGR. I have been an internal student of this Department during the years 2009-2011. Subsequently, I have been granted various scholarships related to research by different organizations, and always on a competitive basis, to promote my research activity at the UGR (e. g. FPU, JAE-Intro). My research focuses on plant evolutionary biology, especially on genetic diversity and phylogeography in ferns. I have elucidated the phylogeographic pattern of four fern species (threatened in the Iberian Peninsula) relicts from the Tertiary throughout their distribution range. I have also analysed their levels of genetic diversity and how this diversity is structured, which is of particular importance in relation to their conservation. One of these ferns is *Vandenboschia speciosa*, which presents both sporophytic and gametophytic generations perennial, analyzing also the gametophytic generation. I have worked also with species of the genus *Centaurea* (Asteraceae), testing for reticulate evolution and recurrent hybridizations between nearby populations of three narrowly distributed endemic species, suggesting that secondary contact during the glacial periods and posterior isolation during interglacial periods along with the location and orientation of the populations on mountainsides are responsible for the current genetic structure observed. During my research career I have also carried out studies in other disciplines of evolutionary biology, such as in the evolutionary analysis of pollen characters, and in Evolution and Development (EVO-DEVO) studies, especially in Papaveraceae. Therefore, I also have experience in the study and analysis of genes: in 2010 I was granted a JAE-INTRO fellowship (CSIC) to work with Dr. Xavier Bellés and Dr. Dolors Piulachs at the Institute of Evolutionary Biology (Barcelona) on genes related to the reproductive system of female cockroaches. In addition, I have carried out my Final Master's Work in the Departments of Botany and Plant



Physiology of the UGR, analyzing two transcription factors related to the development of the androecium and the pollen grain in the Papaveraceae family and I have investigated through Scanning Electronic Microscopy the floral development of *Glaucium flavum* (Papaveraceae). My experience with gene analysis has continued in recent years; in 2015 I carried out a 3 months short stay in Dr. Dobritsa's lab at The Ohio State University (USA), where I improved significantly my experience with *Arabidopsis* pollen mutants and learnt new molecular techniques related to EVO-DEVO analysis and gene expression. The results of this stay are embodied in a paper published in *Journal of Experimental Botany* (D1). In 2017 I carried out a 3 months short stay in Dr. Provan's lab at the Aberystwyth University (UK) where I could learn Species Distribution Modelling analysis and new molecular techniques related with phylogeography. I collaborate with Dr. Dobritsa and Dr. Provan in relation to future publications. I have participated in 3 research grant projects. My teaching experience comprises undergraduate practices on Biodiversity and Conservation of Spermatophytes (Universidad de Granada) since 2016.

Part C. RELEVANT MERITS

C.1. Publications (including books)

- 1- Samira Ben-Menni Schuler, Jordi López Pujol, Gabriel Blanca, Roser Vilatersana, Núria García Jacas, Víctor N. Suárez-Santiago. 2019. Influence of the Quaternary Glacial Cycles and the Mountains on the Reticulations in the Subsection Willkommia of the Genus *Centaurea*. *Frontiers in Plant Sciences*, 10: 303.
- 2- Víctor N. Suárez-Santiago, M. Carmen Fernández-Fernández, Miguel A. Pérez-Gutiérrez, Samira Ben-Menni Schuler, María J. Salinas-Bonillo, Ana T. Romero-García. 2018. Morphological and ultrastructural diversity and character evolution of the pollen in the tribe Chelidonioideae (Papaveraceae). *Review of Paleobotany and Palynology*, 258: 83-97.
- 3- Peng Li, Samira Ben-Menni Schuler, Sarah H. Reeder, Rui Wang, Víctor N. Suárez-Santiago, Anna Dobritsa. 2018. INP1 involvement in pollen aperture formation is evolutionarily conserved and may require species-specific partners. *Journal of Experimental Botany*, 69: 983-996.
- 4- Samira Ben-Menni Schuler, M. del Carmen García-López, Inmaculada López-Flores, Marta Nieto-Lugilde, Víctor N. Suárez-Santiago. 2017. Genetic diversity and population history of the Killarney fern, *Vandenboschia speciosa* (Hymenophyllaceae), at its southern distribution limit in continental Europe. *Botanical Journal of the Linnean Society*, 183: 94-105.
- 5- Miguel A. Pérez-Gutiérrez, María C. Fernández, María J. Salinas-Bonillo, Víctor N. Suárez-Santiago, Samira Ben-Menni Schuler, Ana T. Romero-García. 2016. Comparative exine development from the post-tetrad stage in the early-divergent lineages of Ranunculales: the genera *Euptelea* and *Pterydophyllum*. *Journal of Plant Research*, Volume 129: 1085-1096.
- 6- M. del Carmen García-López, Samira Ben-Menni Schuler, Inmaculada López-Flores, Marta Nieto-Lugilde, Laura Terrón-Camero, Ismael Mazuecos-Aguilera, Víctor N. Suárez-Santiago. 2015. Development of polymorphic microsatellite markers for the Killarney Fern (*Vandenboschia speciosa*, Hymenophyllaceae). *Application in Plant Sciences* 3: 11.

C.2. Research projects and grants

- 1- Impacto de la introgresión adaptativa en la evolución de un grupo vegetal de reciente radiación del género *Centaurea* (Asteraceae) (ref. PGC2018-101825-B-I00). Ministerio de Ciencia, Innovación y Universidades. Call for proposals: 2018. PI: Víctor Nazario Suárez Santiago and Juan Francisco Jiménez Martínez (Universidad de Granada). From 01-01-2019 to 31-12-2022. Researcher of the work team. 160.930,00 €.



2- Evolución y desarrollo del sistema apertural del polen en eudicotiledóneas basales: análisis del gen INAPERTURATE POLLEN1 (ref. CGL2015-70290-P). Ministerio de Economía y Competitividad, DGICT. Call for proposals: 2015. PI: Víctor Nazario Suárez Santiago (Universidad de Granada). From 01-01-2016 to 01-06-2020. Researcher of the work team. 72.237 €.

3- Evolución y desarrollo de eudicotiledóneas basales: el orden Ranunculales (ref. RNM-2680). Consejería de Economía, Innovación, Ciencia, Junta de Andalucía. Call for proposals: 2012. PI: Ana Teresa Romero García (Universidad de Granada). From 30-1-2014 to 31-7-2019. Researcher. 147.459,50 €.

C.3. Contracts

C.4. Patents

C.5 Grants received on a competitive basis related with research

1- FPU Grant (Ayuda para la Formación del Profesorado Universitario). Ministerio de Educación, Cultura y Deporte, from 15-9-2015 to 26-9-2019.

2- Trainee Grant. Universidad de Granada. From 1-4-2014 to 30-9-2014.

3- Iniciación a la Investigación Grant. Universidad de Granada. From 10-07-2012 to 30-5-2013.

4- Colaboración Grant. Ministerio de Educación, Cultura y Deporte. From 17-11-2011 to 30-6-2012

5- JAE-Intro Grant. CSIC. From 1-7-2010 to 17-9-2010.

C.6 International Stays

1- Center for Applied Plant Sciences, Ohio State University (USA). From 1-3-2015 to 1-6-2015.

2- Institute of Biological, Environmental and Rural Sciences, Aberystwyth (UK). From 1-7-2017 to 30-9-2017.

C.7 Congress participation:

1- 2 contributions in 2 national congresses

2- 8 contributions in 5 international congresses

C.8 Teaching experience:

1- Undergraduate practices on Biodiversity and Conservation of Spermatophytes at University of Granada, since 2016 (3 academic courses; 180 hours).

C.9 Awards:

1- Award for the best records 2010/2011 academic year. Vicerrectorado de Estudiantes, Universidad de Granada. 2011.

C.10 Professional experience:



1- Trainee Grant as Animadora Científica at Parque de las Ciencias de Granada. From 01/11/2010 to 28/02/2011.

C.11 Participation in training courses:

1- Preparation and Elaboration of Projects, Universidad de Granada. 2018.

2- Research career development for master and doctoral students: international and national funding options. Universidad de Granada. 2016

C.12 Languages

1- B2 level in English

2- C1 level in German