Date of the CVA	08/01/2020

Section A. PERSONAL DATA

Name and Surname	Carolina San Martín Hernández		
DNI/NIE/Passport		Age	
Researcher's identification number	Researcher ID		
	Scopus Author ID		
	ORCID		

A.1. Current professional situation

Institution	Universidad Politécnica de Madrid		
Dpt. / Centre			
Address			
Phone		Email	
Professional category	Post-doctoral Researcher	Start date	2019
UNESCO spec. code			
Keywords			

A.2. Academic education (Degrees, institutions, dates)

Bachelor/Master/PhD	University	Year
Máster Universitario Estadística Aplicada con R Software. M.Sc. Applied Statistics in R software	Universidad Rey Juan Carlos	2017
Programa Oficial de Doctorado en Conservación de Recursos Naturales	Universidad Rey Juan Carlos	2016
Máster Universitario en Técnicas de Caracterización y Conservación de la Diversidad Biológica. M.Sc. Description and Conservation Techniques of Biological Diversity	Universidad Rey Juan Carlos	2013
Licenciado en Ciencias Biológicas. B.Sc. Biology	Universidad Complutense de Madrid	2010

A.3. General quality indicators of scientific production

Section B. SUMMARY OF THE CURRICULUM

Dr. Carolina San Martín received a bachelor's degree in biology in 2010 from Universidad Complutense de Madrid and two Master degrees from Universidad Rey Juan Carlos, one in biodiversity conservation in 2012 and other in applied statistics with R software in 2017. She completed a PhD degree (Special doctorate award) in weed spatial ecology in corn fields and poplar cropping systems in 2016 in the Institute of Agricultural Sciences Council (ICA-CSIC), under the supervision of Dr. José Dorado. She has done international stays at Rothamsted Research (UK) and Leibniz Institute of Agricultural Engineering and Bio-economy e.V. (Germany). She continued her career as a postdoctoral researcher in the Department of Crop and Soil Science at the Columbia Basin Agricultural Research Center (Oregon State University, USA), where she worked on Integrated Weed Management in the wheat-based productions systems of eastern Oregon, in the Weeds Laboratory of Dr. Judit Barroso. Currently, she broadens her postdoctoral training in the CEIGRAM (Universidad Politécnica de Madrid), in the Agricultural Economics and Natural Resources Management Group, under the supervision of Alberto Garrido. She is co-author of 13 papers published in peer-reviewed journals and 22 contributions to national and international congresses. Moreover, she has participated in several curses related with weeds study and analysis of spatial data, and she has been awarded with three grants and a prize in her research career.

Section C. MOST RELEVANT MERITS (ordered by typology)

C.1. Publications

1 **Scientific paper**. San Martín, C.; Gourlie, J.A.; Barroso, J.2019. Control of volunteer giant reed (Arundo donax) Invasive Plant Science and Management. 10.1017/inp.2018.36-(In press).
2 **Scientific paper**. San Martín, C.; et al. 2019. Spring crops in three year rotations reduce weed pressure in winter wheat Field Crops Research. 233, pp.12-20.
3 **Scientific paper**. Peña, J.M.; et al. 2018. Estimating tree height and biomass of a poplar plantation with image-based UAV technology AIMS Agriculture and Food. 3, pp.313-326.
4 **Scientific paper**. San Martín, C.; et al. 2018. Spatial analysis of digital imagery of weeds in a maize crop ISPRS International Journal of Geo-Information. 7, pp.61.
5 **Scientific paper**. San Martín, C.; et al. 2018. Weed control with bicyclopyrone + bromoxynil in wheat Crop, Forage, & Turfgrass Management. 4, pp.180011.
6 **Scientific paper**. San Martín, C.; et al. 2018. Weed responses to fallow management in Pacific Northwest dryland cropping systems PLoS ONE. 13-9, pp.e0204200.
7 **Scientific paper**. Andújar, D.; et al. 2017. A geometrical model to predict the spatial expansion of Sorghum halepense in maize fields Gesunde Pflanzen. 69, pp.73-81.
8 **Scientific paper**. Barroso, J.; et al. 2016. Response of Sorghum halepense demographic processes to plant density and rimsulfuron dose in maize crop Weed Research. 56, pp.30-312.
9 **Scientific paper**. San Martín, C.; et al. 2016. Spatio-temporal dynamics of Sorghum halepense in poplar crops under various vegetation management regimes and influence of this weed on poplar growth Forest Ecology and Management. 379, pp.37-49.
10 **Scientific paper**. San Martín, C.; et al. 2016. Weed decision threshold as a key factor for herbicide reductions in site-specific weed management Weed Technology. 30, pp.808-897.
11 **Scientific paper**. San Martín, C.; et al. 2015. Spatial Distribution Patterns of Weed Communities in Corn Fields of Central Spain Weed Science. 63, pp.936-945.
12 **Scientific paper**. Barroso, J.; et al. 2012. Johnsongrass (Sorghum halepense) seed dispersal in corn crops under mediterranean conditions Weed Science. 60, pp.34-41.
13 **Scientific paper**. Fuertes, E.; San Martín, C.; Escobar, L.2011. Zelometeorium y Meteoridium (Bryophyta, Brachytheciaceae) en Argentina.Botanica Complutensis. 35, pp.27-37.
14 **Popular science article**. San Martín, C.; et al. 2014. Evaluación de distintas estrategias de manejo de malas hierbas en un cultivo energético de chopo Phytoma España. 255, pp.14.
15 **Popular science article**. San Martín, C.; Montull, J.M.; Zulet, A.2012. Curso Avanzado del IAMZ sobre Gestión de Malas Hierbas en la Agricultura Actual.Boletín de la Sociedad Española de Malherbología. 67.
16 **Book chapter**. San Martín, C.; et al. 2013. Simulation of effects of weed threshold, detection and treatment resolution on the error in spraying decisions and herbicide savings.Precision Agriculture 2013 (Stafford J.V., ed.). Universitat de Lleida. pp.547-553. ISBN 978-90-8686-224-5.
17 **Book chapter**. Fernández-Quintanilla, C.; et al. 2011. A five-step guide for planning a robotic site-specific weed management program for winter wheat.RHEA-2011 Robotics and Associated High-Technologies and Equipment for Agriculture (Gonzalez de Santos P., Rabatel G., eds.). Producción Gráfica Multimedia, PGM. pp.3-12. ISBN 978-84-615-6184-1.
18 **Scientific-technical report**. San Martín, C.2012. Informe de la Beca SEMh 2010: Estudios de algunos aspectos de la demografía de Sorghum halepense (L.) Pers. en cultivos de maíz.Boletín de la Sociedad Española de Malherbología. 67.

C.2. Participation in R&D and Innovation projects

1 SURE-FARM: Towards SUstainable and REsilient EU FARMing systems H2020. Miranda Meuwissen. (Universidad Politécnica de Madrid). 01/06/2017-31/05/2021. Team member.
2 Impacts of chaff collection or chaff plus straw collection at harvest to improve weed control. Western SARE (Sustainable Agriculture Research and Education). Barroso, Judit. (Oregon State University). 01/01/2016-31/12/2018. Team member.

3 Impacts of mixed cereal-oilseed cropping systems on weed communities in the PNW. Oregon Wheat Commission. Barroso, Judit. (Oregon State University). 01/07/2015-30/06/2018. Team member.

4 Sistemas de bajos insumos para cultivos leñosos para biomasa: desarrollo y evaluación de tácticas y estrategias de gestión de malas hierbas (AGL2011-25243). Low input systems for short rotation term woody crops: development and assessment of weed management tactics and strategies. Comisión Interministerial de Ciencia y Tecnología. Fernández-Quintanilla, César. (INSTITUTO DE CIENCIAS AGRARIAS). 01/01/2012-31/12/2014. 121.000 €. Team member.

5 RHEA: Robot Fleets for Highly Effective Agriculture and Forestry Management. EU Collaborative Project (FP7-NMP-245986) Comisión Europea. Gonzalez de Santos, Pablo. (INSTITUTO DE CIENCIAS AGRARIAS). 01/01/2010-31/12/2014. Team member.

C.3. Participation in R&D and Innovation contracts

C.4. Patents