

Part A. PERSONAL INFORMATION		CV date		13/06/2020
First and Family name	JAVIE JOSE CANCELA BARRIO			
Social Security, Passport, ID number	33327411C	Age	43	
Researcher codes	WoS Researcher ID (*)	I-3253-2014		
	SCOPUS Author ID(*)	8621420000		
	Open Researcher and Contributor ID (ORCID) **	0000-0003-2089-7778		

A.1. Current position

Name of University/Institution	University of Santiago de Compostela		
Department	Agroforestry Engineering		
Address and Country	Escuela Politécnica Superior. Rúa Benigno Ledo s/n. 27002. Lugo		
Phone number	678920897	E-mail	javierjose.cancela@usc.es
Current position	Associate Professor	From	01/01/2008
Key words	Irrigation water management, Crop water requirements, Soil-water management, Fertigation, Precision Agriculture		

A.2. Education

PhD	University	Year
Agroforestry Engineering	University of Santiago de Compostela	2004

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

2 six-year research periods, 1 six-year transfer period. Three PhD theses supervised, currently four theses in progress.

Period 2009-2019.-

SCI Publications in Q1 journals: 11. *h*-index: 7. Total citations: 165. Average Citations per Year: 18.3.

Part B. CV SUMMARY

The study of water management has been the main line of research since the beginning of his career in 2000, directly related to his PhD thesis defended in 2004: Integrated Water Management in the upper Miño River basin. From then, continuity was given to the line of research on irrigation management and determination of crop water requirements, for which several post-doctoral stays were carried out at the Higher Institute of Agronomy in Lisbon, in collaboration with Prof. Luis S. Pereira, co-author of the FAO monograph on the calculation of crop water requirements. During this stage, he published his first works related to irrigation management and water needs in the cultivation of forage maize and silage grasslands. In 2006, a new line of work about studying vineyards in Galicia began, which continues until today, in which several works in relation to irrigation management, nutrition, fertigation and precision viticulture have been published for the main Galician varieties. Several national and regional competitive projects have been obtained, as well as several contracts with relevant companies within the Galician Viticulture Sector.

In global terms, the main objectives of the research line are focused on improving the management of irrigation systems in Galicia, with little tradition on their use, together with the application of nutrients through irrigation water. The lack of water in summer has generated the need to address the study of the effects of water and nutrients on crops produced in Galicia. Saving water, energy and nutrients, is one of the aims of this line of work, maximizing crop production and quality.

Part C. RELEVANT MERITS

C.1. Publications (including books)

- Vilanova, M., Fandiño, M., Frutos-Puerto, S., Cancela, J.J. 2019. Assessment fertigation effects on chemical composition of *Vitis vinifera* L. cv. Albariño. Food chemistry, 278, 636-643.
- Cancela, J.J., González, X.P., Vilanova, M., Mirás-Avalos, J.M. 2019. Water Management Using Drones and Satellites in Agriculture. Water, 11(5), 874.
- Cancela, J.J., Fandiño, M., González, X.P., Rey, B.J., Mirás-Avalos, J.M. 2018. Seasonal variation of macro and micronutrients in blades and petioles of *Vitis vinifera* L. cv. Mencía and Sousón. Journal of Plant Nutrition and Soil Science, 181(4), 498-515.
- Cancela, J.J., Fandiño, M., Rey, B.J., Dafonte, J., González, X.P. 2017. Discrimination of irrigation water management effects in pergola trellis system vineyards using a vegetation and soil index. Agricultural Water Management, 183, 70-77.
- Mirás-Avalos, J.M., Fandiño, M., Trigo-Córdoba, E., Martínez, E.M., Moutinho-Pereira, J., Correia, C.M., Dinis, L.T., Rey, B.J., Malheiro, A.C., Cancela, J.J. 2017. Effects of surface and subsurface drip irrigation on physiology and yield of 'Godello' grapevines grown in Galicia, NW Spain. Ciência e Técnica Vitivinícola, 32(1), 42-52.
- Mirás-Avalos, J.M., Fandiño, M., Trigo-Córdoba, E., Rey, B.J., Orriols, I., Cancela, J.J. 2017. Influence of irrigation on consumer acceptability of Albariño and Godello wines. LWT-Food Science and Technology, 85, 345-352.
- Cancela, J.J., Trigo-Córdoba, E., Martínez, E.M., Rey, B.J., Bouzas-Cid, Y., Fandiño, M., Mirás-Avalos, J.M. 2016. Effects of climate variability on irrigation scheduling in white varieties of *Vitis vinifera* (L.) of NW Spain. Agricultural Water Management, 170, 99-109.
- Martínez, E.M., Rey, B.J., Fandiño Beiro, M., Cancela, J.J. 2016. Impact of water stress and nutrition on *Vitis vinifera* cv. 'Albariño': Soil-plant water relationships, cumulative effects and productivity. Spanish Journal of Agriculture Research, 14(1), e1202, 15 pages
- Cancela, J.J., Fandiño, M., Rey, B.J., Martínez, E.M. 2015. Automatic irrigation system based on dual crop coefficient, soil and plant water status for *Vitis vinifera* (cv Godello and cv Mencía). Agricultural Water Management, 151, 52-63.
- Fraga, H., Malheiro, A.C., Moutinho-Pereira, J., Cardoso, R.M., Soares, P.M., Cancela, J.J., Pinto, J.G., Santos, J.A. 2014. Integrated analysis of climate, soil, topography and vegetative growth in Iberian viticultural regions. Plos One, 9(9), e108078.

C.2. Research projects and grants

FEADER 2018/032B. Manexo sostible da variedade tinta castaña: estratexias de manexo fronte ao oidio - GRUPOS OPERATIVOS AUTONÓMICOS 2018. Consellería de Medio Rural – Xunta de Galicia. Main Research: Javier J. Cancela – University of Santiago de Compostela. Partners: Señorío de Rubios SL, Viñas e Terras do Pazo SL, Instituto Galego de Calidade Alimentaria e Universidade de Santiago de Compostela. From: 19/07/2018 to: 01/10/2020. Amount: 12,500.00 €. Participation: main research.

FEADER 2018/007B. Integrated fertilization system in the wine-growing sector (FERVIÑA) AUTONOMIC OPERATING GROUPS 2018. Consellería de Medio Rural – Xunta de Galicia. Main Research: Javier J. Cancela – University of Santiago de Compostela. Partners: Viña Costeira SCG, Cooperativa Vitivinícola Arousana SCG, Fundación Empresa Universidad Gallega, Instituto Galego de Calidade Alimentaria e Universidade de Santiago de Compostela. From: 19/07/2018 to: 01/10/2020. Amount: 5,714.54 €. Participation: main research.

RTA2014-00049-C05-05. Water and agronomic management of white grapevine varieties in order to improve its competitiveness and productive, qualitative and environmental sustainability. National Institute for Agricultural and Food Research and Technology (INIA). Main Research: Mar Vilanova de la Torre. Misión Biológica de Galicia-CSIC. From: 01/01/2016 to: 31/12/2018. Amount: 120,000.00 €. Participation: research member.

RTA2011-00041-C02. Influence of different cultural practices on the water status of vineyards from Northwest Spain: agronomical and economical assessment. National Institute for Agricultural and Food Research and Technology (INIA). Main research: Javier José Cancela Barrio. University of Santiago de Compostela. From: 24/11/2011 to: 31/12/2014. Amount: 70,008.60 €. Participation: main research.

C.3. Contracts

Evaluation of the potential of the Blanco lexítimo variety in the Ribeira Sacra, for the development of new ‘premium’ wines. Company: Adegas Ponte da Boga. Main research: Javier J. Cancela Barrio. University of Santiago de Compostela. From: 01/06/2018 to: 31/12/2020. Amount: 55,000.00 €. CDTI – PID.

Technical service for the control of soil erosion in Galician vineyards, co-financed with FEDER funds (Interreg Atlantic Area Project EAPA_272 / 2016). Entity: CEBAS-CSIC. Main research: Javier J. Cancela Barrio. University of Santiago de Compostela. From: 01/06/2018 to: 10/11/2019. Amount: 41,000.00 €.

Biotechnological strategies to optimize the management of varietal Albariño in the elaboration of tranquil and sparkling wines in the D.O. Rías Baixas. Company: Mar de Frades S.L. Main research: Javier J. Cancela Barrio. University of Santiago de Compostela. From: 01/01/2018 to: 31/12/2020. Amount: 39,000.00 €.

Terroir e zonagem agro-ecológica como fator crítico de competitividade e inovação dos Vinhos Verdes. Proxecto NORTE-02-0853 FEDER-000113. Entity: Instituto Politécnico de Viana do Castelo – Portugal. Main research: Javier J. Cancela Barrio. University of Santiago de Compostela. From: 01/09/2017 to: 31/04/2019. Amount: 2,000.00 €.

Research of methodology for the zoning of precision, management and integral control of vineyards. Energy efficiency - IN825A 2016/162 – CONECTA-PEME Xunta de Galicia. Companies: Lar de Ricobao. Elmantec. Adegas Ponte da Boga SL, and Teican Medioambiental SL. Main research: Javier J. Cancela Barrio. University of Santiago de Compostela. From: 15/02/2016 to: 30/11/2018. Amount: 73,600.00 €.

New vitivinicultural strategies for the sustainable management of production in large areas and the increase of the competitiveness of the wineries in the international market – VINYSOST 2014 – Programa Estratégico de Consorcios de Investigación Empresarial Nacional (CIEN). Company: Comercializadora La Rioja Alta, S.A. Main research: Javier J. Cancela Barrio. University of Santiago de Compostela. From: 01/08/2014 to: 31/07/2018. Amount: 130,000.00 €.

Analysis of the origin of manganese, copper and zinc, and implementation of control tools: fertigation and quimirrigation in the wines of Ponte da Boga. Company: Adegas Ponte da Boga. Main research: Javier J. Cancela Barrio. University of Santiago de Compostela. From: 31/07/2013 to: 30/06/2015. Amount: 60,000.00 €. CDTI – PID.

Influence of fertigation on the organoleptic parameters of Albariño wine. Company: Grupo Vinícola Marqués de Vargas, SL Main research: Javier J. Cancela Barrio. University of Santiago de Compostela. From: 01/10/2007 to: 30/09/2010. Amount: 58,204.95 €. CDTI – PID.

C.5. Doctoral theses directed (previous five years)

Trigo Córdoba, Emiliano. Physiological and agronomic response of Galician vine varieties to different cultivation practices: cover crops and irrigation. Start date: 01/09/2011. Defense date: 11/03/2016.

Marín López, Adolfo. Methodology of evaluation of sustainability in irrigation. Application to the area of Terra Chá (Lugo). Start date: 01/09/2004. Defense date: 28/02/2013.

C.6. Memberships of scientific societies

European Society of Agricultural Engineers – EuroAgEng. Sociedad Española de AgroIngeniería– SEA. Sociedad Española de Ciencias Hortícolas – SECH. Asociación Española de Riegos y Drenajes – AERYD.

C.7. Editorial board and Referee Journals

Member of Editorial Review Board:

Ciência e Técnica Vitivinícola (Journal of Viticulture and Enology)

Remote Sensing (MDPI)

Referee:

Agronomy. Agricultural Water Management. Australian Journal of Experimental Agriculture. Biosystems Engineering. Computer and Electronics in Agriculture. Ecohydrology. European Journal of Remote Sensing. European Journal of Soil Science. Horticulture. Hydrology and Earth System Sciences. Industrial Crops and Products. Irrigation Science. Journal of Arid Environment. Journal of Irrigation and Drainage Engineering. Journal of Water Resource and Protection. Natural Hazards and Earth System Sciences. Precision Agriculture. Remote Sensing. Spanish Journal of Agricultural Research. Springer Plus. Water.