

<b>Part A. PERSONAL INFORMATION</b>		<b>CV date</b>		5/9/2018
First and Family name	Pilar Castro Díez			
Social Security, Passport, ID number	09770088X	Age	49	
Researcher numbers	Researcher ID	L-4716-2014		
	Orcid code	0000-0002-4841-519		

### A.1. Current position

Name of University/Institution	University of Alcalá			
Department	Life Sciences			
Address and Country	Campus Universitario, Edificio de Ciencias, CP 28805, Alcalá de Henares (Madrid)			
Phone number	918855091	E-mail	<a href="mailto:Mpilar.castro@uah.es">Mpilar.castro@uah.es</a>	
Current position	University Professor	From	29-10-2007	
Espec. cód. UNESCO	241713			
Palabras clave	Plant functional ecology, functional traits, biological invasions, ecological impacts, nutrient cycles, ecosystem services			

### A.2. Education

	University	Year
B.S. Biology	University of León	1991
PhD Biology	University of León	1996

### A.3. Indicators of Quality in Scientific Production

- Three ~~6~~ exenios+(last one July 2014).
- PhD supervision: 6 (5 in the last 10 years)
- Total number of citations: 3056 (Web of Science)
- Average number of citations per paper: 46.30 (Web of Science)
- Total number of publications in indexed journals: 68 (Web of Science) 70 (Scopus)
- Total number of publications of first author: 21
- Number of publications in the first quartile: 34
- H-index: 28 (Web of Science)

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

I started my research career in 1992 with a FPU PhD grant at the Pyrenean Institute of Ecology (CSIC). I defended my Thesis in 1996 with the maximum qualification (~~apto~~ <sup>apto cum laude</sup>). Five SCI-publications derived from my Thesis. In 1997 I joined the University of Alcalá as an Associate Professor, later I went on to Assistant Professor (1999-2003) and ~~Profesor Contratado Doctor~~ <sup>Profesor Contratado Doctor</sup> (2003-2007). Finally, in 2007, after passing the National Qualification Test for Professors (~~habilitación~~ <sup>habilitación</sup>), I obtained a permanent position as University Professor. I have participated in 15 research projects, mostly from national programs, being the principal investigator in four additional ones (two from the National Plan, one from Castilla-La Mancha and another from the University of Alcalá), from which I obtained a total funding of 216,490 €. I ~~co~~ <sup>co</sup>-supervised 6 doctoral Theses, some of which have led to brilliant research careers. Throughout these years I have collaborated with researchers from many countries (Great Britain, South Africa, Estonia, Argentina, Holland, Chile, etc.) thanks to the completion of 8 stays abroad of 2-3 months each, financed with public calls. The results of my research activity are 68 articles in SCI journals, 4 books, 14 book chapters, among others. I am reviewer in over 20 SCI journals and guest editor in the journal *Ecosistemas*. Since 2014 I am a member of the Management Committee of the UE Cost Action NNEXT (<http://nnext.boku.ac.at/>), where I lead an international working group of 33 researchers from 14 countries on impacts of exotic trees in environmental services. My research activity combines with an intense teaching and administrative activity in the University of Alcalá (I have been Vice Dean in the Faculty of Environmental Sciences in

2004-10). My scientific interest focuses on understanding the functional relationships between plants and their environment. Since 2007, I try to explain the causes of the success of invasive non-native plants, and to evaluate their impacts on the functioning of ecosystems and the services they provide. In my recent scientific publications, I have contributed to identify functional traits associated with invasive success across woody species, to assess the impacts caused by invasive plants on the functional structure of communities and the functioning of ecosystems, and to quantify the impacts on non-native trees on ecosystem services. Some of these results have been presented as invited conferences in national and international congresses. My medium-long-term aims focus on explaining the disparity of impacts of invasive plants across species and contexts, considering biotic, environmental and socio-economic predictors. From an applied approach, I want to look for predictors of invasion impacts, useful to improve risk analyses and to prevent future impacts. This would contribute to a more efficient management of biological invasions.

## Part C. RELEVANT MERITS

### C.1. The most relevant publications of the last 10 years (including books)

1. Vaz, A.S., **Castro-Díez, P.**, Godoy, O., Alonso, Á., Vilà, M., Saldaña, A., Marchante, H., Bayón, Á., Silva, J.S., Vicente, J.R. & Honrado, J.P. 2018. An indicator-based approach to analyse the effects of non-native tree species on multiple cultural ecosystem services. *Ecological Indicators* 85: 48-56. ISI Journal Citation Reports © Ranking 2017: 48/241 (Environmental Sciences)
2. **Castro-Díez P.**, Aníbal Pauchard, Anna Traveset & Montserrat Vilà. 2017. Linking the impacts of plant invasion on community functional structure and ecosystem properties. *Journal of Vegetation Science* 27(6) 1233. 1242. ISI Journal Citation Reports © Ranking: 2017: 8/66 (Forestry); 54/222 (Plant Sciences); 56/155 (Ecology). Times cited: 7
3. Medina-Villar S., Rodríguez-Echeverría S., Lorenzo P., Alonso A., Pérez-Corona E., **Castro-Díez P.** 2016. Impacts of the alien trees *Ailanthus altissima* (Mill.) Swingle and *Robinia pseudoacacia* L. on soil nutrients and microbial communities. *Soil Biology & Biochemistry* 96:65-73. IJCR © Ranking: 2016: 2/34 (Soil Science). Times cited: 7
4. Cabra-Rivas, I., A. Saldaña, **P. Castro-Díez**, L. Gallien. 2016. A multi-scale approach to identify invasion drivers and invaders future dynamics. *Biological Invasions* 18: 411-426. IJCR © Ranking: 2016: 11/54 (Biodiversity & Conservation); 55/153 (Ecology). Times cited: 9
5. **Castro-Díez P.**, Valle G, González-Muñoz N, Alonso A (2014) Can the life-history strategy explain the success of the exotic trees *Ailanthus altissima* and *Robinia pseudoacacia* in Iberian floodplain forests? *Plos One*, 9(6), e100254 (1-12). IJCR © Ranking: 2014: 9/57 (Multidisciplinary Sciences). Times cited: 11
6. **Castro-Díez P.**, Godoy O., Alonso A., Gallardo A., Saldaña A. (2014). What explains variation in the impact of exotic plant species on the Nitrogen cycle? A meta-analysis. *Ecology Letters* 17:1-12. IJCR © Ranking: 2014: 2/145 (Ecology). Times cited: 57
7. Godoy O, Valladares F, **Castro-Díez P** (2012). The relative importance for plant invasiveness of trait means, and their plasticity and integration in a multivariate framework. *New Phytol* 195(4):912-22. IJCR © Ranking: 2012: 6/196 (Plant Sciences); Times cited: 32
8. **Castro-Díez P.**, Fierro-Brunnenmeister N, González-Muñoz N, Gallardo A. (2012). Effects of exotic and native tree leaf litter on soil properties of two contrasting sites in the Iberian Peninsula. *Plant & Soil* 350(1-2):179-191. IJCR © Ranking: 2012: 9/78 (Agronomy); 45/196 (Plant Sciences); 4/34 (Soil Sciences). Times cited: 43
9. **Castro-Díez P.**, Godoy O, Saldaña A & Richardson DM. (2011) Predicting invasiveness of Australian *Acacia* species on the basis of their native climatic affinities, life-history traits and human use. *Diversity and Distribution*, 17:934-945. IJCR © Ranking: 2011: 2/37 (Biodiversity & Conservation); 20/134 (Ecology). Times cited: 56
10. Godoy O, Valladares F., **Castro-Díez P** (2011). Phenotypic plasticity of invasive plants: the efficiency seems more important than the extent of the response. *Functional Ecology* 25: 1248. 1259. IJCR © Ranking: 2011: 24/134 (Ecology). Times cited: 87

## C.2. Research projects and grants

1. Basic and applied aspects of the impact caused by invasive plants-IMPLANTIN. (CGL2015-65346-R). Organism: Ministry of Economy and Competitiveness. Duration: enero 2016- diciembre 2018. Principal investigator: Montserrat Vilà (CSIC). Amount: 96.000 ". Role: Research team.
2. Program of I+D activities of the Madrid Community on environmental restoration. REMEDINAL3-CM (MAE-2719). Organism: Community of Madrid (I+D Program for Research Groups). Duration: 2015-2018. Principal investigator: Adrián Escudero (Rey Juan Carlos I University). Amount: 600.300 ". Role: Research team
3. CGL2010-16388/BOS. Invasive risk assessment of exotic trees: patterns of distribution, invasive success and impact on ecosystems. Organism: Ministry of Sciences and Innovation. Principal investigator: Pilar Castro Díez (University de Alcalá). Duration: 1/1/2011- 30/9/2014. Amount: 83.490 ". Role: Principal investigator
4. POII10-0179-4700. Comprehensive evaluation of the impacts of invasive exotic trees on fluvial and riverbank ecosystems of Castilla-La Mancha. Organism: Junta de Comunidades de Castilla La Mancha. Principal investigator: Pilar Castro Díez (University de Alcalá). Duration: 1/4/2010 - 31/12/2013. Amount: 96.833,59 ". Role: Principal investigator
5. CGL2007-61873/BOS. Causes and consequences of invasions of exotic plants in the Iberian Peninsula. Organism: Ministry of Sciences and Innovation. Principal investigator: Pilar Castro Díez (University de Alcalá). Duration: 1/10/2007- 30/9/2010. Amount: 53.000 ". Role: Principal investigator
6. FP7-(SCIENCE-IN-SOCIETY-2010-1). Inquiry-based teacher training for a sustainable future. Investigador principal: Suzanne Kapelari. Organism: UE. Duration: 1/12/2010- 31/11/2013. Amount: 2.234.024 ". Role: Research team.
7. 2. Program of I+D activities of the Madrid Community on environmental restoration REMEDINAL 2 (S2009/AMB/1783), Community of Madrid (I+D Program for Research Groups). Duration: 2010 - 2013. Principal investigator: Adrián Escudero (Rey Juan Carlos I University). Amount: 828.000 ". Role: Research team.

## C.3. Contracts

1. 2017 Technical assistance for the Regional Park of the Middle Course of the Guadarrama River and its Surroundings (Community of Madrid). Preparation of the report entitled: "Application of measures for the management and control of invasive plant species in the Regional Park of the Middle Course of the Guadarrama River and its Surroundings". Duration: July 5 to October 5, 2017. Principal investigator: Álvaro Alonso. University of Alcalá. Amount: 3,438 ".
2. 2017-18. Technical assistance for the Regional Park of the Middle Course of the Guadarrama River and its Surroundings (Community of Madrid). "Monitoring of control treatments applied to populations of two invasive exotic plant species in the Regional Park of the Middle Course of the Guadarrama River and its Surroundings. Duration: 3 months. Principal investigator: Álvaro Alonso. University of Alcalá. Amount: 1,705".

## C.4. Patents

1. Álvaro Alonso and Pilar Castro. "Device for taking of images of tree crowns". Application No. P201331309, application date 6-9-13, publication number 2530887

## C.5. Stays abroad (last 10 years)

1. 2007-2008- Forest Ecology and Forest Management Group. Universidad de Wageningen (Holanda). Duration: 9 weeks. Funded by University of Alcalá. Contact: Dr. Lourens Poorter

2. 2009-Forest Ecology and Forest Management Group. University of Wageningen (Holand). Duration: 9 weeks. Funded by University of Alcalá. Contact: Dr. Lourens Poorter
3. 2014-Faculty of Forestry. University of Concepción (Chile). Funded by Programa Nacional de Atracción de Capital Humano Extranjero. CONICYT. Gobierno de Chile. Duration: 3 months (29 April- 29 July 2014). Contact: Dr. Aníbal Pauchard.

## C.6 Awards

1. Award to the supervisor of the best student's project by Ainara Ballesteros Larrañaga "Effect of environmental conditions on the competition between *Pinus pinaster* and *Acacia dealbata*" in the 8th Archimedes University Context of Introduction to Scientific Research. (Resolution of December 16, 2009, published in the BOE of January 1, 2010). Financial support: " 6,000 for the student, " 3,000 for the supervisor, " 10,000 for the University of Alcalá
2. Award to the best reviewer of the Journal Ecosistemas in the year 2013-2014.

## C.7 Supervision of Doctoral Thesis (the most relevant)

1. Óscar Godoy del Olmo. Functional traits and phenotypic plasticity of invasive non-native plants. Defended in November 2009 Alcalá University. Mark: Apto cum laude. Co-supervisors: Fernando Valladares and Pilar Castro Díez. Production of 5 SCI publications.
2. Noelia González Muñoz. Biological drivers of plant invasive risk. Defended in September 25th 2012. Alcalá University. Mark: Apto. Supervisor: Pilar Castro Díez. Production of 5 SCI publications.
3. Isabel Cabra Rivas. Determinants of riparian forest invasions by non-native trees. Defended in November 2015. Alcalá University. Mark: Apto cum laude. Co-supervisors: Pilar Castro Díez and Asunción Saldaña. Production of 3 SCI publications and one national publication.

## C.8 International committees

2014-2019. Representative of Spain in the UE COST Action Management Committee (Non-native tree species for European forests: experiences, risks and opportunities (NNEXT)).

## C.9 Management of scientific activities

2016- Member of the Scientific-Technical Commission of experts, appointed by the General Directorate of Scientific and Technical Research, for the evaluation of the Projects presented in the 2016 calls, "Excellence" and "Challenges", of the State Plan 2013-2016 corresponding to the Area of Management of Biodiversity, Earth Sciences and Global Change (CGL), Biodiversity (BOS-A)