

Part A. Personal Information

DATE	December 2018
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Surname(s)	Vilà	
Forename	Montserrat	
Social Security, Passport, ID number	40462147H	
Sex	woman	
Age	53	
Researcher numbers	Researcher ID	D-9339-2013
	Open Researcher and Contributor ID (ORCID)	0000-0003-3171-8261

A.1. Current position

Post/ Professional Category	Research professor	
UNESCO Code	2417-13 Ecología Vegetal	
Key Words	Alien plants, biodiversity, biogeography, biological invasions, global change, Mediterranean ecosystems, plant communities	
Name of the University/Institution	CSIC	
	Center	Estación Biológica de Doñana
	Full Address	Américo Vespucio 26, Isla de la Cartuja, 41092 Sevilla
	Email Address	montse.vila@ebd.csic.es
	Phone Number	690934093
Start date	2010	

A.2. Education (*title, institution, date*)

1989	Universitat Autònoma de Barcelona (UAB)	B.S. Biology	
1993	UAB	PhD. Biology	<i>Effect of competition in resprouting, growth and flowering of Erica multiflora L. after disturbances</i>
1994-1996	University of California, Berkeley, US	Postdoctorate	<i>Title: Ecology of Carpobrotus hybrids invasion</i>

A.3. Indicators of Quality in Scientific Production (*See the instructions*)

- Among the top 1% researchers for most cited documents in the Ecology/Environment field for 2014, 2015, 2016, 2017, 2018 according to Clarivate Analytics (former Thomson Reuters)
- >170 ISI publications (>90% Q1 Ecology/Plant Sciences/Environmental Sciences).
- Co-editor of 7 books and author of > 40 book chapters, > 30 papers for the general public. See <http://www.montsevila.org>
- SCOPUS: 14097 citations, h = 55; Google Scholar: 21831 citations, h = 65 (date 1911/12/2018).
- Sexenios: 4 (1990-1995, 1996-2001, 2002-2007, 2008-2013). Quinquenios: 4 (1989-1993, 1994-1998, 1999-2003, 2004-2008, 2009-2013)

Part B. Free Summary of CV (*Max. of 3.500 characters, including spaces*)

I did my PhD at the Center for Ecological Research and Forestry Applications (CREAF) at Universitat Autònoma de Barcelona, and a Postdoctorate at the University of California, Berkeley where I got interested on the ecology of introduced species, how they became biological invasions, and the implications for nature protection. Interdisciplinary and

international collaboration has been essential in developing my main research interest which focus on the following areas:

(1) **The ecological factors that determine the success of introduced species**, mainly plants. Specifically, we are focusing on the role that plant-animal interactions play in the naturalization of introduced species into new ecosystems. Our work reveals that native generalist pollinators play a crucial role in integrating introduced entomophilous plant species into the recipient community. We have also described how introduced species have left behind, in the new community, the natural enemies that keep their populations in check in their area of origin. We are enlarging this field by including the interaction between mass-flowering crops and pollinators.

(2) **The description of macroecological patterns of invasions** to explore which geographic and environmental variables are associated with differences in the levels of invasion across Spain and across European countries. This research has shown that the presence and diversity of introduced species in the wild depends more on socioeconomic factors than on environmental ones. We are currently comparing the similarities of invasion by introduced plants across Mediterranean regions of the World.

(3) **The analysis of the ecological and socio-economic impacts of invasions** by conducting extensive field surveys and experiments, as well as the creation, organization and meta-analysis of large datasets. Our leading global synthesis on the impacts of biological invasions has demonstrated that there are general trends towards invasive plant species reducing the fitness and diversity of native plant and animal species, altering energy flow and changing nutrient cycling of invaded ecosystems. Moreover, our work has highlighted that there is a positive relationship between ecological and economic impacts.

Our work on biological invasions is regularly portrayed in the media (e.g. Discovery Channel News, BBC Earth Watch, Associated Press, Le Monde, Publico, Canal Sur, RTVE).

Part C. Accomplishments (Order by typology)

C.1. Ten selected publications for the 2013-2017 period

- Vilà M** & Hulme PH (eds.) 2017. *Impact of biological invasions on ecosystem services*. Springer, Heidelberg.
- Gallardo B et al. (9/9) 2017. Protected areas offer refuge from invasive species spreading under climate change. *Global Change Biology* 23: 5331-5343.
- Gallardo B., M. Clavero, M. I. Sánchez & **M. Vilà**. 2016. Global ecological impacts of invasive species in aquatic ecosystems. *Global Change Biology* 22: 151-163.
- Kumschick S (19/3) 2015. Ecological impacts of alien species: quantification, scope, caveats and recommendations. *Bioscience* 1:55-63.
- Lapedra O et al. (4/4) 2015. Random processes and phylogenetic loss caused by plant invasions. *Global Ecology and Biogeography* 24:774-785.
- Vilà M** et al. (7/1) 2015. Explaining the variation in impacts of non-native plants on local-scale species richness: the role of phylogenetic relatedness. *Global Ecology and Biogeography* 24:139-146.
- Blackburn TM et al. (21/17) 2014. A unified classification of alien species based on the magnitude of their environmental impacts. *Plos Biology* 12: 1-11. e1001850
- Hulme PE et al. (6/6). 2013. Bias and error in understanding plant invasion impacts. *Trends in Ecology and Evolution* 28: 212-218.
- Carboneras C, P Watson & **M Vilà**. 2013. Capping progress on invasive species? *Science* 342: 930-931.
- Simberloff D et al. (14/14) 2013. Impacts of biological invasions - what's what and the way forward. *Trends in Ecology and Evolution* 28: 58-60.

C.2. Participation in Research, Development and Innovation Projects

Besides PI of uninterrupted funding from the Spanish National Research Plan, major funding comes from competitive EU projects.

Understanding and managing the impacts of Invasive alien species on Biodiversity and Ecosystem Services (INvasiVES). Shortlisted for funding at the ERANET-BIODIVERSA call and submitted at the PCIN 2018 call). Coordinator of the proposal: **M. Vilà**

Managing stability of biodiversity-based eCOsystem services in crops through enhanced DEnsity of green infrastructure in Agricultural Landscapes (ECODEAL), ERANET-BIODIVERSA PCIN-2014-084. PI: Y Clout, PI in Spain: **M. Vilà**, 99k € (2015-2017).

COST Actions: Alien Challenge TD1209 (Coordinator: H. Roy, CEH, 2013-2017) and Super-Bee FA1307 (Coordinator: K. Beismeyer, Naturalis Biodiversity Center, 2014-2018). Spanish Manager Committee Member: **M. Vilà**.

Pollinator responses to global change and its implications for ecosystem functioning (BeeFun), PCIG14-GA-2013-631653, PI: **M. Vilà**, 100k € (2014-2016).

Status and Trends of European Pollinators (STEP), EU 244090. PI: S. Potts, Task leader for relevant pressures on European pollinators: **M. Vilà**. 121k € (2010-2014).

Biodiversity and Climate Change, a Risk Analysis (BACCARA), EU 226299, PI: H. Jactel, Task leader for forest inventory analysis: **M. Vilà**. 79k € (2009-2012).

C.3. Contracts

Biological invasions and climate change in Europe: risk analysis and opportunities. Contract with Fundación Iberdrola PI: **M. Vilà** (2014-2015)

Invasive Alien Species - Prioritising prevention efforts through horizon scanning. Contract with European Commission ENV.B.2/ETU/2014/0016. Coordinator: H. Roy (CEH, October 2014-July 2015), Subcontracted expert: **M. Vilà**.

EU EASIN. European Alien Species Information Network (EASIN) – update and alignment to a recent reclassification of pathways by the Convention for Biological Diversity. Contract with European Commission ENV.B.2/SER/2015/0037r1. Coordinator: H. Roy (CEH, November 2015-September 2016). Subcontracted expert: **M. Vilà**.

C.4. Recent institutional service

2012. Member of the Natural Resources Area Committee (CSIC)

2009- 2012. Head of the Department of Integrative Ecology (EBD-CSIC)

2012-2015. Deputy Director, Estación Biológica de Doñana (EBD-CSIC)

2017- 2018. Coordinator of proposal evaluations in Plant Biology, Animal Biology and Ecology area at the Spanish National Research Agency

2017- present. Member of the Scientific Committee on Flora and Fauna for the Spanish Ministry for Ecological Transition

C.5. Recent international service

2011- present. IUCN SSC Invasive Species Specialist Group Member.

2012. Member of the Discussion Forum on alien species in wildlife trade, experiences in the use of biological control agents and development of decision support tools for management of invasive alien species". Convention of Biological Diversity (CBD) Secretariat.

2012-2014. Vice-president of the European Working Group on Biological Invasions (NEOBIOTA).

2013. Chair of the Evaluation Commity BiodivERsA call on "Invasive Species and Biological Invasions".

2014- present. President of NEOBIOTA.

2014. Reviewer for GBO-4 technical background document on Aichi Biodiversity Target 9: Invasive alien species, UNEP.

2014. Member of the Expert Commission for Risk analysis of apple snail in Europe, EFSA.

2015-present. Member of the Scientific Forum of the European Regulation on Alien Invasive Species.

2017. Panel member for LS8 ERC Consolidator Grants.

2018. Member of the Jury for the Ramon Margalef Prize in Ecology.

C.6. Editorial service

Associate editor for Ecology Letters (2012- present), NEOBIOTA (2010- present), Biological Invasions (2009- present), Biosciences (2018-present).

C.7. Recent organization of international meetings and conferences

MEDECOS XIV & XIII AEET Meeting Co-chair. Sevilla, 2017.

European Conference on Biological Invasions (NEOBIOTA). Scientific Commity: Copenhagen (Denmark), 2010; Pontevedra (Spain), 2012; Antalya (Turkey), 2014; Vianden (Luxembourg), 2016; Dublin, 2018.

Developing a priority list of invasive alien species in Europe Workshop, Sevilla, 2015.

XIII MEDECOS International Conference Scientific Commity. Olmué, Chile, 2014.

Adapting to Global Change in the Mediterranean hotspot: from genes to ecosystems (EcoGenes). Organizing and Scientific Commity. Sevilla, 2013.

C.8. Recent proposal evaluation and committees

Deutsche Forschungsgemeinschaft, Swiss National Research Foundation, Research and Innovation SERI in Switzerland, Fundación Banco Bilbao Vizcaya, South Africa's National Research Foundation, Research Foundation Flanders, Comisión Nacional de Investigación Científica y Tecnológica, Ministerio de Educación de Chile, Sino-German Center for Research Promotion.

C.9. Teaching, student advisor and mentorship

Teaching experience to undergraduate and graduate students (240 h/yr) at Universitat Autònoma de Barcelona (UAB) for more than 12 yr.

Regular host for national and international undergraduate and graduate students (ERASMUS +, Leonardo and STM in COST actions, etc).

PhD thesis advisor: Isabel Gimeno (2005), Roser Doménech (2005), Ignasi Bartomeus (2008), Núria Gassó (2008), Amparo Carrillo (2011), Jara Andreu (2012), Ana Montero (2014), Pablo González-Moreno (2015), Alejandro Trillo (In progres), Carlos Zaragoza (In progres), Álvaro Bayón (In progres), Javier Galán (In progres).