

Part A. Personal Information

DATE	Feb/14th, 2017
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Surname(s)	Vilà	
Forename	Montserrat	
Social Security, Passport, ID number	40462147H	
Sex	woman	
Age	51	
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	
	Department/Center	Estación Biológica de Doñana
	Full Address	Américo Vespucio 26, Isla de la Cartuja, 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)

<p>Among the top 1% researchers for most cited documents in the Ecology/Environment field for 2014 and 2015.</p> <p>>150 ISI papers and 40 book chapters, editor of 6 books and coauthor for more than 30 papers for the general public.</p> <p>ISI web Science: 9851 citations, h = 48. Google Scholar: 15735 citations, h = 58</p> <p>See http://www.montsevila.org, https://www.researchgate.net/profile/Montserrat_Vila</p>

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

<p>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 interests which focus on the following areas:</p>
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(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). I am committed to knowledge transfer at all levels such being a Member of the Scientific Forum of the European Regulation on Alien Invasive Species.

Part C. Accomplishments (Order by typology)

C.1. Selected publications (last 10 years)

- Vilà M** & PE Hulme 2017 (eds.) *Impact of biological invasions on ecosystem services*. Springer, Heidelberg.
- Montero-Castaño A & **Vilà M**. 2017. Influence of the honeybee and trait similarity in the effect of a non-native plant on pollination and network rewiring. *Functional Ecology* 31:142-152.
- Cameron EK, **M Vilà** & M Cabeza. 2016. Global meta-analysis of the impacts of terrestrial invertebrate invaders on species, communities and ecosystems. *Global Ecology & Biogeography* 25:596-606.
- Holzschuh A et al. (17/15) 2016. Mass-flowering crops dilute pollinator abundance in agricultural landscapes across Europe. *Ecology Letters* 19: 1228-1236.
- Kumschick S (19/3) 2015. Ecological impacts of alien species: quantification, scope, caveats and recommendations. *Bioscience* 1:55-63.
- Lapiedra 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.
- Leung B et al. (12/12) 2012. TEASIng apart alien species risk assessments: a framework for best practices. *Ecology Letters* 15: 1475-1493.
- Vilà M** et al. (10/1) 2011. Ecological impacts of invasive alien plants: a meta-analysis of their effects on species, communities and ecosystems. *Ecology Letters* 14: 702-708.
- Vilà M** et al. (>50/1). 2010. How well do we understand the impacts of alien species on ecosystem services? A pan-European cross-taxa assessment. *Frontiers in Ecology and the Environment* 8: 135-144.

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

Besides PI of uninterrupted funding from the Spanish National Research Plan (see <http://www.europe-aliens.org/>), major funding comes from competitive EU projects.

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

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/2015/0037rl. Coordinator: H. Roy (CEH, November 2015-September 2016). Subcontracted expert: **M. Vilà**.

C.4. Recent institutional service

2017-Collaborator of the Coordination and Evaluation Subdivision (ANEP; National Research Agency

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

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

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

C.5. Recent international service

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

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

2012- present. Member of the Scientific Council for the Laboratory of Excellence (LABEX) "OT: Med" Aix*Marseille University.

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.

C.6. Editorial service

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

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.

Drivers of pollinator loss Symposium. Organizer at the 12th EEF Congress. Ávila, 2011.

C.8. Recent proposal evaluation and committees

ANEP, 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 COST programs, 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).