

# Marcos Fernández-Martínez

---

## Home

Camí ral, 2, 2  
08303 Mataró (Barcelona, Catalonia)  
Phone: +34 644 17 80 03  
e-mail: [m.fernandez@creaf.uab.cat](mailto:m.fernandez@creaf.uab.cat)



## Work

CREAF (Centre for Ecological Research and Forestry Applications)  
Campus UAB. Edifici C.  
08193 Bellaterra (Barcelona, Catalonia)  
Phone: + 34 93 581 48 51

## Education:

### **Autonomous University of Barcelona – CREAM**

- 2011 – expected December 2015: **Ph.D.**, Terrestrial ecology

### **Autonomous University of Barcelona – CREAM**

- 2010 – 2011: **M.A.**, Terrestrial ecology

### **University of Barcelona**

- 2005 – 2010: **B.A.**. Degree in environmental sciences, specialized in environmental management (University of Barcelona).

## Languages:

- Fluent in Catalan, Spanish and English.

## Research experience:

- Since 2011 - Ph.D student
- 2010 – 2011 – Research support technician in CREAM

## Teaching experience:

- October – November 2013: Field and laboratory instructor - Undergraduate edafology Autonomous University of Barcelona.

## Publications:

- **2014 - Fernández-Martínez, M.**, Vicca, S., Janssens, I.A., Sardans, J., Luysaert, S., Campioli, M., Chapin III, F.S., Ciais, P., Malhi, Y., Obersteiner, M., Papale, D., Piao, S.L., Reichstein, M., Rodà, F. & Peñuelas, J. Nutrient availability as the key regulator of global forest carbon balance. *Nature Climate Change*, 4, 471–476. This paper lead to the publication of a “*news and views*” article in *Nature Climate change*: De Vries, W. (2014) Forest ecology: Nutrients trigger carbon storage. *Nature Climate Change*, 4, 425–426
- **2014 - Fernández-Martínez, M.**, Vicca, S., Janssens, I. a, Campioli, M., Luysaert, S., Sardans, J. & Peñuelas, J. Spatial variability and controls over biomass stocks, carbon

fluxes and resource-use efficiencies in forest ecosystems. *Trees, structure and function*, 28, 597–611.

- **2012** - **Fernández-Martínez, M.**, Belmonte, J. & Espelta, J.M. Masting in oaks: Disentangling the effect of flowering phenology, airborne pollen load and drought. *Acta Oecologica*, 43, 51–59.
- **2011** - Espelta JM, Barbati A, Quevedo L, Tárrega R, Navascués P, Bonfil C, Peguero G, **Fernández-Martínez, M**, Rodrigo A. Post fire management of Mediterranean broadleaved forests. In (F. Moreira, P.M. Corona, M. Arianotsou, J. de las Heras, eds.). *Post-Fire Management and Restoration of Southern European Forests, Managing Forest Ecosystems* 24, DOI 10.1007/978-94-007-2208-8\_8,

### **Presentations and posters**

- **2015** - **Fernández-Martínez, M.** Disentangling the role of nutrient availability and a changing climate in forest productivity. Imbalance-P conference (European Research Council Synergy grant ERC-2013-SyG-610028). Barcelona (Catalonia, Spain), 13-16 January, 2015.
- **2014** - **Fernández-Martínez, M.**, Vicca, S., Janssens, I.A., Sardans, J., Luyssaert, S., Campioli, M., Chapin III, F.S., Ciais, P., Malhi, Y., Obersteiner, M., Papale, D., Piao, S.L., Reichstein, M., Rodà, F. & Peñuelas, J. (2014) Nutrients matter most for global forest carbon balance. 1st ICOS Science Conference on Greenhouse Gases and Biogeochemical Cycles 2014, 22-26 September 2014, Brussels.
- **2013** - Peñuelas, J., Sardans, J., **Fernández-Martínez, M.**, Estiarte, M., Ogaya, R., Carnicer, J., Coll, M., Barbeta, A., Rivas-Ubach, A., Gargallo, A., Llusà, J., Rico, L., Achotegui, A., Farré-Armengol, G., Filella, I., Jump, A.S. Nutrients matter most. Genomic, metabolomic and ecophysiological approaches to the study of climate change impacts on communities and ecosystems: from short term to long term responses. Intecol 2013, 18-23 August 2013, ICC London Ex.
- **2012** - Peñuelas J., Filella I., Estiarte M., Ogaya R., Llusà J., Sardans J., Jump A., Carnicer J., Rico L., Garbulsky M., Coll M., Díaz De Quijano M., Seco R., Rivas-Ubach A., Kefauer S, Barbeta A, Achoategui A, Mejia-Chang M, Gallardo A, Farre G., **Fernandez-Martínez, M.**, Terradas J. Ecosystemic and biospheric interactions with carbon cycle. In Carbon dioxide budget: processes and tendencies symposium. Universitat Politècnica de Catalunya, May 23-25.
- **2011** - **Fernández-Martínez, M.**, Belmonte, J., Espelta, J.M. Acorn production in Mediterranean oaks: disentangling the effects of phenology, airborne pollen availability and water stress. 12<sup>th</sup> EEF Congress, Ávila.
- **2011** - Muñoz, A., Espelta, J.M., **Fernández-Martínez, M.**, Hernández, M., Peguero, G., Bonal, R. Uncoupled seed rain phenologies of *Quercus pubescens* and *Q. ilex* enhance

their succesful dispersal by seed-catching rodents in mixed forests. 12<sup>th</sup> EEF Congress, Ávila.

- **2011** - Muñoz, A., Espelta, J. M., Hernández, M., Bonal, R., **Fernández-Martínez, M**, Torre, I., Llimona, F. Uso de microchips sub-dérmicos en el seguimiento de micromamíferos. Variaciones poblacionales a corto plazo y protocolos de seguimiento a largo plazo. Ciclo de seminarios permanentes del CENEAM 'Protocolos de seguimiento a largo plazo'. Organismo Autónomo de Parques Nacionales. 12-13 September 2011. Valsain (Segovia)
- **2011** - **Fernández-Martínez, M.**, Belmonte, J., Espelta, J.M. La vecería en *Quercus* Mediterráneos: ¿Eficiencia en la polinización o disponibilidad de recursos? Communication at the VIII congress of ECOFLOR's working group, Toledo.