

Cendrine GARBEY (ep. MONY)

Since 2004, Associate professor, UMR ECOBIO, University of Rennes 1

## 1. Scholarship

2003 PhD Thesis (Univ. Metz, UMR CNRS LIEBE)

2013 HDR (Univ. Rennes1, UMR CNRS ECOBIO)

## 2. Scientific papers

Rewarding of PEDR (2008-2012), PES (rank A) (2013-2020).

### • 36 peer-reviewed publications.

Selection of 10 significant publications (19 accepted papers in total) over the 2012-2017 period:  
Louapre, P., Bittebiere, A.-K., Clément, B., Pierre, J.S. & **Mony, C.** 2012. How Past and Present Influence the Foraging of Clonal Plants ? *PlosOne*. 7: e38288.

Benot, M.L., Bittebiere, A.-K., Ernoult, A., Clément, B. & **Mony, C.**, 2013. Fine-scale spatial patterns in grassland communities depend on species clonal dispersal ability and interactions with neighbors. *Journal of Ecology*. 101: 626-636.

Favre-Bac, L., Ernoult, A., **Mony, C.**, Rantier, Y., Nabucet, J. & Burel, F., 2014. Connectivity and propagule sources composition drive ditch plant metacommunity structure. *Acta Oecologica*. 61: 57-64.

**Bittebiere, A.-K. & Mony, C.**, 2015. Plant trait responses to fine-scale competitive landscape: evidence of spatio-temporal disintegration. *Annals of botany*.

Vannier, N., **Mony, C.**, Bittebiere, A.-K. & Vandenkoornhyuse, P., 2015. Epigenetic Mechanisms and Microbiota as a Toolbox for Plant Phenotypic Adjustment to Environment. *Frontiers in Plant Science*. 6(e30515) DOI: 10.3389/fpls.2015.01159.

Favre-Bac, L., **Mony, C.**, Ernoult, A., Burel, F. & Arnaud, J.-F., 2016. Ditch network sustains functional connectivity and shapes the patterns of gene flow in an intensive agricultural landscape: a case study in *Oenanthe aquatica* and *Lycopus europaeus*, two remnant wetland plant species. *Heredity*. 116: 200-212.

Saiz, H., Bittebiere, A.-K., Benot, M.-L., Jung, V. & **Mony, C.**, 2016. Understanding clonal plant competition for space over time: a fine-scale spatial approach based on experimental communities. *Journal of Vegetation Sciences*. 27: 759-770.

Vannier, N., Bittebière, A.-K., Vandenkoornhuys, P. & **Mony, C.**, 2016. AM fungi patchiness and the clonal growth of *Glechoma hederacea* in heterogeneous environment; Scientific reports.

Favre-Bac, L., Lamberti-Raverot, B., Puijalón, S., Ernoulit, A., Burel, F., Guillard, L. & **Mony, C.**, 2017. Plant dispersal traits determine hydrochorous species tolerance to connectivity loss at the landscape scale. *Journal of Vegetation Sciences*.

Barbe, L., Jung, V., Prinzing, A., Bittebiere, A.-K., Butenschoen, O. & **Mony, C.**, 2017. Functionally dissimilar neighbors accelerate litter decomposition in two grass species. *New Phytologist*

### • Invited Editor

Special Issue in Ecological Modelling: **Mony, C.**, Garbey, M., Campillo, F. & El Hamidi, A., 2012. **Modelling clonal plant growth: From Ecological concepts to Mathematics.**

### • 46 communications (31 international and 15 national)

## 3. Grant supervision

**Supervision of 6 research projects** (ANR « Systèmes Complexes et Modélisation », CNRS PICS, CNRS Ingénierie Ecologique, CNRS PEPS, FRB-Région Nord Pas de Calais, UEB-API) and of **2 WPs in research projects** (ANR STRA, FP7 Call9 FOCAS).

**Cosupervision of the LTER site « ZA Armorique »** since January 2011 (<http://osur.univ-rennes1.fr/zoneatelier-armorique/>).

Recent projects (over the 2012-2017 period)

As the PI:

*Project FRB-région Nord-Pas-de-Calais CorEcol* « Rôle des fossés dans les paysages agricoles du nord de la France : Habitat et/ou Corridors écologiques pour les espèces végétales : Application pour la gestion des trames bleues à l'échelle du territoire » (co-PIs: F. Burel & A. Ernoult) funded in the biodiversity program of région Nord-Pas de Calais- Fondation pour la Recherche sur la Biodiversité (Partners: University of Lille, Association Lestrem nature, Communauté de Communes Artois Comm, Communauté de Communes Flandre Lys) (2011-2013).

*Project Mycoland* “L'écologie du paysage appliquée aux communautés microbiennes: Influence du micropaysage floristique sur la structure des métacommunautés de Champignons Mycorhiziens à Arbuscules” (co-Pi: P. Vandenkoornhuysse) funded in the program CNRS PEPS (Partners: UMS 3343 OSUR, Station Biologique de Roscoff-FR2424, IRISA, Technische Univ. Kaiserslautern) (2015).

*Project Ludocol* “Développement d'une plateforme de jeu video en vue de l'utilisation du “Volunteer Thinking” pour la collecte de données écologiques: Utilisation pilote en enseignement universitaire” funded in the program API from UEBC (2015).

*Project Microland* “The conundrum of assembly rules in plant MICRObiota addressed by the transposition of LANDscape ecology to microscale” (Pi: P. Vandenkoornhuysse & C. Mony) funded in the program EC2CO from CNRS (Partners: Univ. Nantes, Univ. Amsterdam) (2017-2018).

#### As coordinator of WP:

*Coordinator of WP 2, project ANR ECS* « Understanding of the evolution of cooperation behaviour of plants-symbionts in the aim of the ecological intensification of agriculture» (Pi: P. Vandenkoornhuysse) funded in the program STRA of ANR (2011-2014) (Partners: INRIA Rennes, Univ. Nantes, Univ. Amsterdam, Max Plank Institute Köln, University of Minnesota, Univ. Arizona).

*Coordinator of WP1, European project Diversify* «Ecological diversity in software for stable collaborative adaptive systems » (Pi: B. Baudry) funded in the program ICT FP7 Call 9 – Objective 9.10 FET Proactive: FOCAS of EU (2013-2015) (Partners: INRIA Rennes, SINTEF, Trinity College Dublin).

#### As member:

*Project Agriconnect* « Continuités écologiques dans les paysages agricoles » (Pi: F. Burel) funded in the program DIVA « Action publique, Agriculture et Biodiversité » du Ministère de l'Ecologie, du Développement durable, des transports et du logement (Partners: Univ. Rennes2, INRA, local managers) (2012-2015).

*Project EC2CO* « Ecologie expérimentale de la structuration des communautés végétales sous contrainte de stress chimique » (Pi : C. Sulmon-Maisonneuve) funded in the program ECODYN of CNRS (Partners : Univ. Lyon1, Univ. Metz) (2015-2016).

*Project ANR* “Connectivity patterns and processes along a gradient of European landscapes with woody vegetation and spatial heterogeneity” (Pi: F. Burel) funded in the program Biodiversa (Partners: Univ. Madrid, Univ. de Louvain, Univ. de Picardie) (2017-2019).

## **4. Student supervision**

Supervision of 4 postdoctorates, 5 PhD thesis, 28 Master students and 15 Undergraduate students.

#### Ongoing PhD thesis:

Vannier, N. (1st Oct. 2014- ); thesis advisors : P. Vandenkoornhuysse, C. Mony, A-K. Bittebiere & T. Kiers). Interrelation plante/mutualistes : comment la plante et son comportement pourraient influencer la diversité des mycorhizes ?

Barbe, L. (1st Oct. 2014- ); thesis advisors : C. Mony, V. Jung & A. Prinzing) Influence de la structuration spécifique, fonctionnelle et phylogénétique des communautés végétales sur la décomposition de la litière : approches pluri-échelles.

## **5. Teaching activities**

- Co-coordination of the Master Degree «Biodiversité, Ecologie, Evolution» since 2016.
- Co-coordination of the Master Degree « Environnement-Droit » (1st & 2<sup>nd</sup> year) and the Licence Degree « Environnement-Droit » since 2008.
- Named representative of University of Rennes1 for the numerical campus ENVAM
- Coordination of 6 Teaching Units at Master level

## **6. Other**

- Scientific expert for different stakeholders (Réserve naturelle régionale, Département d'Ille et Vilaine, Syndicat de gestion, ...)
- Elected member for CNU (section 67)