Emilie Fleurot

PhD in ecology of communities

About me

French
Driver license
→ Researchgate profil
→ Website

Contact

E-mail : emilieangelefleurot@gmail.com

Skills

R language

Statistics
(lmer, glmer ...)

Field work
Data sampling

Modeling
(C++)

French – **Native**
English - **TOEIC : 985/990**
Spanish - **C2**

Research activity

2023 – current **Postdoctoral research**
Department DISAFA, University of Turin, Italy

Education

2019 – 2023 **PhD in ecology of communities, forest ecology, modeling**
Lyon, France
Title : Towards a detailed understanding of the determinism of masting: a multi-scale approach to the study of fruiting of oaks *Quercus petraea* and *Q. robur*.
Supervisors : Samuel Venner and Marie-Claude Bel-Venner.

2017 – 2019 **Master degree in Biology, Evolution and Ecology**
Montpellier, France
Internship (6 months) on the coevolution of germination phenology and dispersal rate in a heteromorphic species.
Supervisors : Pierre-Olivier Cheptou and Jean-Michel Guillon.

Internship (3 months) on the interplay between demography and auto-incompatibility system in *Brassica insularis.*
Supervisor : Sandrine Maurice.

2014 – 2017 **Bachelor degree in Life science, Organisms biology (with honors)**
Dijon, France
Voluntary internship (1 month) on the effect of the double infection nematode-plasmodium in mice.
Supervisor : Gabriele Sorci.

Voluntary internship (1 month) on the immune priming and the immune transfer to offspring in *Tenebrio molitor.*
Supervisor : Yannick Moret.

Teaching activities

2022 Lyon, France
Bachelor 2nd year – Bioinformatic and Biostatistics
Practicals (30h), Headed professors : Marie-Claude Venner and Arnaud Mary.

2020 Lyon, France
Bachelor 2nd year – Bioinformatic and Biostatistics
Practicals (12h), Headed professors : Marie-Claude Venner and Arnaud Mary.

Internship supervising activities (at 50%)

2022 Lyon, France
Master degree 1st year (3 months) – Oak reproduction and control of fruit-eating insects : a modeling approach
Emma Acacia (M1 BEE), University Claude Bernard Lyon 1.

2021 Lyon, France
Master degree 2nd year (6 months) – Cyclic vs stochastic dynamics of reproduction in perennial species : the key role of flowering phenology
Léa Keurinck (M2 BEE), University Claude Bernard Lyon 1.

2020 Lyon, France
Master degree 1st year (3 months) – Floral phenology, a key driver of fruiting dynamics ? A between species comparison
Léa Keurinck (M1 BEE), University Claude Bernard Lyon 1.

Selected conference presentations

Talk Oct. 2024
Reconciling Pollen Limitation Theories: Insights from Temperate Oak Masting.
International Congress in Ecology and Evolution SFE^2, Lyon, France

Talk June 2023
Oak's flowering phenology responses to climate change and their consequences on reproduction dynamics. Masting Conference, Poznan, Poland

Talk June 2022
Climate change, shifting flowering phenology and their consequences on the reproduction of oak trees. Phenology at the crossroads 2022, Avignon, France

Talk May 2022
Timing of flowering : a critical issue to forecast forest regeneration in the context of climate change. Arqus Research Focus Forum on Climate Change and Biodiversity, Lyon, France

Talk March 2022
Shifting flowering phenology with climate change : a key issue for the future of oak forest ecosystems ? Ecology & Behaviour, Strasbourg, France

Talk June 2021
Timing of flowering : the key toward frequent reproductive failure and disruptive fruiting dynamics, temperate oak species as a case study. Mathematical And Computational Evolutionary Biology, Porquerolles, France

Talk May 2021
Oak masting : more than a simple fruits story ? Décryp'thèse, Lyon, France **(Public award for best talk)**

Invited presentations

Talk Oct. 2024
Reconciling Pollen Limitation Theories: Insights from Temperate Oak Masting. Boku University, Vienna, Austria

Talk Oct. 2024 — **Reconciling Pollen Limitation Theories: Insights from Temperate Oak Masting.** Mammal Research Institute, Białowieża, Poland

Scientific publications

2024 **Reconciling Pollen Limitation Theories: Insights from Temperate Oak Masting.** **E. Fleurot***, L. Keurinck*, V. Boulanger, F. Debias, N. Delpierre, S. Delzon, J. Lobry, C. Mermet-Bouvier, M. Bel-Venner, S. Venner. Ecology Letters, 27:e70009. https://doi.org/10.1111/ele.70009

2024 **Evolutionary ecology of masting: mechanisms, models, and climate change.** M. Bogdziewicz, D. Kelly, D. Ascoli, T. Caignard, F. Chianucci, E. E. Crone, **E. Fleurot**, J. J. Foest, G. Gratzer, T. Hagiwara, Q. Han, V. Journé, L. Keurinck, K. Kondrat, R. McClory, J. M. La Montagne, I. A. Mundo, A. Nussbaumer, I. Oberklammer, M. Ohno, I. S. Pearse, M. B. Pesendorfer, G. Resente, A. Satake, M. Shibata, R. S. Snell, J. Szymkowiak, L. Touzot, R. Zwolak, M. Zywiec, A. J. Hacket-Pain. Trends in Ecology & Evolution. https://doi.org/10.1016/j.tree.2024.05.006

2023 **Oak masting drivers vary between populations depending on their climatic environments.** **E. Fleurot**, J. Lobry, V. Boulanger, F. Debias, C. Mermet-Bouvier, T. Caignard, S. Delzon, M. Bel-Venner, S. Venner. Current Biology. https://doi.org/10.1016/j.cub.2023.01.034

2022 **The morphological allometry of four closely related and coexisting insect species reveals adaptation to the mean and variability of the resource.** **E. Fleurot**, S. Venner, P-F. Pélisson, F. Débias, M-C. Bel-Venner. Oecologia. https://doi.org/10.1007/s00442-022-05249-x.

Science popularization

Talk March 2025 — **Suivi de la dynamique de fructification des arbres Résultats sur le chêne sessile et nouveaux projets.** Réunion nationale ONF RENECOFOR, Malbuisson, France

Talk Sept. 2023 — **La reproduction des chênes sessiles : résultats du programme FOREPRO.** Kfé RDI ONF, Online meeting, France

Media

Jul. 2024 **Briançonnais: la science en renfort des pins sylvestres, en danger à cause de la sécheresse.** BFM DICI [link]

Jul. 2024 **SylvAForRes : rendre les forêts de montagne résilientes face aux changements climatiques.** Alpes & Midi [link]

Service

Peer-reviewer 3 journal; 10 manuscripts (WOS)