

## CURRICULUM VITAE

Mélanie Roy, 27/10/1981, born in Kuujjuaq, Canada

### Current situation and contact

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*Maître de conférence* – HDR (habilitée à diriger les recherches), at Université Paul Sabatier (UPS) – Toulouse FRANCE ; Associated-professor at Université du Québec en Abitibi-Témiscamingue (UQAT, CANADA) ; delegated by the Institute for Research and Development (IRD) at the IRL IFAECI - Instituto Franco-Argentino para el Estudio del Clima y sus Impactos (IRL IFAECI/CNRS-CONICET-UBA-IRD).

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### Summary

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Since circa 13 years, my research focus on ectomycorrhizal fungi, their diversity, their ecology and evolution. My research questions aim at understanding how mycorrhizal diversity and their ecological or functional networks contribute to ecosystem resilience – and my fields focus on forests where the resilience might be higher, such as “pristine” forests in the Amazon, “ancient” forests in the Boreal and temperate zone. I’m currently assistant professor at Toulouse University, but working in Argentina in the International Lab IFAECI, to learn about networks and climate resilience.

### University degrees

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- 1999** Baccalauréat, mention Très Bien
- 1999-2001** Classe préparatoire BCPST, Lycée Montaigne, Bordeaux.
- 2001-2005** Master of cellular and molecular biology – Ecole Normale Supérieure Lyon (8e/32), **élève fonctionnaire**
- 2004** One year preparation to teaching at ENS Lyon **Agrégation de SV-STU (66<sup>e</sup>)**.
- 2004-2005** Master 2 Ressources phytogénétiques et interactions biologiques -University Montpellier 2, mention Très Bien (1ère/11).
- 2005-2009** PhD in ecology and evolution of mycoheterotrophy by orchids, Centre d'Écologie Fonctionnelle et Évolutive, Montpellier, supervised by M.-A. Selosse. **First price of the French Botanical Society for the PhD (2009)**.
- 2019** HDR Habilitation à diriger les recherches, Université Paul Sabatier ; what processes shape specialization in plant-fungi mutualisms ?

### Professional experiences

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- 2008/2009** ATER (teaching) at University Montpellier 2
- 2009/2010**. Post-doctoral project on functional diversity of ectomycorrhizal fungi in Europe (6 months, INRA Cestas Pierroton).
- 2010/....** Maître de conférence (Assistant professor) at EDB, UPS
- 2014** Delegated by the CNRS in UMR EcoFoG for 6 months (Kourou, Guyane).
- 2017-2022** Associated professor at UQAT, Canada (only expert, no contract)
- 2021-2022** Delegated by the CNRS at the International Research lab IFAECI (18 months)
- 2022-2024** Delegated by the IRD at the International Research lab IFAECI (24 months)

## National and International visibility

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### Projects

In 13 years, I have been involved in 24 projects, national and international (funded by Brazil, Colombia, Peru, Switzerland and Canada) and was the leader or co-leader (\*) of 13 of them.

### Ongoing projects

- **NEFINEO\*** : Networks of Fungal Interactions in the Neotropics (CESAB-FAPESP Grant ; 100,000<sup>E</sup> ; co-Pi ; 2022-2024)
- **ANDeDNA\*** : The Andes : co-constructing an e-DNA observatory of biodiversity changes in response to climate change (Climat Am Sud ; 37,000<sup>E</sup> ; PI , 2022-2023)
- **FORe\*** : Caractérisation de la diversité Fongique et du sOI dans les Réserves Naturelles de France classées UNESCO à partir de l'ADN environnemental (Réserves Naturelles de France, 30,000<sup>E</sup>, Co-PI ; 2022-2023)
- **MYRECA\*** : Réponse des sols au changement climatique : importance des réseaux mycorhiziens dans la régénération des arbres et le stockage de carbone en forêts anciennes (EC2CO, PI, 23,000<sup>E</sup> ; 2021-2022)
- **MULTIMYCO\*** : Multiscale determinants of arbuscular mycorrhizal fungal communities (LabEx CEBA ; co-PI, 14,000<sup>E</sup> ; 2019-2022)
- **CAMBIA** : ChAngement cliMatique, Biodiversité et Interactions dans les Andes (PSF IRD ; participant, 30,000<sup>E</sup> ; 2022-2024)
- **BENDYS** : The last European old-growth ("subnatural") fir-BEech forests: a loNg-term and global stuDY for their better understanding, conServation and management (ANR JCJC to Vanessa Py, 358000<sup>E</sup>, participant ; 2019-2023)
- **BLOBIFORM** : Block neutral models to predict the response of Biodiversity in tree-related microhabitats to Forest Management (ANR JCJC to Fabien Larroche, 153130<sup>E</sup>, participant ; 2020-2024)

### Past accepted projects

- **SAELVA\*** : Suelo, climA y divErsidad : resiLiencia de los Vinedos al frente al cAmbio climático, projet inetrnational UPS, délégation CNRS, mécénat (2021), PI.
- **FIELDS\*** : From soil diversity to vineyard resilience : use of new indicators with winegrowers and students for a more integrative soil and vineyard health, Project BIOME Makers, 2021, PI.
- **IEA RACINE\*** : International Emerging Action Resilience in Action: Changing Interaction Networks at Ecotones ; CNRS ; 2020-2021, co-PI.
- **ACTUAAL** : Accompagner les transitions de l'urbain Anthropocène en Amérique latine : l'école comme laboratoire, les jeunes comme acteurs ; projet MITI CNRS ; 2018-2019, participant.
- **ABC SAUL** : Atlas de la Biodiversité Communale de Saül, volet Mycologie, FRB, 2018-2021, participant.
- **RECO-RECO\*** : Importance des réseaux mycorhiziens et des connexions racinaires dans la revégétalisation des parcs à résidus miniers, bourses Champlain, Ambassade de France au Québec, 2018-2019, co-PI.
- **DIAMOND** : Dissecting and monitoring Amazonian diversity, projet central LabEx, 2016-2018, participant.
- **DROUGHT** : Functional diversity and response to drought in tropical forests, projet central LabEx, 2016-2018, participant.

- **LONGTIME** : Long Term Impact of ancient Amerindian settlements on Guianese Forests, projet central LabEx, 2016-2018, participant.
- **GLOBNET** : Biogéographie globale des réseaux écologiques des forêts du monde – GlobNets, ANR, 2016-2020, participant.
- **MITAC** : Can tree species mixing improve resilience and productivity of boreal forests? projet MITACS (Québec, financement semi-industriel), participant.
- **SECIL** : Study of leaf endophytic fungi : Exploration and valorization of biosourCed Innovative antibacterial metaboLites, ANR Franco-Suisse, 2015-2020.
- **MYCOTIN\*** : Mycorrhizal communities of Inselbergs, projet Nouragues, CNRS, 2013
- **FUNGUY\*** : Fungal diversity of French Guiana, Projets annuels du Labex, 2011-2012 ; PI.
- **REFUNG\*** : Glacial Refugia and their fungal diversity, EC2CO, 2012-2013, PI.
- **ORCHID\*** : Orchid genetic diversity of French Guiana, MNHN-SFO, 2011, PI.

### **Edition**

Editor for *Mycorrhiza*, *Frontiers in Microbiology*, *Forests*, contributor to the Peer Community In Ecology. Reviewing since 2010 of 80 papers, for 23 journals.

### **Evaluations**

- Evaluation for the Research council of the University of Leuven (2)
- Evaluation for the Natural and Engineering Research Council of Canada
- Evaluation for the French ANR, and IRD

### **Councils**

- Pedagogical council of the LabEx TULIP since 2016.
- Scientific council of the French Phytopathology and Mycological Society since 2016.

### **International invitations**

- Short invited stay at Ceske Budejovice University (2 months, Tcheck Republic, 2010 and 2012), IMPA in Manaus (1 month, Brazil, 2014), Santa Catarina University (2 weeks, Brazil, 2016), Viçosa University (1 month, Brazil, 2017), Leiden University (2 weeks, Naturalis institute, Pays-Bas, 2018), Mendoza CONICET (1 month, 2019), Rouyn Noranda University (UQAT, 2 weeks, Canada, 2019), Tartagal (Argentina, Ambassade de France, a week, 2022), Santiago del Chile (Chile, University Pontifica, 2 weeks, 2022).
- Invited lectures at Orsay University (2013), Louvain Catholic University (Belgium, 2014), Bialystock University (Poland, 2016), Institute of Applied Science (Toulouse, 2017), Montréal Botanical Garden (IRBV, Canada, 2019).
- Invited conference at Aussois (Journées Jean Chevaugéon, France, 2016), Lausanne (Colloque d'Anthropologie, 2017), Leiden (Symposium au Naturalis institute, 2018).
- Invitation to the COP25 (Chili, 2019) from the CNRS
- Key-note invited speaker at *Association Botanique du Canada* congress, Rouyn Noranda, 05-09/06/22.

### **Scientific expertise**

- Mycological inventories and fieldwork organization for the Parc Amazonien de Guyane, Réserve de la Trinité et des Nouragues, *Ministère de la transition écologique, planète revisitée* project.
- Mycological expertise for the *Office National des Forêts* (Project Passiflor-2 ; *Epipogium*)
- Botanical inventories for the CPIE (Tarn), Gaillac town, museum of natural history of Gaillac and Toulouse.

- Expert for IUCN (Orchids of French Guiana)
- Expert for the Mycological collection of MNHN (revision of TaxRef)
- Wine-tasting events around climate change in France and Argentina (Institut Français d'Argentine, ViviFrancia, Alliance Française).
- Expert for tv programs for Arte (*enquêtes archéologiques*), *échappées belles*, *des racines et des ailes*.

## Scientific animation

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### Discussion groups

- Co-responsible of external lab conferences at EDB (2012-2014).
- Member of the Research and Teaching reflexion group at EDB (2019)
- Organization of discussion around the COP25 at EDB (2019)
- Co-organization of a workshop on well-being indicators and their interactions with biodiversity in Gaillac (2019)

### Congress organization

- Mycology and Phytopathology congress (Journée Jean Cheveaugeon), 25-29/01/2016, Aussois, France. co-responsible of a symposium on symbionts diversity
- Association for Tropical Biology and Conservation, 20-24/06/2016, Montpellier, France. co-responsible of a symposium on tropical soil ecology
- Brazilian Mycological Congress, 05-09/09/2016, Florianopolis, Brazil. Co-responsible of a symposium on ectomycorrhizal ecology
- Mycology and Phytopathology congress (Journée Jean Cheveaugeon), 22-26/01/2018, Aussois, France. Co-responsible of the congress
- International Mycology Congress, 16-21/07/2018, Panama. Co-responsible of a symposium on ectomycorrhizal biogeography
- European Tropical Ecology Association, 7-9/06/22, Montpellier. Co-responsible of the symposium on eDNA in the tropics.
- Mycology and Phytopathology congress (Journée Jean Cheveaugeon), 12-16/09/2022, Aussois, France. Co-responsible of the symbiont diversity symposium

### Visiting scientists

- Grant to welcome Jason Hoeksema (Oxford University, USA), from LabEx TULIP in 2015
- Grant to welcome Diego Vázquez (IADIZA, Argentina), from LabEx TULIP in 2019

## Teaching activities

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Since 2010, I teach at University Paul Sabatier (UPS), but also in Albi University center as well as IUT Auch of UPS. My teachings are closely related to symbioses diversity and ecology and have opened my research to biogeography and community ecology.

### Teaching description

Site	Topic (* responsibility)	Type	Level
UPS	Biodiversité végétale	CM	L1
	Systematique végétale	TP	L3
	Mycologie	TP, TD, Terrain	L3
	Inventaires botaniques	Terrain	L3
	Macro-écologie et biogéographie	CM, TD	M1
	Ecologie évolutive	CM, TD	M1

	Phylogénie et méthodes comparatives	CM, TD	M1
	Biodiversité et dynamique des écosystèmes tropicaux*	CM, TD, TP, Terrain	M1
	Ecologie et Viticulture (Cultures perennes)	CM, TD, Terrain	L3 pro
	Interactions biotiques	CM, TD	M2 (BEE)
	Génomique environnementale*	CM, TD, TP	M1
	Génomique environnementale 2*	CM, TD, TP	M2
	Bioéthique et écoresponsabilité*	CM, TD, TP	L3
Centre Universitaire JFC, Albi	Biologie végétale*	CM, TD, TP	L1
	Biodiversité végétale*	Terrain	L3
IUT (UPS), Auch	Ecologie et viticulture	CM, TD, Terrain	L3 pro

### International courses

- 2014** Supervision of Erasmus mundus student in French Guiana (field and analyses, 1 week)
- 2014** In the Amazon, along the Rio Negro, I gave a one-month field trip on white sands, to students from Peru, Brazil, and USA (Supported by Trebediv project, IRD) with colleagues from INPA (Manaus) and Santa Catarina University (Florianopolis).
- 2015** Labex TULIP summer School, 13-17/07/2015, in the Pyrénées. Courses on ecological and mycorrhizal networks to international graduate and PhD students.
- 2016** During the Brazilian Mycology Congress in Florianopolis, I gave a three days course for students of Santa Catarina University. We collected ectomycorrhizae, observed them and discussed with international experts.
- 2019** In Buenos Aires, I have already given two courses (one day each), from the field to the lab, to observe and discuss the ecology of ectomycorrhizae, at Faculty of agronomy and Faculty of sciences of Buenos Aires University.
- 2021** Introduction to eDNA in ecology; online course from University of Cuyo, Argentina
- 2021** Viticulture and climate change; grant from the Centre Franco-Argentin (CFA) of University of Buenos Aires – online course 01/10 to 03/12/2021

### Educational and administrative responsibilities

#### Educational responsibilities

- Co-responsible of master 2 Economics and Ecology (2019-2022)
- Responsible of lectures in master 1 (Biodiversité et Dynamique des écosystèmes tropicaux, 6 ECTS ; Génomique environnementale 6 ECTS), master 2 (interactions biotiques et modélisation, 3 ECTS ; Introduction to Problem based learning in economics and ecology, 5 ECTS ; Génomique environnementale 3 ECTS), licence 3 (Bioéthique ; 3 ECTS).
- Co-responsible of two lectures at the centre universitaire d'Albi (Biologie végétale, L1, 6 ECTS and biodiversité végétale, L3, 3 ECTS).

#### Evaluations

- Evaluation for master 1 and 2 for masters at UPS (*Biologie Végétale, Ecologie, Ecologie et Anthropisation, Ecologie et Evolution, Economics and Ecology* ; circa 4 per year) and for University of Santa Catarina and University of Quebec in Abitibi-Temiscamingue (circa 2 per year)

- PhD committee : Félix Lallemand (Museum National d'histoire Naturelle, France, 2015-18), Irène Calderon-Sanou (LECA, Université de Grenoble, France, 2018-2021), Margaux Trinquier (UPS, France, 2018-2022), Kenji Maurice (Université Montpellier, France, 2019-2022), Antoine Doncieux (Université Montpellier, France, 2019-2023), Jonathan Cazabonne (UQAT, Canada, 2022-2025), Jérémy Fraysse (Université de Sherbrooke, Canada, 2022-2025).
- PhD evaluation : Tristan Cordier (BIOGECO, Université Bordeaux 1, France, 2014), Anne Houlès (LSTM, Université Montpellier, France, 2017), Sofia Gomes (Naturalis institute, 2018), Arthur Maes (UPS, France, 2021), Benoît Perez (IBENS, Ecole Normale Supérieure de Paris, 2021), Claire Ricono (Université de Rennes 2, France, 2021), Jean-Baptiste Le Flo'ch (University of Laval, Canada, 2022), Ariadne Furtado (University of Santa Catarina, Brazil, 2022).
- HDR evaluation : Abdalah Diedhiou (Université de Montpellier, 2017), Adeline Fayolle (Gembloux university, 2022)

### Commissions at UPS

- Co-responsible of the commission for DCCE (teaching service for PhD) recruitment for the Biogeosciences department (UPS, 2018-2022).
- Commission for PRAG recruitment (Centre Universitaire d'Albi)
- Member of the Scientific Council BEST for the Biology and Geoscience Department (2018-2022)

### Supervising experience

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I currently co-supervise two PhD students :

- **Alexandre Raimbault** (2020-...), co-supervised with Antoine Brin. Funded by Région Occitanie (50%) and Ecole d'ingénieurs de Purpan (50%). Topic : resilience of ancient forests in South-West France : influence of soil below-ground networks
- **Evick Mestre** (2020-...), co-supervised with Yves Bergeron and Rock Ouimet (UQAM). Funded by UQAM. Topic : Migration of Maple trees in Canada : potential factors and facilitation.

I have also co-supervised one PhD :

- **Mélissande Nagati** (2015-2019), co-tutelle co-supervised with Yves Bergeron, Monique Gardes and Annie Desrochers. Funded by UQAT. Topic : Facilitation of balsam fir by mycorrhizae in boreal forest.

I have a long experience in supervising undergraduate and master students, regularly welcome students for short stay in my lab (Mariana Sa from Brazil, Alexis Carteron from Canada) and try to integrate them in a first experience of publication (\* co-author of a publication)

### Supervision of undergraduate students from University Paul Sabatier

- Wesley Tomas\*, *Diversité des vanilles de Guyane Française*, 2012, 1 month
- Esther Gomez\*, *Partage des mycorrhizes entre orchidées et poaceae*, 2013, 1 month
- Quentin Fabregal\*, *Paysage et flore adventice des vignes*, 2017, 2 months
- Morgan Ada, *Biogéographie et Phylogénie des géastres néotropicaux*, 2017, 6 months
- Camille Gonthie, *Inventaire des plantes urbaines de la ville de Gaillac*, 2017, 1 month
- Sarah Perusin, *Diversité des plantes adventices et effet des semis dans le vignoble*, 2019, 2 months

### Supervision of master 1 students from University Paul Sabatier

- Jocelyn Soulard, *Spécialisation vs partage de symbiotes entre aulnes et peupliers*, 2011, 2 months

- Adeline Lepape, *Spécialisation et phylogénie des symbiontes ascomycètes chez les aulnes*, 2011, 2 months
- Raphaëlle Gareilh\*, *Biogéographie et diversité des symbiontes des aulnes en Géorgie*, 2012, 6 months
- Louis Graf, *Biogéographie et phylogénie des Alnicola d'Alaska*, 2012, 2 months.
- Jan Hackel\*, *Diversité des champignons associés aux aulnes verts en zone refuge*, 2013, 2 months
- Mélissande Nagati\*, *Diversité des champignons associés aux aulnes en Corse*, 2013, 2 months.
- Laura Fernandez, *Spécialisation vs réseaux de champignons des forêts basses de Guyane*, 2015, 2 months
- Mike Hélon, *Spécialisation et phylogénie des Amanitaceae néotropicales*, 2017, 2 months
- Nina Gazal\*, *Interactions entre endophytes au sein des feuilles d'Astrocaryum*, 2017, 2 months
- Quentin Fabregal, *Recherche d'indicateurs de la mycorhization dans les vignes enherbées*, 2018, 2 months
- Alexandre Ramon, *Spécialisation des mycorhizes des lianes néotropicales*, 2018, 2 months
- Tristan Lafont-Rapnouil\*, *Revégétalisation de sols miniers au Nord du Québec et importance des réseaux mycorhiziens*, 2019, 2 months
- Benjamin Canut, *Diversité des mycorhizes des vieilles forêts des Maramures*, 2020, 2 months
- Julien Touzeau, *Rôle des mycorhizes dans l'agrégation spatiale chez Spirotropis longifolia*, 2020, 2 months
- Arthur Brisse\*, *Diversité des champignons observés dans la commune de Saül*, 2021, 6 months

#### **Supervision of master 2 students from University Paul Sabatier**

- Circé Collongeon, *Spécialisation et biogéographie des symbiotes entre aulnes au Québec*, 2013, 6 months.
- Jan Hackel\*\*, *Phylogéographie des Russules néotropicals*, 2014, 6 months.
- Mélissande Nagati\*, *Spécialisation et compétition au sein des populations mixtes d'aulnes*, 2014, 6 months.
- Sophie Mennicken\*, *Effet du paysage sur les communautés de champignons dans les Cévennes*, 2017, 6 months.
- Nina Gazal\*, *écologie historique des champignons de Guyane*, 2018, 6 months.
- Julien Touzeau, *Effet de l'ancienneté sur la diversité des champignons et leurs interactions*, 2021, 6 months.
- Zoé Bulliard, *Résilience et stabilité des interactions sols-microbiotes dans les vignobles*, 2022, 6 months.

#### **Supervision of master students from other Universities**

- Cédric Gonneau\*, *Fitness et mixotrophie chez Epipactis spp*, 2010, Master 2, 6 months, University Montpellier.
- Esther Gomez, *Interactions entre champignons endophytes de Posidonia oceanica*, 2015, 2 months, University of Perpignan
- Benjamin Durrington, *Réseaux d'interactions mycorhiziennes et résistance à la sécheresse en Guyane*, Erasmus Mundus student, 6 months.
- Supun Pawuluwage Madhumadhawa\*, *spatial interaction between plants mediated by fungi*, Master, 2 years, UQAT.
- Pascal Bredin, *facilitation de l'érable à sucre et interactions plantes-champignons*, master, 2 years, UQAM.
- Franck Cazes, *Effet des réseaux mycorhiziens communs sur la croissance des jeunes hetres*, 2022, 6 months, University of Perpignan

- Cleopatra Andrew-Cavanagh, Usage de l'eDNA par les viticulteurs, 2022, 2 months, Agro Paris tech.

## Bibliography h-factor = 22 ; i-factor = 35

[https://scholar.google.com/citations?hl=en&user=8sqVXwYAAAAA&view\\_op=list\\_works&sortby=pubdate](https://scholar.google.com/citations?hl=en&user=8sqVXwYAAAAA&view_op=list_works&sortby=pubdate)

### Peer-reviewed journals

1. **Roy M**, Dubois M-P, Proffit M, Vincenot L, Desmarais E, Selosse M-A. 2008. Evidence from population genetics that the ectomycorrhizal basidiomycete *Laccaria amethystina* is an actual multihost symbiont. *Molecular Ecology* 17: 2825–2838.
2. Pedersen HA, Watthana S, **Roy M**, Suddee S, Selosse M-A. 2009. *Cephalanthera exigua* rediscovered: new insights in the taxonomy, habitat requirements and breeding system of a rare mycoheterotrophic orchid. *Nordic Journal of Botany* 27: 460–468.
3. **Roy M**, Watthana S, Stier A, Richard F, Vessabutr S, Selosse M-A. 2009. Two mycoheterotrophic orchids from Thailand tropical dipterocarpacean forests associate with a broad diversity of ectomycorrhizal fungi. *BMC Biology* 7: 51.
4. **Roy M**, Yagame T, Yamato M, Iwase K, Heinz C, Faccio A, Bonfante P, Selosse M-A. 2009. Ectomycorrhizal *Inocybe* species associate with the mycoheterotrophic orchid *Epipogium aphyllum* but not its asexual propagules. *Annals of Botany* 104: 595–610.
5. Selosse M-A, **Roy M**. 2009. Green plants that feed on fungi: facts and questions about mixotrophy. *Trends in Plant Science* 14: 64–70.
6. Selosse, M. -A., Martos F., Perry B., Maj P., **Roy M.**, et Pailler, T. 2010. Saprotrophic fungal symbionts in tropical achlorophyllous orchids: Finding treasures among the 'molecular scraps'? *Plant Signaling & Behavior* 5 (4): 349-53.
7. Tranchida-Lombardo, V., **M. Roy**, E. Bugot, G. Santoro, Ü Püttsepp, M. Selosse, et S. Cozzolino. 2010. Spatial repartition and genetic relationship of green and albino individuals in mixed populations of *Cephalanthera* orchids. *Plant Biology* 12 (4): 659-67.
8. Richard, F., **M. Roy**, O. Shahin, C. Sthultz, M. Duchemin, R. Joffre, et M. -A. Selosse. 2011. Ectomycorrhizal communities in a Mediterranean forest ecosystem dominated by *Quercus ilex*: seasonal dynamics and response to drought in the surface organic horizon. *Annals of Forest Science* 68 (1): 57-68.
9. Kohout, P., T. Těšitelová, **M. Roy**, M. Vohník, et J. Jersáková. 2013. A diverse fungal community associated with *Pseudorchis albida* (Orchidaceae) roots. *Fungal Ecology* 6 (1): 50-64.
10. **Roy M.**, C. Gonneau, A. Rocheteau, D. Berveiller, J.-C. Thomas, C. Damesin, et M.-A. Selosse. 2013. Why do mixotrophic plants stay green? A comparison between green and achlorophyllous orchid individuals in situ. *Ecological Monographs* 83 (1): 95-117.
11. **Roy M.**, J. Rochet, S. Manzi, P. Jargeat, H. Gryta, P. -A. Moreau, et M. Gardes. 2013. What determines *Alnus*-associated ectomycorrhizal community diversity and specificity? A comparison of host and habitat effects at a regional scale. *New Phytologist* 198 (4): 1228-38.
12. Těšitelová, T., J. Jersáková, **M. Roy**, B. Kubátová, J. Těšitel, T. Urfus, P. Trávníček, et J. Suda. 2013. Ploidy-specific symbiotic interactions: divergence of mycorrhizal fungi between cytotypes of the *Gymnadenia conopsea* group (Orchidaceae). *New Phytologist* 199 (4): 1022-33.
13. Gonneau, C., J. Jersáková, E. de Tredern, I. Till-Bottraud, K. Saarinen, M. Sauve, **M. Roy**, T. Hájek, et M. -A. Selosse. 2014. Photosynthesis in perennial mixotrophic *Epipactis* spp.(Orchidaceae) contributes more to shoot and fruit biomass than to hypogeous survival. *Journal of Ecology* 102 (5): 1183-94.



14. Henkel, T. W., A. W. Wilson, M. C. Aime, J. Dierks, J. K. Uehling, **M. Roy**, H. Schimann, F. Wartchow, et G. M. Mueller. 2014. Cantharellaceae of Guyana II: New species of *Craterellus*, new South American distribution records for *Cantharellus guyanensis* and *Craterellus excelsus*, and a key to the Neotropical taxa. *Mycologia* 106 (2): 307-24.
15. Gladieux, P., A. Feurtey, M. E. Hood, A. Snirc, J. Clavel, C. Dutech, **M. Roy**, et T. Giraud. 2015. The population biology of fungal invasions. *Molecular Ecology* 24 (9): 1969-86.
16. Buyck, B., P. -A. Moreau, R. Courtecuisse, A. Kong, **M. Roy**, et V. Hofstetter. 2016. *Cantharellus coccolobae* sp. nov. and *Cantharellus garnieri*, two tropical members of *Cantharellus* subg. *Cinnabarinus*. *Cryptogamie, Mycologie* 37(3): 391-404.
17. **Roy, M.**, H. Schimann, R. Braga-Neto, R. AE Da Silva, J. Duque, D. Frame, F. Wartchow, et M. A. Neves. 2016. Diversity and distribution of ectomycorrhizal fungi from Amazonian lowland white-sand forests in Brazil and French Guiana. *Biotropica* 48 (1): 90-100.
18. Shefferson, Ri. P., **M. Roy**, Ü. Püttsepp, et M. -A.Selosse. 2016. Demographic shifts related to mycoheterotrophy and their fitness impacts in two *Cephalanthera* species. *Ecology* 97 (6): 1452-62.
19. Barbosa-Silva, A., C. L. Ovrebo, B. Ortiz-Santana, M. CA Sá, M. A. Sulzbacher, **M. Roy**, et F. Wartchow. 2017. *Tylophilus aquarius*, comb. et stat. nov., and its new variety from Brazil. *Sydowia*. 69: 115-122.
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21. De Crop, E., J. Nuytinck, K. Van de Putte, K. Wisitrassameewong, J. Hackel, D. Stubbe, K. D. Hyde, **M. Roy**, R. E. Halling, et P.-A. Moreau. 2017. A multi-gene phylogeny of *Lactifluus* (Basidiomycota, Russulales) translated into a new infrageneric classification of the genus. *Persoonia: Molecular Phylogeny and Evolution of Fungi* 38: 58.
22. Gryta, H., C. Van de Paer, S. Manzi, H. Holota, **M. Roy**, et G. Besnard. 2017. Genome skimming and plastid microsatellite profiling of alder trees (*Alnus* spp., Betulaceae): phylogenetic and phylogeographical prospects. *Tree Genetics & Genomes* 13 (6): 118.
23. **Roy, M.**, A. C. Pozzi, R. Gareil, M. Nagati, S. Manzi, I. Nouioui, N. Sharikadze, P. Jargeat, H. Gryta, et P. -A. Moreau. 2017. Alder and the Golden Fleece: high diversity of Frankia and ectomycorrhizal fungi revealed from *Alnus glutinosa* subsp. *barbata* roots close to a Tertiary and glacial refugium. *PeerJ* 5: e3479.
24. **Roy, M.**, A. Vasco-Palacios, J. Geml, B. Buyck, L. Delgat, A. Giachini, T. Grebenc, E. Harrower, F. Kuhar, et A. Magnago. 2017. The (re) discovery of ectomycorrhizal symbioses in Neotropical ecosystems sketched in Florianópolis. *New Phytologist* 214 (3): 920-23.
25. Schwob, G., **M. Roy**, S. Manzi, T. Pommier, et M. P. Fernandez. 2017. Green alder (*Alnus viridis*) encroachment shapes microbial communities in subalpine soils and impacts its bacterial or fungal symbionts differently. *Environmental Microbiology* 19 (8): 3235-50.
26. Gruhn, G., S. Dumez, P. -A. Moreau, **M. Roy**, Or. Morreale, H. Schimann, et R. Courtecuisse. 2018. The genus *Resinicium* in French Guiana and the West Indies: a Morphological and Molecular Survey, Revealing *Resinicium grandisporum* sp. nov. *Cryptogamie, Mycologie*. 38(4) : 469-484.
27. Hoeksema, J. D., **M. Roy**, G. Łaska, A. Sienkiewicz, A. Horning, M. J. Abbott, C. Tran, et J. Mattox. 2018. *Pulsatilla patens* (Ranunculaceae), a perennial herb, is ectomycorrhizal in northeastern Poland and likely shares ectomycorrhizal fungi with *Pinus sylvestris*. *Acta Societatis Botanicorum Poloniae*. 2018. 87(1):3572.
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- acetabulum*: Three epiphytic lichens potentially active against *Candida* biofilms. *Microbiological Research* 211: 1-12.
29. Nagati, M., **M. Roy**, S. Manzi, F. Richard, A. Desrochers, M. Gardes, et Y. Bergeron. 2018. Impact of local forest composition on soil fungal communities in a mixed boreal forest. *Plant and Soil*, 432(1-2): 345-357.
  30. Pozzi, A. C., **M. Roy**, M. Nagati, G. Schwob, S. Manzi, M. Gardes, P. -A. Moreau, et M. P. Fernandez. 2018. Patterns of diversity, endemism and specialization in the root symbiont communities of alder species on the island of Corsica. *New Phytologist* 219(1): 336-349.
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  36. Vleminckx J., H. Schimann, J. Orivel, **M. Roy**, M. Fichaux, V. Vedel, T. Decaëns, M. Lapier, J. Engel, P. Petronelli, G. Jaouen, C. Baraloto. 2019. Coordinated beta-diversity across five taxonomic groups in Amazonian rainforests. *Scientific reports*. 9(1), 1-10
  37. Nagati M., **M. Roy**, A. DesRochers, S. Manzi, Y. Bergeron, M. Gardes. 2019. Facilitation of balsam fir by trembling aspen in a boreal forest : does soil fungal communities matters ? *Frontiers in plant science*. 10: 932.
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  39. Jaouen, G., Sagne, A., Buyck, B., Decock, C., Louisanna, E., Manzi, S., Baraloto, C., **Roy, M.** and Schimann, H., 2019. Fungi of French Guiana gathered in a taxonomic, environmental and molecular dataset. *Scientific data*, 6(1), pp.1-6.
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44. Nagati, M., **Roy, M.**, DesRochers, A., Bergeron, Y., & Gardes, M. (2020). Importance of Soil, Stand, and Mycorrhizal Fungi in Abies balsamea Establishment in the Boreal Forest. *Forests*, 11(8), 815.
45. Delgat, L., Courtecuisse, R., De Crop, E., Hampe, F., Hofmann, T. A., Manz, C., ... **Roy, M.** & Verbeken, A. (2020). Lactifluus (Russulaceae) diversity in Central America and the Caribbean: melting pot between realms. *Persoonia: Molecular Phylogeny and Evolution of Fungi*, 44, 278.
46. Mennicken, S., Kondratow, F., Buralli, F., Manzi, S., Andrieu, E., Roy, M., & Brin, A. (2020). Effects of past and present-day landscape structure on forest soil microorganisms. *Frontiers in Ecology and Evolution*, 8, 13p.
47. Schimann, H., Vleminckx, J., Baraloto, C., Engel, J., Jaouen, G., Louisanna, E., ... & **Roy, M.** (2020). Tree communities and soil properties influence fungal community assembly in neotropical forests. *Biotropica*, 52(3), 444-456.
48. Silva-Filho, A. G., Sa, M. C., Komura, D. L., Moncalvo, J. M., Margaritescu, S., **Roy, M.**, & Wartchow, F. (2020). Two novel species of Lactifluus subg. Pseudogymnocarpi (Russulaceae) from Brazil. *Phytotaxa*, 436(3), 222-236.
49. Donald, J., **Roy, M.**, Suescun, U., Iribar, A., Manzi, S., Péllissier, L., ... & Chave, J. (2020). A test of community assembly rules using foliar endophytes from a tropical forest canopy. *Journal of Ecology*, 108(4), 1605-1616.
50. Calderón-Sanou, I., Münkemüller, T., Zinger, L., Schimann, H., Yoccoz, N. G., Gielly, L., **M. Roy** ... & Thuiller, W. (2021). Cascading Effects of Moth Outbreaks on Subarctic Soil Food Webs.
51. Silva-Filho, A. G., Sá, M. C., Komura, D. L., Baseia, I. G., Marinho, P., Moncalvo, J. M., **M. Roy** & Wartchow, F. (2021). Novelty in Lactifluus subg. Gymnocarpi (Russulales, Basidiomycota) from Brazilian tropical forests. *Mycological Progress*, 20(4), 549-565.
52. Donald, J., Muriene, J., Chave, J., Iribar, A., Louisanna, E., Manzi, S., **M. Roy**... & Zinger, L. (2021). Multi-taxa environmental DNA inventories reveal distinct taxonomic and functional diversity in urban tropical forest fragments. *Global Ecology and Conservation*, e01724.
53. Cambon, M. C., Cartry, D., Chancerel, E., Ziegler, C., Levionnois, S., Coste, S., Stahl, C., Delzon, S., Buée, M., **M. Roy**, ... & Burban, B. (2022). Drought tolerance traits in Neotropical trees correlate with the composition of phyllosphere fungal communities. *Phytobiomes Journal*, ja.
54. Ghotsa Mekontchou, C., Houle, D., Bergeron, Y., **Roy, M.**, Gardes, M., Séguin, A., & Drobyshev, I. (2022). Contrasting structure of root mycorrhizal communities of black spruce and trembling aspen in different layers of the soil profile in the boreal mixedwoods of eastern Canada. *Plant and Soil*. <https://doi.org/10.1007/s11104-022-05410-8>
55. Hackel, J., Henkel, T. W., Moreau, P.-A., De Crop, E., Verbeken, A., Sà, M., Buyck, B., Neves, M.-A., Vasco-Palacios, A., & Wartchow, F., ... and **M. Roy** (2022). Biogeographic history of a large clade of ectomycorrhizal fungi, the Russulaceae, in the Neotropics and adjacent regions. *New Phytologist*.

### **Society journals**

1. Consiglio G, Contu M, **Roy M**, Selosse MA, Vizzini A. 2007. *Rhodocybe praesidentialis* spec. nov. Una nuova specie della sezione *Rhodocybe*. Addendum. *Rivista di Micologia dell'associazione micologica bresadola* 50: 175–178.
2. **Roy, M.** et M. -A. Selosse. 2010. De la graine à l'adulte, de l'individu à l'espèce: des orchidées plus hétérotrophes qu'il n'y paraît? *Cahier de la Société Française d'Orchidophilie* 8: 185-94.
3. Selosse M.-A. et **M. Roy**. 2012. Les plantes qui mangent des champignons. *Dossier Pour la science* 77.
4. **Roy, M** & Selosse. M. -A. La germination des orchidées, quoi de neuf ? *Revue de la Société Nationale d'Horticulture de France* 622.
5. Kohout, P., T. Malinová, **M. Roy**, M. Vohník, et J. Jersáková. 2013. Mycorrhizal and endophytic fungal communities associated with roots of *Pseudorchis albida* (Orchidaceae). *Lankesteriana International Journal on Orchidology* 13 (1-2): 142.
6. **Roy M**, Tomas W, Gareilh R, Claessens O, Tostain O, Leotard G, Sambin A, Ravet E. 2014. Diversité phylogénétique des orchidées de Guyane Française. *Cahier de la Société Française d'Orchidophilie* 8 : 99-118.
7. **Roy, M.** 2018. La mycohétérotrophie et le jardinier – un conte presque réaliste. *Revue de la Société Nationale d'Horticulture de France* 650.
8. **Roy M.**, V. Troispoux, E. Louisanna et H. Schimann. 2018. Diversité, distribution et écologie des champignons du mont Itoupé. *Les cahiers scientifiques du parc Amazonien de Guyane*, dossier spécial Itoupé 4(1) 59-64.

### **Book Chapters**

1. Hynson, N. A., T. P. Madsen, M. -A. Selosse, I. KU Adam, Y. Ogura-Tsujita, **M. Roy**, et Gerhard Gebauer. 2013. The physiological ecology of mycoheterotrophy. In *Mycoheterotrophy*, 297-342. Springer, New York, NY.
2. **Roy, M.** et Selosse, M. -A. 2015. les réseaux mycorrhiziens in *Analyse des réseaux sociaux appliquée à l'éthologie et l'écologie*. in Sueur et al., Editions matériologiques, Paris.
3. Gazal, N., Brin, A., Manzi, S., Houël, E., Lapied, E., Decaëns, T., & **Roy, M.** (2020). Earthworms and fungi in historical ecology. *Methods in Historical Ecology: Insights from Amazonia*, 99.
4. **Roy, M.**, & Caillon, S. (2022). Rendre visible le sensible par un engagement scientifique et artistique. In *Les esprits scientifiques*, Presses Universitaires de Grenoble, Jean Foyer ed.

### **Oral communications at congresses**

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1. F. Richard, M. Duchemin, **M. Roy**, M.-A. Selosse, 2009. Diversity of ectomycorrhizal fungi associated with *Quercus ilex*: temporal and spatial variability. Atelier de l'ESF sur l'écologie des communautés de champignons ectomycorhiziens, 6-8/12/09, Nancy, France (oral)
2. A. Franc, M. Duchemin, **M. Roy**, E. Legname, C. Plassard, 2009. ECM communities : traits or taxa assembly ? Atelier de l'ESF sur l'écologie des communautés de champignons ectomycorhiziens, 6-8/12/09, Nancy, France (oral)
3. **M. Roy**, J. Rochet, S. Manzi, P. Jargeat, H. Gryta, P. -A. Moreau and M. Gardes. Does host evolution shape alder-associated ectomycorrhizal fungi communities? 2011, Mycological Society of America, 3-8/08/2011, Fairbanks, Alaska, USA (oral).
4. **M. Roy**, J. Rochet, P. Jargeat, H. Gryta, S. Manzi, P.-A. Moreau, M. Gardes, 2012. Coévolution des aulnes et de leurs champignons mycorrhiziens : une histoire de couples et de communautés. 07-08/09/2012, congrès MycoFrance, Nancy, France (oral)

5. **M. Roy**, J. Rochet, P. Jargeat, H. Gryta, S. Manzi, P.-A. Moreau, M. Gardes, 2012. Coevolution in *Alnus*-ectomycorrhizal fungi mutualism : from couples to communities. International Society of Symbiosis, 02-08/08/2012, Kracow, Poland (oral).
6. **M. Roy**, M. Nagati, J. Hackel, C. Collongeon, R. Gareilh, L. Graf, S. Manzi, H. Gryta, P. Jargeat, A. Herrera, A. Pozzi, P.-A. Moreau, M. Fernandez, M. Gardes, 2013. Biogéographie d'un mutualisme : les aulnes et leurs champignons ectomycorhiziens. Congrès du REID, 26/09/2013, Paris, France. (oral)
7. **M. Roy**, 2013. Diversity and discovery of Ascomycota and endophytes in French Guiana, Rencontres d'étude des Ascomycota, 01-08/06/2013, Somiedo, Espagne (oral).
8. M. Nagati, W. Thomas, R. Gareilh, O. Claessbesn G. Leotard, A. Sambin, O. Tostain, E. Ravet **M. Roy**, 2014. Diversité phylogénétique des orchidées de Guyane Française. Congrès de la Société Française d'Orchidophilie, 16/04/2014, Blois, France (oral présenté par M. Nagati).
9. **M. Roy**, H. Schimann, R. Braga-Neto, L. Fernandez, J. Hackel, S. Manzi, R. Angelica Elias Da Silva, J. Duque, D. Frame, C. Decock, M. A. Neves. Diversity, distribution and specificity of ectomycorrhizal fungi in the Amazonian lowlands. International Conference on Mycorrhiza, 3-8/08/2015, Flagstaff, Arizona, USA (oral).
10. **M. Roy**, H. Schimann, S. Manzi, A. Sagne, G. Gruhn, C. Lechat, J. Fournier, H. Voiry, S. Welti, C. Decock, P.-A. Moreau, T. Henkel, R. Courtecuisse. 2015. FLAG : Fungi of the Lesser Antillas and French Guiana. Congrès Bibliothèque du Vivant, 24/06/2015, Paris, France (oral)
11. **M. Roy**, H. Schimann, R. Braga-Neto, L. Fernandez, J. Hackel, S. Manzi, R. Angelica Elias Da Silva, J. Duque, D. Frame, C. Decock, M. A. Neves. 2016. Diversity and host-specificity of ectomycorrhizal fungi from inselbergs of French Guiana. VIIIe Congress of Brazilian Mycology. 3-6/10/2016, Florianopolis, Brazil (oral).
12. **M. Roy**, H. Schimann, R. Braga-Neto, L. Fernandez, J. Hackel, S. Manzi, R. Angelica Elias Da Silva, J. Duque, D. Frame, C. Decock, M. A. Neves. 2016. High diversity and high specificity of ectomycorrhizal fungi communities associated with trees from low canopy forests in French Guiana. Association for Tropical Biology and Conservation. 17-21/06/2016, Montpellier, France (oral).
13. **M. Roy**, H. Schimann, R. Braga-Neto, L. Fernandez, J. Hackel, S. Manzi, R. Angelica Elias Da Silva, J. Duque, D. Frame, C. Decock, M. A. Neves. 2016. Diversité et distribution des champignons ectomycorhiziens au Brésil et en Guyane. Journée Jean Chevaugeon, 23-27/01/2016, Aussois, France (oral).
14. Nagati M., S. Manzi, P.-A. Moreau, M. Gardes, **M. Roy**. 2016. Les champignons des aulnes corses sont-ils endémiques ? Journée Jean Chevaugeon, 23-27/01/2016, Aussois, France (oral).
15. **M. Roy** & S. Caillon. 2017. De la scientificité à la une gestion créative multidimensionnelle : échanges de savoirs autours des plantes rencontrées dans le vignoble gaillacois. Colloque d'Anthropologie, University of Lausanne, Switzerland. 13/12/2017 (oral, invited)
16. S. Mennicken, F. Kondratow, **M. Roy**, E. Andrieu, A. Brin. 2017. Influence de la quantité de forêt ancienne dans le paysage sur la diversité et la composition des communautés de champignons. Rencontres d'écologie du Paysage. 23-26/10/2017, Toulouse, France (oral)
17. Nagati M., **M. Roy**, S. Manzi, A. DesrRochers, Y. Bergeron, M. Gardes. Effect of canopy cover and micro-organisms on the establishment of balsam fir in the boreal forest. North European Forest Mycologist Congress, Uppsala, 09/02/2018
18. **M. Roy**, A. Taudière, P. -A. Moreau, F. Richard, J. D. Hoeksema, M. Gardes. 2018. En quoi les changements d'échelles et de mesures peuvent-ils éclairer la spécialisation de

- l'association aulnes-champignons ectomycorhiziens ? Journées Francophones des mycorhizes, 27-29/06/18. Dunkerque, France (oral)
19. **M. Roy**, A. Taudière, P. -A. Moreau, F. Richard, J. D. Hoeksema, M. Gardes. To network or not ? Variations in host-ECM fungi interactions. 2018. Symposium on ecology of mycorrhiza, Leiden, Netherlands, 29/10/18 (oral, invited)
  20. Nagati M., **M. Roy**, S. Manzi, A. DesrRochers, Y. Bergeron, M. Gardes. Effets des micro-organismes sur l'établissement du sapin en forêt boréale. Colloque de la chaire en aménagement forestier durable, Lorrainville, Canada, 30/11/2018.
  21. Nagati M., **M. Roy**, S. Manzi, A. DesrRochers, Y. Bergeron, M. Gardes. Les mycorhizes sont-elles impliquées dans l'établissement du sapin en pessière à mousse ? Colloque du centre d'étude sur la forêt, Chicoutimi, Canada, 01-02/05/2019.

### Invited conferences

1. **M. Roy**, Schimann H., Sagne A., Moreau P.-A., Welti S., Lechat C., Fournier J., Gruhn G., Manzi S., Luisana E., Pelozuelo A., Decock C., Henkel T., Courtecuisse R., Gardes M. 2014. Conférence invitée à la Mycothèque de l'Université Catholique de Louvain. 09/10/2014 (oral, invited).
2. **M. Roy** et al. 2015. Ecology and evolution of ectomycorrhizal fungi in the Amazonian lowlands, or how to search for networks in hyper-diverse primary forests. Invited conference at Institute of Applied Sciences, Toulouse, France, 19/09/2015 (oral, invited).
3. **M. Roy** et al. 2015. L'Amazonie, un bon coin à champignons ? Conférence invitée, FRAIB, Toulouse, France. 04/06/15 (oral, invited)
4. **M. Roy**. 2015. Phylogéographie d'un mutualisme : les aulnes et leurs champignons ectomycorhiziens. Invited conference at INRA, Pierroton, 5/03/2015 (oral).
5. **M. Roy**, et al. Des réseaux...partout ? Distribution et écologie des réseaux mycorhiziens. Invited conference at UQAT, Rouyn Noranda, Québec, Canada, 30/08/16 (oral).
6. **M. Roy**, et al. Diversity and distribution of alder and its symbionts: impact of recent migration and climate changes. Invited conference at University of Bialystok, Poland, 13/07/2016 (oral).
7. **M. Roy** et al. From biogeography to ecology of ectomycorrhizal symbioses in the Neotropics, invited conference at Université Lille 1, 14/06/2016 (oral).
8. **M. Roy**. 2017. Metabarcoding specimens, roots and soil to search for ectomycorrhizal fungi in the Neotropics. Invited conference at Viçosa University, Brazil, 22/02/17 (oral)
9. **M. Roy** & H. Schimann. 2018. Diversity and distribution of ectomycorrhizal symbioses in French Guiana and in the Neotropics from the field to the course. Conference at Naturalis institute, Leiden, Netherlands, 16/04/18 (oral, invited)
10. **M. Roy**. 2018. What interaction networks tell us about plant, and fungi ecology. Invited conference at Agronomy Faculty, Buenos Aires, Argentina, 21/12/18 (oral)
11. **M. Roy**. 2018. To network or not ? Distribution and ecology of ecological networks between plant and fungi in the neotropical forests. Invited conference at Ecology Department of Buenos Aires University, Argentina, 18/12/18 (oral)
12. **M. Roy**. 2019. Biogeography of ectomycorrhizal symbioses in the neotropics. Invited conference at Cordoba University, Argentina, 08/02/19 (oral)
13. **M. Roy**. 2019. Are mycorrhizal networks the rule ? digging into ectomycorrhizal fungi ecology in the neotropics. Invited conference Mendoza University, Argentina, 04/02/19 (oral)
14. **M. Roy**, 2019. To network or not ? Distribution and ecology of ecological networks between plant and fungi from the boreal to the neotropical forests. Invited conference at IRBV, Montréal, Canada, 19/06/19 (oral)

15. **M. Roy** et al. 2020. Migration and facilitation of balsam fir in boreal forests, International Research Network on Cold Forests, 2-4/11/2020, online.
16. **M. Roy** et A. Brin, 2020. Les interactions champignons-arbres face aux changements globaux : rôle des symbioses mycorhiziennes et intégration aux réponses des forêts. Carrefour Forêts et Changement Climatique, 19-21 novembre 2020, Foix.
17. **M. Roy**, 2020. Le paysage viticole : un terrain pédagogique pour étudier l'écologie du sol. Conférence invitée par le groupe Vinseo, online, 26/11/2020.
18. **M. Roy** et al. 2020. From soil to satellites : clues and responses of ectomycorrhizal fungi to landscape and climatic gradients in French Guiana. South American Mycological Congress, online, 14-16/12/2020.
19. **M. Roy** et al., 2021. ANR "Biogéographie globale des réseaux écologiques des forêts du monde ». Symposium ANR Bois et Société, 26/03/2021, online.
20. **M. Roy** and S. Caillon, 2021. le dessin comme compagnon d'une approche bioculturelle ; exemple du portrait de la flore des vignes et des pratiques chez les vignerons de Gaillac. Humanités environnementales, 4-5/10/2021, Montpellier.
21. **M. Roy** et al., 2022. From mycorrhizae to the landscape: what soil diversity teaches us about plant-fungi interactions in forests, and the long-term? Key-note talk at ABC conference, Rouyn-Noranda, 05-09/06/22.

### Posters

1. **M. Roy**, 2013. What can we learn from albino individuals in orchids? Symposium du New Phytologist, 14-16/05/2013, University of Calabria, Italy (poster).
2. **M. Roy**, J. Hackel, S. Manzi, E. Louisanna, A. Iribar-Pelozuelo, A. Buffard, D. Frame, M. Gardes T. Henkel, C. Decock, P.-A. Moreau, R. Courtecuisse, H. Schimann. 2014. Are Ectomycorrhizal fungi so rare in the Neotropics? Diversity of ectomycorrhizal symbioses in French Guiana. Symposium du New Phytologist, 19-21/05/2014, Zurich, Switzerland (poster).
3. J. Hackel, P.-A. Moreau, R. Courtecuisse, B. Buyck, T. Henkel, S. L. Miller, E. de Crop, A. Verbeken, M.A. Neves, M. C. W. Jaeger, J. Duque, F. Wartchow, M. Sà, J.-L. Cheype, E. Louisanna, H. Schimann, S. Garnica, G. M. Mueller, V. Hofstetter, S. Manzi, M. Gardes, **M. Roy** . 2014. Origins and diversification of neotropical taxa in a cosmopolitan lineage of ectomycorrhizal fungi (Basidiomycota: Russulaceae). International Mycology Conference, 3-8/08/2014, Bangkok, Thailand (poster présenté par J. Hackel).
4. Nagati M. M. Roy, S. Manzi, Y. Bergeron, M. Gardes. Communautés fongiques en forêt boréale : ce que le metabarcoding nous révèle. Colloque de Centre d'Etude sur la Forêt, Montréal, 01-02/05/2017.

### Conference for societies

1. **M. Roy**, 2012. Les orchidées des racines truffées de champignons en tout genre. 15<sup>e</sup> Congrès « Alliances au pays des racines 2012 » de la Société Nationale d'Horticulture de France, 25/05/2012, Paris, France (oral)
2. **M. Roy** and H. Schimann, 2014. Café des sciences dédié aux champignons de Guyane. Organisé à Kourou par l'association Canopée des Sciences.
3. **M. Roy**, 2015. Les orchidées mangeuses de champignons. Muséum d'histoire naturelle de Gaillac.
4. **M. Roy**, 2016. Des champignons voyageurs. Muséum d'histoire naturelle de Gaillac.
5. **M. Roy**. 2017. Les fromages sous la coupe des mycologues. Conférence-dégustation organisée par l' Association Mycologique Toulousaine.

6. **M. Roy.** 2018. Mixotrophy, or how to mix? Annual meeting of the mycological society of the Netherlands, Utrecht, Netherlands, 14/04/18 (oral, invited)

### **Other communications**

- Punctual invitations on radio program “los matices del vino”, local radio in Mendoza

### **Other skills**

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#### **Oenology**

- Responsible of wine tasting club at ENS Lyon (2001), UPS (2017-2021)
- Vermouth production with Matias Riccitelli, Argentina

#### **Drawing**

Since 2015, I run an auto-entreprise related to my scientific and watercolor drawings, linked notably to my field of expertise, with projects such as

- Illustrations for the reserves of Ile d’Oléron, bureau d’étude Biotope, 2015
- Report for the Office National des Forêts, 2017, water colors of the Mont Itoupé
- Water colors for Domaine des Canailles, 2020-2022
- Water colors for Presses Universitaires de Grenoble, see Roy and Caillon, 2022
- Water colors for articles of DYNAFOR lab, see :

Since 2019, I am a recognized *artiste-auteure* from France, contributing to some artistic-scientific events such as

- Animation for the Festival Ciné Feuilles, Gaillac, France, 2017-18
- The opening of Expoésie, Périgueux, France, 2019
- Conference for the COAL network, Fleurance, France, 2019
- The *Festival du bout du Monde*, Ushuaia, Argentina, 2019
- Exhibitions at Alliance Française, Mendoza, Argentina, 2019, 2022

#### **Exhibitions**

- Les petits formats, Galerie Quincampoix, Paris, France, 2010
- De Terre et d’eau, correspondances avec Emeline Houël, Centre Pagaré, Cayenne, Guyane, 2017.
- Portraits vigneron, Mairie de Gaillac, Gaillac, 2015
- Portraits de la flore des vignes, Domaine de Matens, Gaillac, 2016
- Dessi’nez, Expoésie, Périgueux, 2019
- Cépages franco-argents, Mendoza, Argentine, 2019
- 1000 palabras en un dibujo, Mendoza, Argentine, 2022

#### **Publication**

Mélanie Roy et François Hersen, *Le champ des vélivoles, une biosphère préservée sur les pentes de la Montagne noire*. edition les Agados, 2018.

#### **Website (drawing and field essentially)**

<https://www.instagram.com/melanieroydieutre/>