

Marion Desquilbet
Curriculum Vitae, June 2023

Marion DESQUILBET

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Current position

Research Fellow (Chargée de recherche hors classe), Institut national de recherche pour l'agriculture, l'alimentation et l'environnement, Toulouse School of Economics.

Current main area of research

Natural resource and environmental economics, microeconomics and agricultural economics, applied to analyse the regulation and impacts of different farming methods: methods and costs of acquiring knowledge on the effects of pesticides on health and the environment and regulatory procedures for market authorisation.

Experience

2020-now – Chargée de recherche hors classe INRAE, Toulouse School of Economics

2007-2020 – Chargée de recherche INRA, Toulouse School of Economics

2004-2007 – Chargée de recherche INRA, Toulouse

2002-2004 – Chargée de recherche INRA, Grenoble

1998-2002 – Chargée de recherche INRA, Rennes

1993-1998 – Attachée Scientifique Contractuelle INRA, Rennes

5 year parental leave from 2004 to 2013.

Academic background

2020 – Habilitation à Diriger des recherches, Université Toulouse 1 Capitole

2000 – Post-Doctoral stay, University of Illinois at Urbana Champaign, 6 months

1998 – PhD in international economics, University Paris IX Dauphine. Mention très honorable avec félicitations du jury à l'unanimité.

1995 – Statistician Economist. Ecole Nationale de la Statistique et de l'Administration Economique (ENSAE).

1993 – Ingénieur Agronome. Ecole Nationale Supérieure d'Agronomie de Montpellier.

Publications in peer-reviewed journals

- Fardet, A., Desquilbet, M., & Rock, E. (2022). The compliance of French purchasing behaviors with a healthy and sustainable diet: A 1-yr follow-up of regular customers in hypermarkets. *Renewable Agriculture and Food Systems*, 37(1), 49-59. doi: 10.1017/S1742170521000296.
- Desquilbet M., Cornillon P.A., Gaume L., Bonmatin J.M. (2021). Adequate statistical modelling and data selection are essential when analysing abundance and diversity trends, Matters Arising, arising from M. S. Crossley et al. <https://doi.org/10.1038/s41559-020-1269-4> (2020). *Nature Ecology & Evolution*, doi:10.1038/s41559-021-01427-x.
- Desquilbet M., Gaume L., Grippa M., Céréghino R., Humbert J.F., Bonmatin J.M., Cornillon P.A., Maes F., Van Dyck H., Goulson D. (2020). Comment on “Meta-analysis reveals declines in terrestrial but increases in freshwater insect abundances”, *Science*, doi:10.1126/science.abd8947.
- Loconto A., Desquilbet M., Moreau T., Couvet D., Dorin B. (2020). The Land sparing – Land sharing controversy: tracing the politics of knowledge. *Land Use Policy*, 96, 103610. doi: 10.1016/j.landusepol.2018.09.014.
- Desquilbet M., Bullock D.S., D’Arcangelo F.M. (2019). A discussion of the market and policy failures associated with the adoption of herbicide-tolerant crops. *International Journal of Agricultural Sustainability*, 17, 326-337. doi:10.1080/14735903.2019.1655191
- Desquilbet M., Maigné E., Monier-Dilhan S. (2018). Organic food retailing and the conventionalisation debate. *Ecological Economics*, 150, 194-203. doi: 10.1016/j.ecolecon.2018.04.025.
- Skandrani Z., Desquilbet M., Prévot A.C. (2018). A renewed framework for urban biodiversity governance: urban pigeons as a case-study. *Natures Sciences Sociétés*, 26, 280-290. doi:10.1051/nss/2018051
- Desquilbet M., Dorin B., Couvet D. (2017). Land sharing vs. land sparing for biodiversity: How agricultural markets make the difference. *Environmental Modeling & Assessment*, 22, 188-200. doi:10.1007/s10666-016-9531-5.
- Desquilbet M., Herrmann M. (2016). The dynamics of pest resistance management: the case of refuge fields for *Bt* crops. *Canadian Journal of Agricultural Economics*, 64, 253-288. doi :10.1111/cjag.12071.
- Desquilbet M., Monier-Dilhan S. (2015). Are geographical indications a worthy quality label? A framework on Protected Designation of Origin with endogenous quality choice. *European Review of Agricultural Economics*, 42, 129-150. doi:10.1093/erae/jbu008.
- Desquilbet M., Poret S. (2014). How do GM/non GM coexistence regulations affect markets and welfare? *European Journal of Law and Economics*, 37, 51-82. doi: 10.1007/s10657-013-9416-x.
- Ambec S., Desquilbet M. (2012). Regulation of a spatial externality: refuges *versus* tax for managing pest resistance. *Environmental and Resource Economics*, 51, 79-104. doi:10.1007/s10640-011-9489-3.
- Desquilbet M., Bullock D.S. (2010). On the proportionality of EU spatial *ex ante* coexistence regulations: a comment. *Food Policy*, 35, 87-90. doi:10.1016/j.foodpol.2009.08.004.

- Desquilbet M., Bullock D.S. (2009). Who pays the costs of non-GMO segregation and identity preservation? *American Journal of Agricultural Economics*, 91, 656-672. doi:10.1111/j.1467-8276.2009.01262.x.
- Desquilbet M., Lemarié S. (2008). Compte-rendu de lecture : Marie-Monique Robin, Le monde selon Monsanto. *Revue d'Études en Agriculture et Environnement / Review of Agricultural and Environmental Studies*, 86, 99-103.
- Vacher C., Bourguet D., Desquilbet M., Lemarié S., Ambec S., Hochberg M.E. (2006). Fees or refuges: which is better for the sustainable management of insect resistance to transgenic *Bt* corn? *Biology Letters*, 2, 198-202. doi:10.1098/rsbl.2005.0418.
- Bourguet D., Desquilbet M., Lemarié S. (2004). Regulating insect resistance management: the case of non-*Bt* corn refuges in the US. *Journal of Environmental Management*, 76, 210-220. doi:10.1016/j.jenvman.2005.01.019.
- Bullock D.S., Desquilbet M. (2002). The economics of non-GMO segregation and identity preservation. *Food Policy*, 27, 81-99. doi:10.1016/S0306-9192(02)00004-0.
- Desquilbet M., Guyomard H. (2002). Taxes and subsidies in vertically related markets. *American Journal of Agricultural Economics*, 84, 1033-1041. doi:10.1111/1467-8276.00051.
- Desquilbet M., Gohin A., Guyomard H. (1999). La nouvelle réforme de la politique agricole commune : une perspective internationale. *Economie et statistique*, n°329-330, 13-33.
- Desquilbet M., Guyomard H. (1998). Agricultural export subsidies and intermediate goods trade: comment. *American Journal of Agricultural Economics*, 80, 422-425. doi:10.2307/1244514.

Expertise

- 2020-2022: Member of the scientific committee of the national food, environmental and occupational health safety agency (Anses, French Agency for Food, Environmental and Occupational Health & Safety).
- 2021-2022: Member of the Anses group for the scientific and technical support report on farm uses of copper.
- 2019: Member of the Anses group for the scientific and technical support report “Socio-economic analysis: assessment and prospects for Anses”.
- 2018: Member of the Committee of the French High Council for Public Health proposing result indicators of the draft National Strategy on Endocrine Disruptors 2.
- 2018: Participation in the working groups led by the Ministry for the Ecological and Inclusive Transition for the elaboration of a new national strategy on endocrine disruptors.
- 2017-2018: Member of the Anses group for the scientific and technical support report on the farm impact of neonicotinoid insecticides in France, Anses.
- 2013–2015: Member of a working group on socio-economic evaluation of genetically modified crops, French High Council on Biotechnologies.
- 2011–2014: member of the Scientific Committee of the French High Council on Biotechnologies.

Scientific animation

- 2015–: Secretary of TSE group “Environmental Economics and Natural Resources”
- 2019-2021: Member of the scientific animation group of the INRAE international priority programme “agro-ecology, biocontrol and reduction of pesticides”.
- 2018: Participation in the working group set up by INRA to propose scientific themes for the Priority Research Programme “*Growing and protecting differently*”.
- 2013-2017: Book review editor, *Review of Agricultural, Food and Environmental Studies* (RAFE)
- Member of the scientific committee of the 134th EAAE Seminar “Labels on sustainability: an issue for consumers, producers, policy makers, and NGOs”, March 21-22, 2013, Paris
- Co-organizer of INRA-IDEI workshop “Geographical indications and collective brands: firm strategies and public policies”, Toulouse, June 14-15, 2007
- Member of the organization committee of the second international conference on coexistence between GM and non-GM based agricultural supply chains (INRA / European Commission Joint Research Center), November 14-15, 2005, Montpellier
- Reviewer for *American Journal of Agricultural Economics*, *Journal of Environmental Economics and Management*, *European Review of Agricultural Economics*, *Environmental and Resource Economics*, *Resource and Energy Economics*, *European Journal of Law and Economics*, *Biological Conservation*, *Ecological Applications*, *Food Policy*, *Environmental Science and Policy*, *Agricultural Economics*, *Journal of Agricultural and Food Industrial Organization*, *Economie Rurale*, *Revue Economique*, *Cahiers Agriculture*, *Preventive Medicine Reports*, *Environment Development and Sustainability*, *AIMS Agriculture and Food*, *Ecological Solutions and Evidence*.

Activities for socio-economic partners of INRA

- 2017-2022: member of the National Committee on Organic Farming of the French National Institute for Origin and Quality (INAO).
- 2019: Member of the Scientific Council of the French Organic Food and Farming Institute (ITAB).
- 2015-2016: Member of the expert panel of the French platform for organic research (FROG – French Research Organic Group).

Teaching

- 2020–: management of the Ecology & Economics track of TSE Master 2 Environmental Economics and Policy.
- Master 2 Environmental and Natural Resource Economics, Environmental Policies, 4.5 hours in 2017, 3 hours in 2018, 9 hours in 2019, organisation of a 15-hour module since 2020.
- Course on the socio-economic impacts of genetically modified plant crops, Master 2 students, AgroCampus West, France, 2 hours, and University of Illinois at Urbana Champaign, 2 hours, 2015.

- Course on the impact of GMOs. Institut Supérieur Agricole de Beauvais, 4 hours, 2002.
- International trade course. Ecole Supérieure d'Ingénieurs et de Techniciens pour l'Agriculture (ESITPA), Rouen, 5th year, 17 hours per year, 2000 and 2002.
- Tutorials in econometrics. Ecole Nationale de la Statistique et de l'Analyse de l'Information (ENSAI), Rennes, 6 hours, 2001.
- Econometrics course. Master 2 in Finance, Institut de Gestion de Rennes, 16 hours, 2000.
- Tutorials in econometrics. Master 2 econometrics, University of Rennes I, 30 hours per year, 1998 and 1999.

Supervision of fixed-term contracts and internships

(Co)-supervision of a 13-month and a 3-month fixed-term contract, 9 master-2 internships, 5 master-1 internships, 5 bachelor-3 internships

Participation to research programs

- 2021 – 2023 : Fondation pour la Recherche Médicale, EcoHealth SDHI project. *EcoHealth approach for the evaluation of SDHI fungicide use: exposome and hazards for human health.*
- 2021 – 2023 : ANR, projet SoEcoHealth. *EcoHealth approach for the evaluation of SDHI fungicide use: exposome and hazards for biodiversity and human health.* Workpackage leader.
- 2020 – 2022 : SOHO, projet Ecophyto Agence Française de la Biodiversité. *Impact of the use of SDHI fungicides: agro-socio-economic, epidemiological and toxicological evaluation (SDHI ecOHealth).* Workpackage leader.
- 2015 – 2020: ANR, IDAE project. *Institutionnalisation of agroecologies.*
- 2016 – 2018: INRA SMaCH metaprogramme, AVATAR project. *Analyse économique et agronomique des effets de verrouillage dans l'adoption de cultures tolérantes aux herbicides : les cultures résistantes au glyphosate aux Etats-Unis et les variétés tolérantes non OGM en France.*
- 2015 – 2016: INRA GloFoodS metaprogramme, GOSAMO project. *Gouverner par les modèles : Les modèles d'usage des sols comme instruments de gouvernement de la sécurité alimentaire (Gouverner la sécurité alimentaire par les modèles).*
- 2012 – 2016: ANR, OCAD project. *Offrir et consommer une alimentation durable.*
- 2009: European project Co-Extra. *GM and non-GM supply chains: their CO-EXistence and TRAceability.* Project 007158, Integrated project, Sixth Framework Programme, Priority 5 (Food Quality and Safety), 2005-2009.
- 2007 – 2010: ANR project GCOM2AP (GMO program). *Apports de la modélisation dans une approche pluridisciplinaire pour gérer la coexistence de filières OGM et non OGM chez le maïs.*
- 2005 – 2009: Programme Fédérateur INRA, Agriculture et Développement Durable. *Exploitation durable de résistances aux maladies chez les végétaux.* Workpackage leader.

- 2002 – 2005: Action Transversale INRA, impact et gestion des innovations variétales. *Gestion durable des résistances du colza oléagineux à deux maladies (Phoma et Hernie)*.
- 2001 – 2004: Programme du ministère de la recherche, impact des OGM. *Gestion de la résistance des insectes phytophages aux plantes génétiquement modifiées*.
- 2001 – 2004: Programme du ministère de la recherche, impact des OGM. *Plantes transgéniques : une analyse en termes d'économie du bien-être*.
- 2000: Action Incitative Programmée INRA, Négociations internationales. *Commerce international et plantes transgéniques : une analyse de bien-être*. With David S. Bullock.

Book chapter

Desquilbet M., Poret S. (2013). Labelling GM or non-GM products, regulating coexistence of GMOs and non-GMOs: an economic perspective. In: GM and non-GM supply chains: coexistence and traceability, Y. Bertheau (ed.), Wiley-Blackwell, Oxford (UK), pp. 193-214.

Other publications

Poméon T., Desquilbet M., Monier-Dilhan S. (2015). Entre standards privés et normes publiques, la diversité des agricultures biologiques. *POUR, revue du GREP*, n°227, Novembre, 89-96.

Desquilbet M., Dorin B., Couvet D. (2013). Land sharing ou land sparing pour la biodiversité : Comment les marchés agricoles font la différence. *Innovations Agronomiques* 32, 377-389.

Cresson Céline (ITAB) from Desquilbet, Dorin B., Couvet D. (2013). AB et Biodiversité : Intensive ou extensive : quelle agriculture pour favoriser la biodiversité ? *Alter Agri* n°122 pp. 15-16.

Ambec S., Desquilbet M. (2011). Réguler pour contrôler le développement de la résistance aux pesticides: La durabilité de la sensibilité des bioagresseurs aux pesticides et aux variétés résistantes.

INRA Sciences Sociales 2-3.

Bourguet D., Desquilbet M., Lemarié S. (2003). Le dispositif des zones refuges liées au maïs *Bt* aux Etats-Unis : ce qu'il peut apprendre aux Européens. *Courrier de l'Environnement de l'INRA*, n° 48.

Bullock D.S., Desquilbet M., Nitsi E.I (2001). The Economics of Non-GMO Segregation. *Feed & Grain* 40 (January), pp. 16-22.

Expert reports and reports in collaboration with socio-economic partners

Joly, P.B., Dargemont, C., Béhar, F., Bonmatin, J.M., Desquilbet, M., Ducrot, C., Kaufmann, A., Lagrange, E. (2022). The credibility of scientific expertise: issues and recommendations. Report of the Anses Scientific Advisory Board Working Group, Maisons-Alfort: Anses, 134 p. [in French]

Anses, 2022. Cartographie des utilisations des produits phytopharmaceutiques à base de cuivre en France en considérant leur application en agriculture biologique et conventionnelle. Saisine n° 2021-AUTO-0060, Rapport d'appui scientifique et technique. Maisons-Alfort : Anses, 133 p. Rapporteurs : Ballot R. Delière L., Desquilbet M.

Haut Conseil de la Santé Publique. 2018. Critical analysis of the draft National Strategy on Endocrine Disruptors 2 (SNPE2) and proposal of result indicators, 148 p. Member of the HCSP Committee for result indicators.

Anses. 2018. Risques et bénéfices relatifs des alternatives aux produits phytopharmaceutiques comportant des néonicotinoïdes Tome 3 – Rapport d'appui scientifique et technique sur l'impact agricole. Avis et rapport de l'Anses. Maisons-Alfort, 148 p. Rapporteurs : Ballot R., Desquilbet M., Garnon P., Reboud X.

Le Pichon V., Tchamitchian M., Bellon S., Bertrand C., Betencourt E., Billen G., Desquilbet M., Faiq C., Ferment G., Fouilleux E., Lairon D., Pointereau P., Prache S., Rey F., Sautereau N., Taupier-Letage B. (2017). Programme cadre français pour la recherche et l'innovation en Agriculture Biologique, Plateforme française pour la recherche bio (FROG), ITAB.

Desquilbet M., Baret P., Butault J.-P., Chauvel B. (2015). Proposition d'un cadre méthodologique pour l'évaluation socio-économique des plantes génétiquement modifiées. Rapport pour le Haut Conseil des Biotechnologies, Juillet.

Research reports

Milanesi J., Desquilbet M., Luch E., Rocha dos Santos R. (2009). Current and future availability of non-genetically modified soybean seeds in the U.S., Brazil and Argentina. Deliverable D3.11, Task T3.7, CO-EXTRA "GM and non-GM supply chains: their CO-EXistence and TRAceability", Project 007158, Integrated project, Sixth Framework Programme, Priority 5 (Food Quality and Safety), 103 p.

Colinet P., Desquilbet M., Hassan D., Monier-Dilhan S., Orozco V., Réquillart V. (2006). Case study: Comté cheese in France. In: Economics of food quality assurance and certification schemes managed within an integrated supply chain, European Techno-Economic Policy Support Network, Final Report, 12/12/06, European Commission JRC IPTS Seville, 91 p.

Desquilbet M., Diemer A., Marette S., Levert F., Carrère M., Bullock D.S. (collab.), Les répartitions possibles entre les acteurs de la filière agro-alimentaire des gains éventuels tirés des plantes transgéniques en France, Etude financée par le Commissariat Général du Plan.

Butault J.P., Desquilbet M., Gohin A., Gorin O., Guyomard H., Le Mouël C. (1998). *Eléments d'analyse de la proposition "agenda 2000" de réforme de la politique agricole commune*. Note n°3 pour le directeur du cabinet du ministère de l'agriculture et de la pêche, 28 p. (+ annexes, 50 p.).

Invited talks

- 2017. *Modes de production agricole et impacts en termes de durabilité : enjeux méthodologiques*. Séminaire CGDD-TSE, Commissariat Général au Développement Durable, Ministère de l'Ecologie, du Développement Durable et de l'Energie, Paris La Défense.
- 2015. *EU organic food and crop standards*. Department of Agricultural and Consumer Economics Policy Talk, University of Illinois at Urbana Champaign, Champaign, USA (March 12).

- 2012. *What place for economics in the socio-economic evaluation of genetically modified plants?* 6th Meeting of European Advisory Committees on Biosafety (MEACB), Paris (December 13-14).
- 2012. *Pest resistance management: an economic perspective.* Plant Resistance Sustainability 2012 International Conference, La Colle sur Loup, FRA (October 16-19).

Talks for the general public

- Participation in a round table "Organic food, at what price?", Foire biô Garonne, association Erables 31, Toulouse, 13 October 2017.
- Desquilbet M. (2009). Do we really need GMOs to feed the world? Talk during the Marciac controversies (15th Summer University of Rural Innovation, Marciac), 5-7 August 2009. http://www.agrobiosciences.org/?page=imprime&id_article=2778.
- Desquilbet M. (2008). GMOs: an economic science perspective. Talk during the meeting "GMO: inform, debate to decide" organized by Cap 3B (syndicat mixte de développement du bassin de Bourg-en-Bresse) and the Agrobiosciences mission, 11 December 2008. Summary: <http://www.cap3b.fr/developpement-durable/actes-cap3b.pdf>.

Newspaper articles and interviews

Prétendre éviter des crises alimentaires en Afrique et au Moyen-Orient en relançant la production agricole européenne serait une erreur. Le Monde, March 31, 2022. Opinion column with a collective of 805 researchers

Climat et biodiversité : « Les petits pas de la politique agricole commune ne suffisent plus ». Le Monde, 3 mai 2021. Opinion column with a collective of 714 researchers

La recherche publique doit se mobiliser pour se prémunir de l'instrumentalisation du doute scientifique. Le Monde, 16 mars 2021. Opinion column with a collective of 26 researchers

Vive controverse autour du déclin des insectes. Interview in le Monde (January 20, 2021)

Déclin des populations d'insectes : « Publier à tort des études rassurantes peut démobiliser ». Interview in Libération (December 21, 2020)

Sur l'impact des pesticides, la recherche scientifique doit éclairer la décision publique. Le Monde (May 17, 2019). Opinion column with a collective of 257 researchers

Acheter des produits bio coûte-t-il vraiment plus cher ? Interview in la Dépêche du Midi (October 14, 2017)

Les coûts cachés exorbitants des pesticides. Interview in le Monde (March 16, 2016)

Radio

France Culture, de cause à effets, le magazine de l'environnement. Mais à quoi servent les agences sanitaires ? 11 avril 2023.