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*Senior researcher*  
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**Education**

1995. PhD Thesis, Crop health management of the French grain crop producers: a micro-econometric analysis. Committee : J. Mairesse (Supervisor), J.-J. Laffont, J.-M. Meynard, A. Trognon, D. Vermersch, R.D. Weaver  
Ecole des Hautes Etudes en Sciences Sociales, Paris, France.

1993. *Ingénieur Statisticien Economiste* (Master of Science, Economics and Statistics)  
Ecole Nationale de la Statistique et de l'Administration Economique, Paris

1991. *Ingénieur Agronome, Spécialisation « Politiques Economiques de l'Agriculture et de l'Espace »*  
(Master of Science, Agricultural Science, Major in Agricultural Economics)  
Ecole Nationale Supérieure d'Agronomie de Rennes, France

**Current and past positions**

2006- Senior researcher, Agricultural production micro-economics and micro-econometrics, UMR SMART-LERECO, INRA-Agrocampus Ouest, Rennes, France

2012-2017 Invited professor, economics, Department of Economics and Management Science, Agrocampus Ouest, Rennes, France

2004-2012 Invited professor, econometrics, Department of Economics, Ecole Nationale de la Statistique et de l'Analyse de l'Information, Rennes, France

1995-2006 Researcher, Agricultural production micro-economics and micro-econometrics, UMR SMART-LERECO, INRA-Agrocampus Ouest, Rennes, France

1996. Post-doctoral fellowship, Department of Agricultural Economics and Rural Sociology, Pennsylvania State University, USA.

## Main fields of interest

- **Research**
  - o Applied micro-economics and micro-econometrics
  - o Agricultural production economics
  - o Agricultural production modeling with special emphasis on agronomical considerations
- **Expertise**
  - o Use of chemical inputs in agricultural production
  - o Public decision making
  - o Agri-environmental policy design
- **Teaching**
  - o Applied micro-economics and micro-econometrics
  - o Public decision making and agri-environmental policy design

## Other activities

- **Current member of**
  - o Coordinating committee of the INRA program "Sustainable Management of Plant Health" (SMACH), 2010-
  - o Committee for the assessment of the pesticide policy of the French Department of Agriculture, 2015-
  - o Scientific Committee of the EcoPhyto R&I research program, 2019-
- **Past significant expertise activities**
  - o In charge of the economic section of the "Expertise Scientifique Collective on Pesticides, Agriculture et Environnement" for the French Departments of Agriculture and of the Environment (2005) and of the "EcoPhytoR&D" program of the French Department of Agriculture (2009-2010)
  - o Member of the task Force on "Marketing authorizations of plant health products" of the French Agency for Food, Environmental and Occupational Health & Safety (ANSES), 2014-2016.
  - o Member of the scientific Committee "Economic and Social Science" of INRA, 2010-2017

## Recent publications

- Koutchadé, O.P., A. Carpentier and F. Féménia. Modeling Heterogeneous Farm Responses to European Union Biofuel Support with a Random Parameter Multicrop Model. *American Journal of Agricultural Economics*, 100(2), 434-455, 2018.
- Latruffe, L., B. E. Bravo-Ureta, A. Carpentier, Y. Desjeux and V. H. Moreira. Subsidies and technical efficiency in agriculture: evidence from European dairy farms. *American Journal of Agricultural Economics*, 99(3), 783-799, 2017.
- Carpentier, A., A. Gohin, P. Sckokai and A. Thomas. Modelling agricultural production choices. A literature survey. *Review of Agricultural and Environmental Studies*, 96(1), 131-165, 2015.
- Carpentier, A. and E. Letort. Modelling acreage decisions within the Multinomial Logit framework: profit functions and discrete choice models. *Environmental and Resource Economics*, 59(4), 537-559, 2014.
- Carpentier, A. and E. Letort. Accounting for heterogeneity in multicrop micro-econometric models. Implications for variable input demand modeling. *American Journal of Agricultural Economics*,

94(1): 209–224, 2012.

Blazy, J.-M., A. Carpentier and A. Thomas. The Willingness to Adopt Agro-ecological Innovations: Application of Choice Modelling to Caribbean Banana Planters. *Ecological Economics*, 72, 140-150, 2011.

Féménia F., Gohin A. and Carpentier A. Measuring the decoupling of farm direct payments : revisiting the wealth effects. *American Journal of Agricultural Economics*, 92(3), 836-848, 2010.

### Other selected publications

Bonnieux, F. et A. Carpentier. La méthode des programmes pour l'évaluation des biens environnementaux. *Revue d'Economie Politique* 117(5), 699-718, 2007.

Carpentier, A., C. Nauges, A. Reynaud et A. Thomas. Effets de la délégation sur le prix de l'eau potable, une approche par les effets de traitement. *Economie et Prévision*, 174(3), 1-19, 2006.

Carpentier, A. and H. Guyomard. Unconditional Elasticities in Two-Stage Demand Systems. *American Journal of Agricultural Economics*, 83(1), 222-229, 2001.

Oude Lansink, A. O. and A. Carpentier. Damage Control Productivity: An Input Abatement Approach. *Journal of Agricultural Economics*, 52(3), 11-22, 2001.

Carpentier, A. and R.D. Weaver. Damage Control Productivity: Why Econometrics Matters. *American Journal of Agricultural Economics*, 79(1), 47-61, 1997.

Carpentier, A. and R.D. Weaver. Heterogeneity in Production Technologies and Estimation of Pesticide Productivity. *Canadian Journal of Agricultural Economics*, 219-236, 1996.

Carpentier, A. L'Efficacité Privée et Publique de la Gestion du Risque Phytosanitaire: le Rôle de l'Information. *Cahiers d'Economie et de Sociologie Rurales*, 39-40, 37-61, 1996.

Guyomard, H., Baudry, M. and A. Carpentier. Estimating Crop Supply in the Presence of Farm Programmes: Application to the Common Agricultural Policy. *European Review of Agricultural Economics*, 23(4), 401-420, 1996.

### Recent communications

Féménia, F., A. Carpentier, A. Gohin and R. Sodjahin. Estimating crop rotation effects with farm accountancy data. *Conference on Crop Diversification*. Accepted oral contribution. Budapest, September 2019.

A. Carpentier. On the economic value of crop diversification: pre crop effect value, cropping system effect value and opportunity cost. *Conference on Crop Diversification*. Accepted oral contribution. Budapest, September 2019.

Koutchadé, Ph., A. Carpentier, A. and F. Féménia. Corner solutions in empirical acreage choice models: an endogenous switching regime approach with regime fixed costs. *International Conference of Agricultural Economics*. Accepted oral contribution. Vancouver, BC, July 2018.

Carpentier, A. Why farmers consider pesticides the ultimate in crop protection: Economic and behavioral insights. *International Conference of Agricultural Economics*. Accepted oral contribution. Vancouver, BC, July 2018.

Féménia, F., A. Carpentier, A. Gohin and R. Sodjahin. Estimating crop rotation effects with farm accountancy data. Accepted oral contribution. *International Conference of Agricultural Economics* Vancouver, BC, July 2018.

- Koutchadé, Ph., A. Carpentier, A. and F. Féménia. Corner solutions in empirical acreage choice models: an endogenous switching regime approach with regime fixed costs. *Annual Conference of the International Association for Applied Econometrics*. Accepted oral contribution. Montréal, QU, June 2018.
- Koutchadé, Ph., A. Carpentier, A. and F. Féménia. Dealing with corner solutions in empirical acreage choice models: an endogenous switching regime approach with regime fixed costs. *Annual Meeting of the Agricultural and Applied Economics Association*. Accepted contribution. Chicago, MI, July 2017.
- Koutchadé, Ph., A. Carpentier, A. and F. Féménia. Accounting for unobserved heterogeneity in agricultural production choice models: a random parameter approach. *Conference of the International Association of Applied Econometrics*. Thessalonik, Greece, June 2015.
- Koutchadé, Ph., A. Carpentier, A. and F. Féménia. Empirical modelling of production decisions of heterogeneous farmers with mixed models. *Annual Meeting of the Agricultural and Applied Economics Association*. Accepted oral contribution. San Francisco, CA, July 2015.
- Koutchadé, Ph., A. Carpentier, A. and F. Féménia. Dealing with corner solutions in empirical acreage choice models: an endogenous switching regime approach with regime fixed costs. *Annual Meeting of the Agricultural and Applied Economics Association*. Accepted oral contribution. San Francisco, CA, July 2015.
- Carpentier, A. and A. Gohin. Dynamic acreage choices. *Triennial Congress of the European Association of Agricultural Economists*. Ljubjana, Slovénie, Août 2014.
- Carpentier, A., F. Féménia and Ph. Koutchadé. Accounting for unobserved heterogeneity in agricultural production choice models: a random parameter approach. *Annual Meeting of the Agricultural and Applied Economics Association*. Minneapolis, Minnesota, Juillet 2014.
- Carpentier, A. and A. Gohin. Dynamic acreage choices. 133<sup>rd</sup> *European Association of Agricultural Economists Workshop "Modeling Tools for Agricultural and Environmental Policy Analysis"*, Chania, Creete, May 2013.
- Carpentier, A., A. Gohin and E. Letort. Investigating acreage choices accounting for crop rotation effects and constraints. *Agricultural and Applied Economics Association, Annual Meeting*, Pittsburgh, Pennsylvania, July 2011.

### **Selected expertise reports (in French)**

- Carpentier, A., F. Féménia, A. Gohin and J. Helming. Feasibility study on modelling crop rotation effects  
Final report. Specific contract 154208.X29 "Lot 2:" of the AgEconEurope framework contract 154208-2014-A08-NL, 2017.
- Gohin, A., A. Carpentier, P. Koutchadé, et F. Bareille. Amélioration de la représentation de l'offre agricole dans les modèles macro-économiques. Rapport final. ADEME. 114, 112p, 2015
- Ricci *et alii*. *Repenser la protection des cultures. Innovations et transitions vers une protection écologique*. Chapitres 6 « Contribution des politiques publiques à la transition vers la protection intégrées : états des lieux » et Chapitre 10 « Mobiliser l'action publique et privée à l'échelle du système sociotechnique », Ed. Educagri, 2011.
- Carpentier, A. *et alii*. *EcoPhyto R&D. Vers des systèmes de culture économes en produits phytosanitaires. Tome I : Méthodologie générale*. Rapport pour le MAP et le MEDDAD, 2009.
- Butault, J.-P. *et alii*. *EcoPhyto R&D. Vers des systèmes de culture économes en produits*

*phytosanitaires. Tome VI : Analyse ex ante de scénarios de rupture dans l'utilisation des pesticides. Rapport pour le MAP et le MEDDAD, 2009.*

Aubertot, J.-N. *et alii. Synthèse du Rapport de l'Expertise Collective INRA/CEMAGREF : Pesticides, agriculture et environnement : réduire l'utilisation des pesticides et en limiter les impacts environnementaux.* Ed. QUAE, 2006.

Carpentier, A. *et alii. Aspects économiques de la régulation des pollutions par les pesticides.* Chapitre 5, Rapport pour le MAP et le MEDDAD de l'Expertise Collective INRA/CEMAGREF « Pesticides, agriculture et environnement : ... » Ed. INRA, 2005.