

C. LAVIGNE
FULL LIST OF SCIENTIFIC PUBLICATIONS

o Spatial ecology of pests and pest enemies in agro-ecosystems

- Boreau de Roince C., Lavigne C., Mandrin J.-F., Rollard C., Symondson WOC (2012) Early-season predation on aphids by winter-active spiders in apple orchards revealed by diagnostic PCR. *Bulletin of Entomological Research*. On line.
- Boreau de Roince C., Lavigne C., Ricard J.-M., Franck P., Bouvier J.-Ch., Garcin A., Symondson WOC (2012) Predation by generalist predators on the codling moth versus a closely-related emerging pest the oriental fruit moth: a molecular analysis. *Agricultural and Forest Entomology*. 14, 260–269.
- Franck P., Ricci B., Klein E.K., Olivares J., Simon S., Cornuet J.M., Lavigne C. (2012) Genetic inferences about the population dynamics of codling moth females at a local scale. *Genetica* 139, 949-960.
- Franck P, Siegwart M, Olivares J, Toubon JF, Lavigne C (2012) Multiple Origins of the Sodium Channel kdr Mutations in Codling Moth Populations. *Plos One* 7.
- Monteiro L.B., Lavigne C., Ricci B., Franck P., Toubon J.-F., Sauphanor B. (2012) Predation of codling moth eggs is affected by pest management practices at orchard and landscape levels. *Agriculture, Ecosystems & Environment*. On line.
- Mouron P., Heijne B., Naef A., Strassemeyer J., Hayer F., Avilla J., Alaphilippe A., Höhn H., Hernandez J., Gaillard G., Mack G., Solé J., Sauphanor B., Samietz J., Patocchi A., Bravin E., Lavigne C., Bohanec M., Aubert U., Bigler F.(2012). Sustainability assessment of crop protection systems: SustainOS methodology and its application for apple orchards. *Agricultural Systems*. 113: 1-15.
- Roy L., Bouvier J-Ch., Lavigne C., Galès M. , Buronfosse T. (in press) Impact of pest control strategies on the arthropodofauna living in bird nests built in nestboxes in pear and apple orchards. *Bulletin of Entomological Research*.
- Veres, A., Petit, S., Conord, C., Lavigne, C. (2012) Does landscape composition affect pest abundance and their control by natural enemies? A review. *Agriculture, Ecosystems & Environment*. On line.
- Veres A, Tóth F, Kiss J, Fetykó K, Orosz S, Lavigne C, Otto S, Bohan D (2012) Spatio-temporal dynamics of *Orius* spp. (Heteroptera: Anthocoridae) abundance in the agricultural landscape *Agriculture, Ecosystems & Environment* 162, 45–51.
- Bouvier J., Ricci B., Agerberg J., Lavigne C. (2011). Apple orchard pest control strategies affect bird communities in south-eastern France. *Environmental Toxicology and Chemistry* 30:212-219.
- Ricci B., Franck P., Bouvier J., Casado D., Lavigne C. (2011) Effects of hedgerow characteristics on intra-orchard distribution of larval codling moth. *Agriculture Ecosystem Environment* 140, 395-400.
- Joannon B., Lavigne C., Lecoq H., Desbiez C. (2010) Barriers to gene flow between emerging populations of Watermelon mosaic virus in south-eastern France. *Phytopathology* 100, 1373-1379.
- Lavigne C., Ricci B., Franck P., Senoussi R. (2010) Spatial analyses of ecological count data: a density map comparison approach. *Basic and Applied Ecology*.
- Le Ber F.C., Lavigne C., Adamczyk K., Mari J.-F., Angevin F., Monod H., Colbach N. (2009) Neutral modelling of agricultural landscapes by tessellation methods - Application for gene flow simulation. *Ecological Modelling*.
- Ricci B., Franck P., Toubon J.-F., Bouvier J.-C., Sauphanor B., Lavigne C. (2009) The influence of landscape on insect pest dynamics: a case study in southeastern France. *Landscape Ecology*. 24:337–349.

o Pollen dispersal in crop species and cultivation of GM crops

- Chifflet R., E.K. Klein, C. Lavigne, V. Le Féon, A.E. Ricroch, J. Lecomte and B.E. Vaissière (2011) Spatial scale of oilseed rape pollen dispersal by insects in an openfield landscape. *Journal of Applied Ecology*. 48: 689-696.
- Colbach N., Monod H., Lavigne C. (2009) A simulation study of the medium-term effects of field patterns on cross-pollination rates in oilseed rape (*Brassica napus* L.). *Ecological Modelling*. 220 : 662–672
- Viaud V., Monod H., Lavigne C., Angevin F., Adamczyk K. (2008) Spatial sensitivity of maize gene flow to landscape pattern: a simulation approach. *Landscape Ecology*. 23:1067–1079.
- Lavigne C., Klein E.K., Mari J.-F., Le Ber F. , Adamczyk K., Monod H., Angevin F. (2008) How do genetically modified (GM) crops contribute to background levels of GM pollen in an agricultural landscape ? *Journal of Applied Ecology*. 45:1104-1113.
- Angevin F., Klein E.K., Choimet C., Gauffreteau A., Lavigne C., Messéan A., Meynard J.M. (2008) Modelling impacts of cropping systems and climate on maize cross-pollination in agricultural landscapes: The MAPOD model. *European Journal of Agronomy*. 28: 471-484.
- Pivard S., Adamczyk K., Lecomte J., Lavigne C., Bouvier A., Deville A., Gouyon P.-H., Huet S. (2008) Where do the feral oilseed rape populations come from? A large-scale study of their possible origin in a farmland area. *Journal of Applied Ecology*. 45 : 476–485.
- Devaux C., Klein E.K., Lavigne C., Sausse C., Messéan A. (2008) Environmental and landscape effects on cross-pollination rates observed at long distance among French oilseed rape (*Brassica napus*) commercial fields. *Journal of Applied Ecology*. 3 : 803-812
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- Klein E.K., Lavigne C., Renard M., Gouyon P.-H. (2006)Pollen dispersal of oilseed rape: estimation of the dispersal function and effects of field dimension. *Journal of Applied Ecology* 43 : 141-151
- Devaux C., Lavigne C., Falentin–Guyomarc’h H., Vautrin S., Lecomte J., Klein K. (2005) High diversity of oilseed rape pollen clouds over an agro-ecosystem indicates long-distance dispersal. *Molecular Ecology* 14:2269-228
- Lavigne C., Klein EK, Couvet D. (2002) Using seed purity data to estimate an average pollen mediated gene flow from crops to wild relatives, *Theoretical and Applied Genetics* 104: 139-145.
- Lavigne C., Klein E.K., Vallee P., Pierre J., Godelle B., Renard M. (1998) A pollen-dispersal experiment with transgenic oilseed rape. Estimation of the average pollen dispersal of an individual plant within a field, *Theoretical and Applied Genetics* 96: 886-896.
- Lavigne C., Godelle B., Reboud X, Gouyon P.H. (1996) A Method to determine the mean pollen dispersal of individual plants growing within a large pollen source. *Theoretical and Applied Genetics* 93:1319-1326.

o Management of crop genetic diversity

- Porcher E., Giraud T., Lavigne C. (2006) Genetic differentiation of neutral markers and quantitative traits in predominantly selfing metapopulations: confronting theory and experiments. *Genetical Research* 87:1-12.
- Porcher E., Gouyon P.H., Lavigne C. (2004a) Dynamic management of genetic resources : maintenance of outcrossing in experimental metapopulations of a predominantly inbreeding species. *Conservation Genetics* 5: 259-269.
- Porcher E, T Giraud, I Goldringer, C Lavigne (2004b) Experimental demonstration of a causal relationship between heterogeneity of selection and genetic differentiation at quantitative traits. *Evolution* 58: 1434-1445.
- de Meaux, J., I Cattan-Toupance, C. Lavigne, T. Langin, C. Neema (2003) Polymorphism of a complex Resistance Gene Candidate family in wild populations of Common Bean (*Phaseolus vulgaris*) in Argentina: Comparison with phenotypic resistance polymorphism. *Molecular Ecology* 12: 263-273.
- Lavigne C., Reboud X., Lefranc M., Porcher E., Roux F., Olivieri I., Godelle B. (2001) Evolution of genetic diversity in metapopulations : *Arabidopsis thaliana* as an experimental model, *Genetics, Selection, Evolution*, 33: S399-423.
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o Others

- Franck P, Siegwart M, Olivares J, Toubon J-F, (2012) Multiple origins of the sodium channel *kdr* mutations in Codling Moth populations. *PLoS ONE* 7(8): e43543.
- Giraud T, Villareal L, Austerlitz F, Le Gac M, Lavigne C (2006) A model of host race formation and sympatric speciation in parasites. *Phytopathology*. 96:280-296.
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- Gigord L., Lavigne C., Shykoff J.A., Atlan, A. (1999), Evidence for effects of restorer genes on male and female reproductive functions of hermaphrodites in the gynodioecious species *Thymus vulgaris* L, *Journal of Evolutionary Biology* 12: 596-604.
- Gigord L., Lavigne C., Shykoff J.A. (1998), Partial self-incompatibility and inbreeding depression in a native tree species of La Reunion (Indian Schmid B., Birrer A., Lavigne C. (1996). Genetic variation in the response of plant populations to elevated CO₂ in a nutrient-poor, calcareous grassland. In "Carbon Dioxide, Populations, and Communities." (C. Körner and F.A. Bazzaz, eds), pp. 31-50. Academic Press, New York, New York.
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- Lavigne C., Millecamps J.L., Manac'h H., Le Cordonnier P., Vasseur J.L., Gasquez J. (1994) Monogenic semidominant resistance to sulfonylurea in white chicory. *Plant Breeding* 113 : 305311.