

I. General Informations

Nationality	Belgium, born in Ciney, 21-05-1966
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Language	French, English, Dutch (niv 3)

- 2009-2010: Researcher in the "Unité d'écologie et de biogéographie", UCL. Spin off in Brussels, financially supported by IRSNB.
- 2006-2008: Researcher in the "Unit of Social Ecology", ULB. Prospective Research for Brussels, financially supported by IRSNB.
- 2005: Manager of coordination (Temporary job). Laboratoire d'Analyse Biologique.
- 2001-2004: Researcher in the « Lutte Biologique et Ecologie Spatiale », ULB, financially supported by Région Wallonne. Postgraduate (DEA) in Sciences, ULB
- 1996-2001: Thesis in the « Laboratoire de Biologie des Organismes », ULB. Auto-financed by my work as secretary and house painter.
- 1992-1996: Bachelor in Biology, Great Distinction, ULB. Auto-financed by my work as secretary and house painter

II. Publications and scientific activities

1. [PAPERS IN INTERNATIONAL JOURNAL](#)

Under submission

- Maillieux A. C., Buffin A., Detrain C., Deneubourg J. L. (2009). Starvation management in mass recruiting ants.
- Maillieux A. C., Buffin A., Detrain C., Deneubourg J. L. (2009). Nestmates or scouts: Who boost the recruitment in starved nests of *Lasius niger*.
- Maillieux A. C., Astudillo A. F., Detrain C., Deneubourg J. L. (2009). Coordinated traffic during migration in house dust mites.

➤ Le Goff G., Maillieux A-C, Detrain C., Deneubourg J-L., Clotuche G., Hance T. (2009). How group living affects fertility, survival and silk production in the web spinner *Tetranychus urticae*

Published or in press

➤ Le Goff G., Maillieux A. C., Detrain C., Deneubourg J. L., Clotuche G., Hance T.(2009) Spatial distribution and genetic proximity in *Tetranychus urticae*. C. R. Biologies, in press.

➤ Clotuche G., Legoff G., Maillieux A. C., Deneubourg J. L., Detrain C. et T. Hance (2009). How to visualize the spider mites silk. Microscopy Research and Technique, in press.

➤ Maillieux A. C., Detrain C., Deneubourg J. L. (2009). Light load mode of food transport in the ant *Lasius niger*. C. R. Biology, in press.

➤ Maillieux A. C., Furey R., Saffre F., Krafft B., Deneubourg J.L. (2008). How the presence of non-nestmates affects the cohesion of swarming groups of social spiders. Insectes Sociaux 355-359.

➤ Maillieux A. C., Devigne C., Detrain C., Deneubourg J. L. Impact of starvation on *Lasius niger*' exploration. Submitted.

➤ Maillieux A. C., Roques A., Molenberg J. M., Grégoire J. C. (2007). An American invasive seed pest *Megastigmus spermotrophus* (Wachtl) (Torymidae): Its populations and parasitoids in a European introduction zone. *Biological Control*: 44, 137-141.

➤ Maillieux A. C., Detrain C., Deneubourg J. L. (2006). «Starvation drives a threshold triggering communication ». *Journal of Experimental Biology*: 209, 4224-4229.

➤ Maillieux A. C., Detrain C., Deneubourg J. L. (2005). «Triggering and persistence of trail-laying behaviour of *Lasius niger* ». *Journal of Insect Physiology*. 51, 297-304.

➤ Maillieux A. C., Detrain C., Deneubourg J. L. (2003). « Regulation of ants' foraging to resource productivity ». *Proc. R. Soc. London B*: 270, 1609-1616.

➤ Maillieux A. C., Detrain C., Deneubourg J. L. (2003). « How colony growth influences communication in ants? ». *Insectes Sociaux*. 50: 24-31

➤ Maillieux A. C., Detrain C., Deneubourg J. L. (2000). « How do the ants assess food volume? ». *Animal Behaviour*, 59: 1061-1069.

➤ Saffre F., Maillieux A. C & Deneubourg J. L. (2000). « Exploratory Recruitment Plasticity in a social spider *Anelosimus eximius* ». *Journal of Theoretical Biology*, 205: 37-46.

➤ Saffre F., Maillieux A. C, Deneubourg J. L. (1999). « Dragline attachment Pattern in the Neotropical Social Spider *Anelosimus eximius* (Araneae: Theridiidae) ». *Journal of Insect Behaviour*, 12: 277-28.

2. BOOK CHAPTER

- M. Navajas, A. Migeon, A. Estrada-Pena, R. Petanovic, P. Servigne & A.C. Mailleux (2009). »The Acari«, in « Terrestrial invertebrate invasions in Europe ». *Frontiers in Ecology and the Environment*. in press.

3. PAPERS OF SCIENTIFIC POPULARIZATION

- Mailleux A. C., Detrain C. Novembre (2007). *Sciences et Avenir*, L'intelligence collective chez les insectes sociaux
- Mailleux A. C., Molenberg J.M., Grégoire J.C (2007). *Megastigmus spermotrophus*, un ravageur américain introduit en Europe. *Forêt Wallonne*.
- Mailleux A. C., Molenberg J.M., Grégoire J.C. (2007). *Megastigmus spermotrophus*, un ravageur américain introduit en Europe. *Sylva Belgica*

4. COMMUNICATIONS (CONGRES, SYMPOSIUM)

- Mailleux A. C., Furey R., Saffre F., Krafft B., Deneubourg J.L. (2008). Strains on the wire in social spiders: How the presence of non-nestmates affects the cohesion of swarming groups of social spiders. *Entomology in Belgium 2008*, vendredi 5 décembre 2008, à l'Institut royal des Sciences naturelles de Belgique (IRSNB).
- Mailleux A. C., Deneubourg J. L., Detrain C. 2006. Aggregation in Dust mites. (2008). 6th Symposium of European Acarology. Montpellier. 21-25 july.
- Hance T., Le Goff G., Clotuche G., Mailleux A. C., Detrain C., Deneubourg J. L. (2007). Sub-socialité et démographie chez *Tetranychus urticae* (Acari: Tetranychidae). 4ème Congrès Africain d'Acarologie. Hammamet, Tunisie.
- Le Goff G., Mailleux A. C., Detrain C., Deneubourg J. L. Hance T. (2007). Aggregation and egg production in *Tetranychus urticae*. 4ème Congrès Africain d'Acarologie. Hammamet, Tunisie.
- Le Goff G., Mailleux A. C., Detrain C., Deneubourg J. L., Hance T. (2006). Aggregation behaviour and genetic proximity in *Tetranychus* sp. XIIIth International Congress of Acarology. Amsterdam, The Netherlands, August 2006.
- Le Goff G., Mailleux A. C., Detrain C., Deneubourg J. L., Hance T. (2007). Cooperation mechanisms in the two-spotted mite, *Tetranychus urticae*. IIIrd meeting in Ecology and Behaviour. Montpellier, France, March 2007.
- Le Goff G., Mailleux A. C., Detrain C., Deneubourg J. L., Hance T. (2006). Aggregation behaviour and genetic proximity in *Tetranychus* sp. XIIIth Benelux Congress of Zoology. Louvain-La-Neuve, Belgium. Mailleux A. C., Detrain C., Deneubourg J. L. 2006. Recruitment process during migration in *Dermatophagoides pteronyssinus*. XIIIth International Congress of Acarology. Amsterdam, The Netherlands.
- Mailleux A. C., Deneubourg J. L., Detrain C. (2006). Modulation of a threshold triggering ant trail-laying by starvation. XV Congress International Congress on Social Insects Proceedings. Washington.

- Maillieux A. C., Detrain C. , Deneubourg J. L., (2005). How ants simply regulate their foraging activities to their resource productivity. XXIX INTERNATIONAL ETHOLOGICAL CONFERENCE, 20-27 August 2005. Budapest, Hungary
- Maillieux A. C., Portha S., Deneubourg J. L., Detrain C. (2005). A behavioural rule of thumb adjusting ant's recruitment to aphid recruitment. IUSSI. 3rd European Congress on Social Insects. St Petersburg, Russia, August 2005.
- Maillieux A. C., Molenberg J. M., Grégoire J. C. (2004). An improved method of census for the parasitoids of *Megastigmus spermotrophus*. International symposium « Biodiversity: state, stake and future » Louvain-la-Neuve, Belgique. 7-9 avril.
- Roques A., Maillieux A.C., Sun J.H., Gregoire J.C., Gourov A., Molenberg J.M., Turgeon J.J.(2004). Tentative release of parasitoids from the native range to control an american Douglas-fir seed chalcid, *Megastigmus spermotrophus*, introduced to western Europe International Plant Protection Congress. China.
- Detrain C., Maillieux A.C., Portha S., Deneubourg J.L. (2002). Self-organized patterns of foraging: the ant-aphid association. ». International workshop « Self-organization and Evolution of Social Behaviour », Monte Verita, Ascona, Suisse.
- Maillieux A. C., Deneubourg J. L. (1998). « Les fourmis mesurent-elles les volumes de nourriture? *Lasius niger*répond ». JEC, Dijon, France.
- Saffre F., Furey R., Maillieux A. C., Deneubourg J. L. (1998). « Choix collectif chez les araignées ». Munster, NSI.
- Maillieux A. C., Deneubourg J. L., Detrain C. (1998). « Les acteurs du recrutement alimentaire chez *Lasius niger*». Actes Colloque Insectes Sociaux. Albi, France.
- Maillieux A. C., Detrain C., Deneubourg J. L. (1997). « Comment les fourmis mesurent-elles les volumes de nourriture? Le cas *Lasius niger*. » Actes Colloque Insectes Sociaux, Paris, France.
- Detrain C., Maillieux A. C., Deneubourg J. L. (1997). «Coding of food volume in the ant *Lasius niger*? » .25th Int. Ethological Congress. Vienne, Autriche.
- Detrain C., Maillieux A. C., Deneubourg J. L. (1997). « Coding of food volume in the ant *Lasius niger* ». In *Advances in Ethology* . Ed. by Taborsky M. and Taborsky B., Blackwell Wissenschafts-Verlag Berlin, Vienna, p183.
- Maillieux A. C., Detrain C., Deneubourg J. L. (1996). « How do ants measure food volume? », Proceeding of Zoology Congress. Namur, Belgique.

5. [REPORTS](#)

- Maillieux A.C. Detrain C., Deneubourg J. L. (Rapport intermédiaire en 2006, Rapport final en 2008). Dissémination et coopérativité chez *Dermatophagoides pteronyssinus*, acarien domestique allergène. Rapport pour le programme Prospective Research for Brussels.
- Maillieux A. C., Molenberg J.M., Grégoire J.C. (Rapports intermédiaires en 2003-2004 et Rapport final en 2005). Mise au point d'un schéma de lutte biologique contre *Megastigmus*

spermatrophus, parasite de graines de Douglas. Rapport pour la convention financée par la Région Wallonne, convention PDR - Mesure n° 6, 1.1.2. Action "Gestion des ressources génétiques à long terme ».

6. [FOREIGN STUDIES](#)

- 2002: Study and collection of *Megastigmus spermatrophus* in Oregon (Collaboration with Ross Darrell, Department of Forest Science, Oregon State University, Oregon).
- 2002: Study and collection of *Megastigmus spermatrophus* in Utah (Collaboration with Nancy Rappaport, PSW Research Station, Berkeley, Utah).
- 1998: Study and collection of *Messor barbarus* in France.
- 2000: Study and collection of *Anelosimus eximius*, French Guiana. (Collaboration : Professeur B. Krafft, Université Nancy, France ; R. Furey, Harrisburg University of Science and Technology , Pennsylvania ; F. Saffre , Pervasive ICT Research Centre, BT, England ; Professeur J. L., Deneubourg ULB).

7. [EXPERT EVALUATION](#)

- 2006 : SOLVAY CARBONATE France Centre d'Etudes et de Recherches Rue Gabriel Péri, 2 France Theme: Chemical control of *Dermanyssus gallinae*.
- 2007: PROCTER & GAMBLE Temselaan , 55 Belgique Theme: Efficiency of the current methods of control of *Dermatophagoides pteronyssinus* et *farinae*.

8. [OTHERS](#)

Scientific prizes:

- Prizewinner of the Foundation François de Meurs (1998).
- Prizewinner of the Foundation David et Alice Van Buuren (1997).
- Prizewinner of the Foundation David et Alice Van Buuren (1996).

Illustrations of scientific books and papers:

- Book of S. Camazine (2001). "Self-organization in biological systems". Princeton,
- Book of C. Detrain, J. L. Deneubourg , J. M. Pasteels (1999): « Information Processing in social insects ». Birkhäuser, Basel.
- Paper of G. Theraulaz (1998): « Les insectes ont-ils le plan de leur nid dans la tête? ». La Recherche, Novembre 1998.

III. Popularization activities

1) WEB SITE « ACARI.BE »

Promoter, organizer, responsible of a website describing the world of acari.

2) TV BROADCASTS

- Two television broadcasts Matière grise. RTB. Themes : « Un safari domestique », «ant- algorithm » (2007).
- One television broadcast “Les fourmis”, Arte (1999).
- More than ten television broadcasts “GpiG” distributed by Rtb, TV5, TV5 Canada, RTL.

3) OTHERS

- Folder for teachers (2007): « Les acariens, tu connais ? » distribué par Infor-Sciences. (http://www.ulb.ac.be/infosciences/pds2007/activite/BRU09-4_dossier.pdf).
- Animation/Moderation of 4 debates for the Siep (2006, 2007), for the Centre culturel de l'ULB (2007).
- Course in primary school, Ecole Communale, 1332 Genval. Theme: “Rencontre avec les fourmis”.
- Organization of workshops « Les arthropodes de nos maisons » Village des Sciences, Place de la Monnaie, Bruxelles (2008), “Printemps des Sciences », ULB (2008), « Découverte des Acariens » Printemps des Sciences, ULB (2007), Siep (2007), “Expos des Sciences” ULB (1995, 1996, 2000, 2007).

IV. Teaching experiences

1) SEMINARS

- Mailleux A.C., Fernandez E. A, Detrain C., Deneubourg J.L (3/3/2008). Social organization in Dust mites. Seminar on invitation. Laboratoire des Macromolécules Biologiques. Liège.
- Mailleux A.C., Detrain C., Deneubourg J.L (6/12/2007). Social organization in Dust mites. Seminar on invitation. Departement of Crop protection, Laboratory of Agrozoology, Ghent 9000.

- Mailleux A.C., Detrain C., Deneubourg J.L (29/11/2007). Interfaculty seminar: L'organisation sociale chez les acariens des poussières. Service Eco-Ethologie Evolutive ULB.
- Mailleux A. C., Roques A., Molenberg J. M., Sun J.H., Turgeon J., Grégoire J. C. (28/06/2006). Lecture: *Megastigmus spermotrophus*, an american seed pest introduced in Europe. Institut Royal Sciences Naturelles de Belgique.
- Mailleux A.C., Detrain C., Deneubourg J.L. (15/06/2005) Lecture: Stratégies alimentaires chez la fourmi *Lasius niger*: Comment les exploratrices mesurent-elles leur source de nourriture et transmettent-elles cette information à leur congénères ?_Centre de Recherche INRA D'Orléans. Zoologie Forestière, France.
- Mailleux A. C., Roques A., Molenberg J. M., Sun J.H., Turgeon J., Grégoire J. C. (28/04/2005). Interfaculty seminar: A step forward in the biological control of a conifer seed pest, *Megastigmus spermotrophus* Wachtl, invasive in Western Europe. Service d'Ecologie Sociale, ULB.
- Mailleux A.C., Detrain C., Deneubourg J.L. (23/06/2005). Interfaculty seminar: A simple rule regulating ants foraging activities. Service Eco-Ethologie Evolutive, ULB
- Mailleux A. C., Roques A., Molenberg J. M., Sun J.H., Turgeon J., Grégoire J. C. (22/04/2005). Interuniversity seminar: *Megastigmus spermotrophus* et ses parasitoïdes: Phénologie et parasitisme d'un hyménoptère invasif et ravageur de graines. Unité d'écologie et de biogéographie. UCL
- Mailleux A.C., Detrain C., Deneubourg J.L. (25/02/2005). Interuniversity seminar: Stratégies alimentaires chez la fourmi *Lasius niger*: Comment les exploratrices mesurent-elles leur source de nourriture et transmettent-elles cette information à leur congénères ? Unité d'écologie et de biogéographie. UCL

2) 1ST CYCLE

Stage : 3 bachelors + 3 master: subject: Ecology of Houses dust mites

3) 2SD AND 3RD CYCLE

- Co-promoter of Guillaume Le Goff, DEA, Promoter: Hance T. 2005. UCL. Aggregation behaviour and genetic proximity in *Tetranychus* sp.
- Co-promoter of Guillaume Le Goff thesis, Promoter: Hance T. 2006. UCL. Aggregation behaviour and genetic proximity in *Tetranychus* sp.

V. Logistic responsibilities

- Principal coordinator for ULB in the European Program DAISIE (<http://www.europe-aliens.org/>). Contributor to the book "Handbook of Alien Species in Europe" Series Invading nature-Springer Series in Invasion Ecology, Vol 3. 2009.

- Principal promoter of PRB Prospective Research for Brussels, Dissémination et coopération chez *Dermatophagoides pteronyssinus*, acarien domestique allergène.
- Principal promoter for the FRFC 2.4.622.06 .F. Analyse des mécanismes de coopération et de dispersion chez un organisme haplo-diploïde *Tetranychus urticae*.
- 2007 & 2008: Delegate of Scientific Staff (temporary) in the Département de Biologie des Organismes.