

Curriculum vitae

Philippe GRANDCOLAS

Directeur de recherche au CNRS

born on 7 May 1964, Granville (France)

Directeur, Institut de Systématique, Evolution, Biodiversité
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EDUCATION

Master, Biology, Université Paris XI, 1985, Ecology, Université Paris XI-ENS, 1986

PhD (Doctorat ès Sciences), Université de Rennes I, 1991

Habilitation à diriger les recherches, Université P. & M. Curie (Paris VI), 1999

EMPLOYMENT

1993-1996, Research Scientist CNRS, Université de Rennes I

1996-, Research Scientist CNRS, Muséum national d'Histoire naturelle.

MANAGEMENT RESPONSABILITIES

Director, Laboratory UMR 7205 CNRS MNHN UPMC EPHE.

Head, team « Phylogénie, évolution, comportement, ontogenèse et adaptations – PHYLEVO », in the lab
UMR 7205 CNRS/MNHN, 2009-2013

Head, Programme pluriformation « Structure et évolution des écosystèmes », Ministry of
Research and Muséum national d'Histoire naturelle, 2004-2008

Elected President, Willi Hennig Society, 2006-2008

Editor-in-chief, *Mémoires du Muséum national d'Histoire naturelle*, 1999-2008

Associate Editor, *Cladistics* (Wiley-Blackwell), 2005-

Associate Editor, *Bionomia* (Magnolia Press), 2010-

Academic Editor, PeerJ, 2013-

OTHER RESPONSABILITIES

Scientific Secretary, Comité National de la Recherche Scientifique, 2004-2008

Elected member, Comité National de la Recherche Scientifique, 2008-2012

Elected Member, Scientific Council, Muséum national d'Histoire naturelle, 2006-2013

Appointed Member, Evaluation Committee, Agence National de la Recherche, CSD7, 2006, 2010

Appointed Member, Evaluation Committee, Agence National de la Recherche, FRB, 2009

Elected Councillor, Société Française de Systématique, 2006-2009

RESEARCH ACTIVITIES

More than 25 field trips of scientific exploration in South America, Africa, the Middle East, Asia ,and Oceania

Supervisor for 12 Doctorate theses (PhD)

Teaching Phylogenetics and Evolutionary Biology (Université Paris VI UPMC et Muséum national d'Histoire naturelle)

Supervisor for research grants for a total of 1 660 000 euros

90 scientific papers and 4 edited books

PUBLICATIONS : 2008-2013

Legendre, F., D'Haese, C., Deleporte, E., Pellens, R., Whiting, M. F., Schliep, K., Grandcolas, P. 2014. The evolution of social behaviour in Blaberid cockroaches with diverse habitats and social systems: phylogenetic analysis of behavioural sequences. *Biological Journal of the Linnean Society*, in press.

Prokop, J., Krzeminskib, W., Krzeminskab, E., Hörnschemeyer, T., Ilgerd, J. M., Brauckmannd, C., Grandcolas, P., Nel, A. 2014. Late Palaeozoic Paoliida is the sister group of Dictyoptera (Insecta: Neoptera). *Journal of Systematic Palaeontology*, in press.

Nattier, R., Grandcolas, P., Jourdan, H., Couloux, A., Pellens, R., Poulain, S., Robillard, T. 2013. Climate and soil type together explain the distribution of microendemic species in a biodiversity hotspot. *Plos ONE* 8, e80811.

Marquier, I., Amedegnato, C., Nichols, R. A., Pompanon, F., Grandcolas, P., Desutter-Grandcolas, L. 2014. Inside the Melanoplinae: New Molecular Evidence for the Evolutionary History of the Eurasian Podismini (Orthoptera: Acrididae). *Molecular Phylogenetics and Evolution*, in press.

Robillard, T., Montealegre-Z, F., Desutter-Grandcolas, L., Grandcolas, P., Roberts, D. 2013. Mechanisms of high frequency song generation in brachypterous crickets and the role of ghost frequencies. *Journal of Experimental Biology* 216, 2001-2011.

Gasc, A., Sueur, J., Pavoine, S., Pellens, R., Grandcolas, P. 2013. Biodiversity sampling using a global acoustic approach: contrasting sites with microendemics in New Caledonia.

- Plos ONE 8(5): , e65311.
- Legendre, F., Whiting, M. F., Grandcolas, P. 2013. Phylogenetic analyses of termite post-embryonic sequences illuminate caste and developmental pathway evolution. *Evolution & Development* 15, 146-157.
- Gasc, A., Sueur, J., Jiguet, F., Devictor, V., Grandcolas, P., Burrow, C., Depraetere, M., Pavoine, S. 2013. Assessing biodiversity with sound: Do acoustic diversity indices reflect phylogenetic and functional diversities of bird communities? *Ecological Indicators* 25, 279-287.
- Grandcolas, P., Daubin, V., Chave, J., Kergoat, G. J., Samadi, S., Vignes-Lebbe, R. 2013. Systématique, Phylogénie. In: Thiébault, S., Hadi, H. (Eds.), *Prospective de l'Institut Ecologie Environnement du CNRS. Compte-Rendu des Journées des 24 et 25 Octobre 2012*, Avignon. CNRS, Paris, pp. 75-78.
- Garrouste, R., Clement, G., Nel, P., Engel, M. S., Grandcolas, P., D'Haese, C., Lagebro, L., Denayer, J., Gueriau, P., Lafaité, P., Olive, S., Prestianni, C., Nel, A. 2012. A complete insect from the Late Devonian period. *Nature* 488, 82-85.
- Genise, J. F., Garrouste, R., Nel, P., Grandcolas, P., Maurizot, P., Cluzel, D., Cornette, R., Fabre, A.-C., Nel, A. 2012. *Asthenopodichnium* in fossil wood: Different trace makers as indicators of different terrestrial palaeoenvironments. *Palaeogeography, Palaeoclimatology, Palaeoecology* 365-366, 184-191.
- Nattier, R., Grandcolas, P., Elias, M., Desutter-Grandcolas, L., Jourdan, H., Couloux, A., Robillard, T. 2012. Secondary Sympatry Caused by Range Expansion Informs on the Dynamics of Microendemism in a Biodiversity Hotspot. *Plos ONE* 7, e48047.
- Sueur, J., Gasc, A., Grandcolas, P., Pavoine, S. 2012. Global estimation of animal diversity using automatic acoustic sensors. In: Le Galliard, J. F., Guarini, J. M., Gail, F. (Eds.), *Sensors for ecology. Toward integrated knowledge of ecosystems* CNRS, Paris, pp. 99-117.
- Grandcolas, P., Pellens, R. 2012. Capítulo 27. Blattaria. In: Rafael, J. A., Rodrigues de Melo, G. A., Barros de Carvalho, C. J., Casari, S. A., Constantino, R. (Eds.), *Insetos do Brasil. Diversidade e Taxonomia*. Holos Editora, Ribeirão Preto, pp. 333-346.
- Nattier, R., Robillard, T., Desutter-Grandcolas, L., Couloux, A., Grandcolas, P. 2011. Older than New Caledonia emergence? A molecular phylogenetic study of the eneopterine crickets (Orthoptera: Grylloidea). *Journal of Biogeography* 38, 2195-2209.
- Grandcolas P, Nattier R, Legendre F, Pellens R. 2011. Mapping extrinsic traits such as extinction risks or modelled bioclimatic niches on phylogenies: does it make sense at all? *Cladistics* 27: 181–185.
- Pellens R, Grandcolas P. 2010. Conservation and management of the biodiversity in a hotspot characterized by short range endemism and rarity: the challenge of New Caledonia. Pages 139-151 in Rescigno V, Maletta S, eds. *Biodiversity Hotspots*. Hauppauge, NY Nova Publishers.
- Pellens R, Garay I, Grandcolas P. 2010. Biodiversity Conservation and Management in the Brazilian Atlantic Forest: Every Fragment Must Be Considered. Pages 1-35 in Rescigno V, Maletta S, eds. *Biodiversity Hotspots*. Hauppauge, NY Nova Publishers.
- Grandcolas P. 2010. Phylogénie et Homologie du comportement: Les niveaux pertinents d'analyse. Pages 19-26 in Deleporte P, Grandcolas P, eds. *Biosystema*, 27. *Systématique et Comportement*. Paris: Société Française de Systématique.
- Deleporte P, Grandcolas P, eds. 2010. *Systématique et Comportement* Paris: Biosystema, 27. Société Française de Systématique.

- Murienne J, Guilbert E, Grandcolas P. 2009. Species diversity in the New Caledonian endemic genera *Cephalidiosus* and *Nobarnus* (Insecta: Heteroptera: Tingidae), an approach using phylogeny and species distribution modeling. *Biological Journal of the Linnean Society* 97: 177-184.
- Grandcolas P, ed. 2009. *Zoologia Neocaledonica* 7. Biodiversity studies in New Caledonia: Mémoires du Muséum national d'Histoire naturelle, 198 pp.
- Grandcolas P. 2009. Notion: Adaptation. Pages 87-104 in Heams T, Huneman P, Lecointre G, Silberstein M, eds. *Les mondes darwiniens. Les sciences de l'évolution aujourd'hui*. Paris: Syllepse.
- Pellens R, Grandcolas P. 2008. Catalogue of Blattaria (Insecta) from Brazil. *Zootaxa* 1709: 1-109.
- Murienne J, Pellens R, Grandcolas P. 2008. Short-range endemism in New Caledonian Insects. New species and distribution in the genus *Lauraesilpha* Grandcolas, 1997 (Insecta, Dictyoptera, Blattidae, Tryonicinae). Pages 261-271 in Grandcolas P, ed. *Zoologia Neocaledonica* 6. Biodiversity studies in New Caledonia, Mémoires du Muséum national d'Histoire naturelle.
- Murienne J, Pellens R, Budinoff RB, Wheeler WC, Grandcolas P. 2008. Phylogenetic analysis of the cockroach *Lauraesilpha* endemic to New Caledonia. Testing competing hypotheses for the diversification of the biota. *Cladistics* 24: 802-812.
- Legendre F, Whiting MF, Bordereau C, Canello EM, Evans TA, Grandcolas P. 2008. The phylogeny of termites (Dictyoptera: Isoptera) based on mitochondrial and nuclear genes: Implications for and the evolution of the worker and pseudergate castes, and foraging behaviors. *Molecular Phylogenetics and Evolution* 48: 615-627.
- Legendre F, Robillard T, Desutter-Grandcolas L, Whiting MF, Grandcolas P. 2008. Phylogenetic analysis of non-stereotyped behavioural sequences with a successive event-pairing method. *Biological Journal of the Linnean Society* 94: 853-867.
- Legendre F, Pellens R, Grandcolas P. 2008. A comparison of behavioral behavioural interactions in solitary and presocial Zetoborinae cockroaches (Blattaria, Blaberidae). *Journal of Insect Behavior* 21: 351-365.
- Guilbert E, Desutter-Grandcolas L, Grandcolas P. 2008. Heterochrony in Tingidae (Insecta: Heteroptera): Paedomorphosis and/or peramorphosis? *Biological Journal of the Linnean Society* 93: 71-80.
- Grandcolas P, Murienne J, Robillard T, Desutter-Grandcolas L, Jourdan H, Guilbert E, Deharveng L. 2008. New Caledonia: a very old Darwinian island? *Philosophical Transactions of the Royal Society of London, B* 363: 3309-3317.