

JEROME CHAVE

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French citizenship
Born on May 18th, 1973 in Cannes (France)
Married, two children

EDUCATION

- 1999 **PhD in physics**. Université Paris-XI, Orsay. Service de Physique de l'Etat Condensé, Commissariat à l'Energie Atomique, Saclay.
- 1995 **Msc.** Plasma physics. Université Paris XI, Orsay.
- 1995 **Ecole Centrale de Paris**, Châtenay-Malabry. 3rd year option: particle physics

RESEARCH INTERESTS

One overarching goal in community ecology is to understand the mechanisms of species coexistence across scales. Tropical forests have long served as a testing ground for these theories: in the most diverse of these forests every other tree is a representant of a new species. I am combining field research and mathematical modeling to explore and compare the different mechanisms proposed to explain this astounding biodiversity. Much of my recent field research was in French Guiana, and especially at the Nouragues research station (French Guiana). Current projects also involve the study of large-scale patterns of plant species and phylogenetic diversity in South America (Brazil, Bolivia, Guyana, Venezuela, and Peru). One natural extension of this research is to explore the potential of next-generation sequencing to accelerate the pace of biodiversity monitoring and discovery.

I am also interested in the biogeochemical cycling between the biosphere and the atmosphere. I am involved in a project aimed at providing biometric methods for measuring carbon stock and balance for tropical forests at a global scale. This entails a precise individual-level estimation of biomass stocks, both for trees and for lianas, detailed scaling-up techniques, and long-term census plots for woody plants. This work is being developed through collaborations with the Center for Tropical Forest Science, and the RAINFOR international research network. A recent extension of this project is the development of a remote-sensing synthetic aperture radar technology for measuring biomass stocks in forested ecosystems worldwide .

EMPLOYEMENT

- Since 2011 **Team leader** of the group 'Dynamique écologique et évolutive des populations' (22 faculty and staff) in the Research Unit EDB (40 staff)
- 2008-2011 **Professeur chargé de cours, Ecole Polytechnique.**
- Since 2008 **Directeur de Recherches, CNRS** (senior staff researcher)
- 2005 **Habilitation à Diriger des Recherches.** Université Paul Sabatier (jury: Christophe Thébaud, Michel Loreau, François Houllier, Manolo Gouy).

2003 **Chargé de recherche CNRS (CR1)**. Laboratoire Evolution et Diversité Biologique (UMR 5174 CNRS/Université Paul Sabatier, directrice : Prof. Brigitte Crouau-Roy).

2001 **Chargé de recherche CNRS (CR2)**. Laboratoire Ecologie Terrestre (junior staff researcher).

1999-2000 **Post-doctoral fellowship**. Dept Ecology and Evolutionary Biology, Princeton University (NJ, USA). Advisors Simon Levin and Stephen Pacala

1997-1999 **TA in mathematics**. Ecole Supérieure de Physique-Chimie Industrielle de la Ville de Paris.

1995-1996 **Military service**. CEA, Direction des Applications Militaires, Limeil-Valenton. Code development for the laser-plasma interaction.

TITLES AND DISTINCTIONS

Bronze Medal CNRS 2004

IRPE Prize 2011

EDITORIAL ACTIVITY

Member of the editorial board of *Ecology Letters* (since 2004), *PLoS ONE* (since 2007), *Journal of Theoretical Biology* (since 2006), and *Population Ecology* (since 2008).

RESEARCH FUNDING

2011- LABEX CEBA 'Center for the study of Biodiversity in Amazonia' (PI, 12,000,000 € for the period 2011-2020)

2011- ANR METABAR 'Metabarcoding of environmental diversity' (coPI, 550,000 € for the period 2012-2015; PI: P Taberlet)

2011- DEEP team funds (30,000 €/year recurrent funding from CNRS and Université Toulouse) French Pyrénées, la Réunion and French Guiana

2007-2010 ANR-Biodiversité BRIDGE (PI, 776,000 €) French Guiana

2008-2011 COPAS project (co-PI, 460,000 €) French Guiana

2007- Recurrent funding for the Nouragues CNRS field Station (PI 100,000 €/year) French Guiana

2010-2012 Fondation pour la Recherche sur la Biodiversité (PI 40,000 €) Brazil and Bolivia

2008-2011 CNRS Amazonie grant (PI 160,000 €) French Guiana

PEER-REVIEWED PUBLICATIONS

1. G Chust, X Irigoien, J Chave, R Harris 2012. Latitudinal phytoplankton distribution and the neutral theory of biodiversity. *Global Ecology and Biogeography*, in press
2. WF Laurance (+ 215 coauthors) 2012. Averting biodiversity collapse in tropical forest protected areas. *Nature*, doi:10.1038/nature11318
3. TR Feldpausch, J Lloyd, SL Lewis, RJW Brienen, M Gloor, A Monteagudo Mendoza, G Lopez-Gonzalez, L Banin, K. Abu Salim, K Affum-Baffoe, M Alexiades, S Almeida, I Amaral, A Andrade, LEOC Aragão, A Araujo Murakami, EJMM Arets, L Arroyo, GA Aymard, TR Baker, O Banki, NJ Berry, N Cardozo, J Chave, JA Comiskey, E Alvarez, A de Oliveira, A Di Fiore, G Djangbletey, TF Domingues, TL Erwin, PM Fearnside, MB França, MA Freitas, N Higuchi, E Honorio, Y Iida, E Jimenez, AR Kassim, TJ Killeen, WF Laurance, JC Lovett, Y Malhi, BS. Marimon, BH Marimon-Junior, E Lenza, AR Marshall, C Mendoza, DJ Metcalfe, ETA Mitchard, DA Neill, BW Nelson, R Nilus, EM Nogueira, A Parada, KS-H Peh, A Pena-Cruz, MC Penuela, NCS Pitman, A Prieto, CA Quesada, F Ramirez, H Ramirez-Angulo, JM Reitsma, A Rudas, G Saiz, RP Salomao, M Schwartz, N Silva, JE Silva-Espejo, M Silveira, B Sonké, J Stropp, HE Taedoumg, S Tan, H ter Steege, J Terborgh, M Torello-Raventos, GMF van der Heijden, R vasquez, E villanova, VA Vos, L White, S Willcock, H Wöll, and OL Phillips. 2012. Tree height integrated into pantropical biomass forest estimates. *Biogeosciences*. 9, 3381-3403.

4. EA Courtois, C Baraloto, CET Paine, P Petronelli, P-A Blandinieres, D Stien, E Houel, J-M Bessiere, J Chave 2012. Differences in volatile terpene composition between the bark and leaves of tropical tree species. *Phytochemistry*, in press.
5. PC Dubois-Fernandez, T Le Toan, S Daniel, H Oriot, J Chave, L Blanc, L Villard, MWJ Davidson, M Petit 2012. The TropiSAR airborne campaign in French Guiana: objectives, description, and observed temporal behavior of the backscatter signal. *IEEE Transactions on Geoscience and Remote Sensing*, 50, 3228-3241
6. C Suchet, V Simon, C Raynaud, J Chave 2012. Reproducibility of flower scent emissions in two wild subspecies of snapdragon, *Antirrhinum majus*. *Environmental Engineering and Management Journal*, in press.
7. L Bardon, J Chamagne, KG Dexter, CA Sothers, GT Prance, J Chave 2012. Origin and evolution of the Chrysobalanaceae family: insights into the evolution of plants in the Neotropics. *Botanical Journal of the Linnean Society*, in press.
8. G Vincent, D Sabatier, L Blanc, J Chave, E Weissenbacher, R Pélissier, E Fonty, J-F Molino, P Couteron 2012. Accuracy of small footprint airborne LiDAR in its predictions of tropical moist forest stand structure. *Remote Sensing of the Environment*, in press.
9. Yoccoz NG, Bråthen KA, Gielly L, Haile J, Edwards ME, Goslar T, von Stedingk H, Brysting AK, Coissac E, Pompanon F, Sønsteby JH, Miquel C, Valentini A, de Bello F, Chave J, Thuiller W, Wincker P, Cruaud C, Gavory F, Rasmussen M, Gilbert MTP, Orlando L, Brochmann C, Willerslev E, Taberlet P 2012. DNA from soil mirrors plant taxonomic and growth form diversity. *Molecular Ecology*, 21, 3647-3655.
10. N Mouquet, V Devictor, CN Meynard, F Munoz, LF Bersier, J Chave, P Couteron, A Dalecky, C Fontaine, D Gravel, OJ Hardy, F Jabot, S Lavergne, M Leibold, D Mouillot, T Munkemuller, S Pavoine, A Prinzing, ASL Rodrigues, RP Rohr, E Thebault, W Thuiller. 2012 Ecophylogenetics: advances and perspectives. *Biological Reviews*, in press.
11. C Baraloto, OJ Hardy, CET Paine, KG Dexter, C Cruaud, LT Dunning, MA Gonzalez, JF Molino, D Sabatier, V Savolainen, J Chave. 2012. Using functional traits and phylogenetic trees to examine the assembly of tropical tree communities. *Journal of Ecology*, 100, 690-701.
12. CET Paine, N Norden, J Chave, PM Forget, C Fortunel, KG Dexter, C Baraloto. 2012 Phylogenetic density dependence and environmental filtering predict seedling mortality in a tropical forest. *Ecology Letters* 15 34-41.
13. F Hibert, D Sabatier, J Andrivot, C Scotti-Saintagne, S Gonzalez, M-F Prevost, P Grenand, J Chave, H Caron, C Richard-Hansen. 2011. Botany, genetics and ethnobotany: a crossed investigation on the elusive tapir's diet in French Guiana. *PLoS ONE*. 6, e25850.
14. B Hérault, B Bachelot, F Bongers, J Chave, CET Paine, L Poorter, V Rossi, C Baraloto. 2011. Functional traits predict ontogenetic growth trajectories of tropical trees. *Journal of Ecology*. 99, 1431-1440
15. F Jabot, J Chave 2011. Analyzing tropical forest tree species abundance distributions using a non-neutral model and through approximate Bayesian inference. *American Naturalist*. 178, E37-E47.
16. TR Feldpausch, L Banin, OL Phillips, TR Baker, SL Lewis, CA Quesada, K Affum-Baffoe, EJMM Arets, NJ Berry, M Bird, ES Brondizio, P de Camargo, J Chave, G Djagbletey, TF Domingues, M Drescher, PM Fearnside, MB França, NM Fyllas, G Lopez-Gonzalez, A Hladik, N Higuchi, MO Hunter, Y Iida, K. Abu Silam, AR Kassim, M Keller, J Kemp, DA King, JC Lovett, BS. Marimon, BH Marimon-Junior, E Lenza, AR Marshall, DJ Metcalfe, ETA Mitchard, EF Moran, BW Nelson, R Nilus, EM Nogueira, M Palace, S Patiño, KS-H Peh, MT Raventos, JM Reitsma, G Saiz, F Schrodte, B Sonké, HE Taedoumg, S Tan, L White, H Wöll, and J Lloyd. 2011. Height-diameter allometry of tropical forest trees. *Biogeosciences*. 8, 1081-1106
17. CET Paine, C Baraloto, J Chave, B Hérault 2011 Functional traits of individual trees reveal ecological constraints on community assembly in tropical rain forests. *Oikos*. 120, 720-727.
18. C Suchet, L Dormont, B Schatz, M Giurfa, V Simon, C Raynaud, J Chave 2011 Floral scent variation in two *Antirrhinum majus* subspecies influences the choice of naïve bumblebees. *Behavioural Ecology and Sociobiology*. 65, 1015-1027.
19. P Ciais, A Bombelli, M Williams, SL Piao, J Chave, CM Ryan, M Henry, P Brender, R Valentini 2011 The carbon balance of Africa: synthesis of recent research studies. *Philosophical Transactions of the Royal Society B*. 369, 2038-2057.
20. N Delbart, P Ciais, J Chave, N Viomy, Y Malhi, T Le Toan. 2010. Mortality as a key driver of the spatial distribution of aboveground biomass in Amazonian forests: results from a Dynamic Vegetation Model. *Biogeosciences* 7, 3027-3039
21. NJB Kraft, MR Metz, RS Condit, J Chave. 2010. The relationship between wood density and mortality in a global tropical forest dataset. *New Phytologist* 188, 1124-1136

22. C Baraloto, CET Paine, L Poorter; J Beauchêne, D Bonal, A-M Domenach; B Hérault, S Patino, J-C Roggy, J Chave 2010. Decoupled leaf and stem economics in rain forest trees *Ecology Letters* 13, 1338-1347
23. SJ DeWalt, SA Schnitzer, J Chave, F Bongers, RJ Burnham, Z Cai, G Chuyong, DB Clark, CEN Ewango, JJ Gerwing, E Gortaire, T Hart, G Ibarra-Manriquez, K Ickes, D Kenfack, MJ Macia, J-R Makana, M Martinez-Ramos, J Mascaro, S Moses, HC Muller-Landau, MPE Parren, N Parthasarathy, DR Perez-Salicrup, FE Putz, H Romero-Saltos, D Thomas 2010. Annual rainfall and seasonality predict pan-tropical patterns of liana density and basal area. *Biotropica* 42, 309-317
24. C Baraloto, CET Paine, S Patiño, D Bonal, B Hérault, J Chave 2010. Functional trait variation and sampling strategies in species-rich plant communities. *Functional Ecology* 24, 208-216
25. J Chave, D Navarrete, S Almeida, E. Álvarez, L. E. O. C. Aragão, D. Bonal, P. Châtelet, J. E. Silva-Espejo, J.-Y. Goret, P. von Hildebrand, E. Jiménez, S. Patiño, M. C. Peñuela, O. L. Phillips, P. Stevenson, and Y. Malhi 2010. Regional and seasonal patterns of litterfall in tropical South America. *Biogeosciences* 7, 43-55.
26. E Courtois, CET Paine, P-A Blandinieres, D Stien, J-M Bessiere, E Houel, C Baraloto, J Chave. 2009. Diversity of the volatile organic compounds emitted by 55 species of tropical trees: a survey in French Guiana. *Journal of Chemical Ecology* 35, 1349-1362
27. MA Gonzalez, A Roger, E Courtois, F Jabot, N Norden, B Riera, CET Paine, C Baraloto, C Thebaud, J Chave. 2009. Shifts in species and phylogenetic diversity between sapling and tree communities indicate negative density-dependence in a lowland rain forest. *Journal of Ecology* 98, 137-146
28. S Patiño, J Lloyd, R Paiva, TR Baker, CA Quesada, LM Mercado, J Schmerler, M Schwarz, AJB Santos, A Aguilar, CI Czimczik, J Gallo, V Horna, EJ Hoyos, EM Jimenez, W Palomino, J Peacock, A Peña-Cruz, C Sarmiento, A Sota, JD Turriago, B Villanueva, P Vitzthum, E Alvarez, L Arroyo, C Baraloto, D Bonal, J Chave, ACL Costa, R Herrera, N Higuchi, T Killeen, E Leal, F Luizão, P Meir, A Monteagudo, D Neil, P Núñez-Vargas, MC Peñuela, N Pitman, N Priante Filho, A Prieto, SN Panfil, A Rudas, R Salomão, N Silva, M Silveira, S Soares de Almeida, A Torres-Lezama, R Vásquez-Martínez, I. Vieira, Y Malhi, and OL Phillips. 2009. Branch xylem density variations across the Amazon Basin. *Biogeosciences* 6, 545-568
29. MA Gonzalez, C Baraloto, J Engel, SA Mori, P Petronelli, B Riera, A Roger, C Thebaud, J Chave. 2009. Identification of Amazonian trees with DNA barcodes, *PLoS ONE* 4, e7483
30. JS Powers, RA Montgomery, EC Adair, FQ Brearley, SJ DeWalt, CT Castanho, J Chave, Erika Deinert, JU Ganzhorn, ME Gilbert, JA Gonzalez, S Bunyavejchewin, HR Grau, KE Harms, A Hiremath, S Iriarte-Vivar, E Manzano, AA de Oliveira, L Poorter, J-B Ramanamanjato, C Salk, A Varela, GD Weiblen, MT Lerdau. 2009. Decomposition in tropical forests: a pan-tropical study of the effects of litter type, litter placement and mesofaunal exclusion across a precipitation gradient. *Journal of Ecology* 97, 801-811.
31. OL Phillips, LEOC Aragão, SL Lewis, JB Fisher, J Lloyd, G López-González, Y Malhi, A Monteagudo, J Peacock, CA Quesada, G van der Heijden, S Almeida, I Amaral, Luzmila Arroyo, G Aymard, TR Baker, O Bánki, L Blanc, D Bonal, P Brando, J Chave, AC Alves de Oliveira, ND Cardozo, CI Czimczik, TR Feldpausch, MA Freitas, E Gloor, Niro Higuchi, E Jiménez, G Lloyd, P Meir, C Mendoza, A Morel, David A. Neill, Daniel Nepstad, Sandra Patiño, MC Peñuela, A Prieto, F Ramírez, M Schwarz, J Silva, M Silveira, AS Thomas, H ter Steege, J Stropp, R Vásquez, P Zelazowski, EA Dávila, S Andelman, A Andrade, K-J Chao, T Erwin, A Di Fiore, E Honorio C., H Keeling, TJ Killeen, WF Laurance, A Peña Cruz, NCA Pitman, P Núñez Vargas, H Ramírez-Angulo, A Rudas, R Salamão, N Silva, J Terborgh, A Torres-Lezama. 2009. Drought Sensitivity of the Amazon Rainforest. *Science*, 323, 1344-1347
32. J Chave, D Coomes, S Jansen, SL Lewis, NG Swenson, AE Zanne. 2009. Towards a worldwide wood economics spectrum. *Ecology Letters*, 12, 351-366
33. M. Gloor, OL Phillips, JJ Lloyd, SL Lewis, Y Malhi, TR Baker, G Lopez-Gonzalez, J Peacock, S Almeida, AC Alves de Oliveira, E Alvarez, I Amaral, L Arroyo, G Aymard, O Banki, L Blanc, D Bonal, P Brando, KJ Chao, J Chave, N Davila, T. Erwin, J Silva, A. Di Fiore, T. Feldpausch, A Freitas, R Herrera, N Higuchi, E Honorio, E Jimenez, T Killeen, W Laurance, C Mendoza, A Monteagudo, A Andrade, D Neill, D Nepstad, P Nunez Vargas, MC Penuela, A Pena Cruz, A Prieto, N Pitman, C Quesada, R Salomao, M Silveira, M Schwartz, J Stropp, F Ramirez, H Ramirez, A Rudas, H ter Steege, N Silva, A Torres, J Terborgh, R. Vasquez, G. van der Heijden. 2009. Does the disturbance hypothesis explain the biomass increase in basin-wide Amazon forest plot data? *Global Change Biology* 15, 2418-2430
34. L Blanc, M Echard, B Hérault, D Bonal, E Marcon, J Chave, C Baraloto. 2009. Dynamics of aboveground carbon stocks in a selectively logged tropical forest. *Ecological Applications* 19, 1397-1404
35. F Jabot, J Chave. 2009 Inferring the parameters of the neutral theory of biodiversity using phylogenetic information and implications for tropical forests *Ecology Letters* 12, 239-248

36. N Norden, J Chave, P Belbenoit, A Caubere, P Chatelet, P-M Forget, B Riera, J Viers, C Thébaud. 2009. Interspecific variation in seedling responses to seed limitation and habitat conditions for 14 Neotropical woody species. *Journal of Ecology* 97, 186-197
37. N. Norden, M Daws, C. Antoine, M-A Gonzalez, N. Garwood, J. Chave. 2008. The relationship between seed mass and mean time to germination for 1,037 tree species across five tropical forests. *Functional Ecology* in press
38. F Jabot, RS Etienne, J Chave. 2008. Reconciling neutral community models and environmental filtering: theory and an empirical test. *Oikos* 117, 1308-1320.
39. J. Chave, J Olivier, F Bongers, P Châtelet, P-M Forget, P. van der Meer, N Norden, B Riéra, P Charles-Dominique. 2008 Aboveground biomass and productivity in a rain forest of eastern South America. *Journal of Tropical Ecology*. 24, 355-366.
40. J Chave, R Condit, H. C. Muller-Landau, S. C. Thomas, P. S. Ashton, S. Bunyavejchewin, L. L. Co, H. S. Dattaraja, S. J. Davies, S. Esufali, C. E.N. Ewango, K. J. Feeley, R. B. Foster, N. Gunatilleke, S. Gunatilleke, P. Hall, T. B. Hart, C. Hernández, S. P. Hubbell, A. Itoh, S. Kiratiprayoon, J. V. LaFrankie, S. Loo de Lao, J.-R. Makana, Md. Nur Supardi Noor, A. Rahman Kassim, C. Samper, R. Sukumar, H. S. Suresh, S. Tan, J. Thompson, Ma. D. C. Tongco, R. Valencia, M. Vallejo, G. Villa, T. Yamakura, J. K. Zimmerman, E. C. Losos. 2008. Assessing evidence for a pervasive alteration in tropical tree communities *PLoS Biology*, 6, e45
41. N. Norden, J. Chave, P. Belbenoit, A. Caubère, P. Châtelet, P.-M. Forget, C. Thébaud. 2007. Mast fruiting is a frequent strategy in woody species of Eastern South America. *PLoS ONE*, 2, e1079
42. J. Chave (in press). Competition, neutrality, and community organization. Ed Simon A Levin, *The Princeton Guide to Ecology*. Princeton University Press.
43. K.J. Feeley, S.J. Davies, P.S. Ashton, S. Bunyavejchewin, M.N. Nur Supardi, Abd Rahman Kassim, S. Tan, J. Chave. The role of gap phase processes in the biomass dynamics of tropical forests. 2007. *Proceedings of the Royal Society B* 274, 2857-2864
44. N Norden, J Chave, A Caubère, P Châtelet, N Ferroni, P-M Forget, C Thébaud. 2007. Is seedling dynamics determined by environment or by seed arrival? A test in a neotropical forest. *Journal of Ecology* 95, 507-516
45. J. Chave, N. Norden. 2007. Changes of species diversity in a simulated fragmented neutral landscape. *Ecological Modelling* 207, 3-10 .
46. J Chave. (in press) Spatial variation in tree species composition across tropical forests: pattern and process. Eds. Stefan Schnitzer and Walter Carson. *Tropical Forest Community Ecology* Blackwell
47. J. Chave, G. Chust, C. Thébaud. 2007. The importance of phylogenetic structure in biodiversity studies. In pp 151-167, Eds D Storch, P Marquet, and JH Brown. *Scaling Biodiversity*. Santa Fe Institute Editions
48. W.F. Laurance, H.E.M. Nascimento, S.G. Laurance, A. Andrade, J.E.L.S. Ribeiro, J.P. Giraldo, T.E. Lovejoy, R. Condit, J. Chave, K.E. Harms, and S. D'Angelo. 2006. Rapid decay of tree-community composition in Amazonian forest fragments. *Proceedings of the National Academy of Sciences USA* 103, 19010-19014
49. H. ter Steege, NCA Pitman, OL Phillips, J Chave, D Sabatier, A Duque, J-F Molino, M-F Prévost, R Spichiger, H Castellanos, P von Hildebrand, R Vásquez. 2006. Continental-scale patterns of canopy tree composition and function across Amazonia. *Nature* 443, 444-447
50. Y Malhi, D Wood, TR Baker, J Wright, OL Phillips, T Cochrane, P Meir, J. Chave, S Almeida, L Arroyo, N Higuchi, TJ Killeen, SG Laurance, WF Laurance, SL Lewis, A Monteagudo, DA Neill, P Nunez V, NCA Pitman, CA Quesada, R Salomao, JNM Silva, AT Lezama, J Terborgh, R Vasquez M, B Vinceti. 2006. The regional variation of above-ground live biomass in old-growth Amazonian forests. *Global Change Biology* 12, 1107-1138
51. J. Chave, R.S. Etienne, D. Alonso 2006. Comparing models of species abundance. *Nature* 441, E1
52. J. Chave, H. Muller-Landau, T. Baker, T. Easdale, H. ter Steege, CO Webb. 2006. Regional and phylogenetic variation of wood density across 2,456 neotropical tree species. *Ecological Applications* 16, 2356-2367 .
53. H.C. Muller-Landau, R. Condit, J. Chave, S.C. Thomas et 36 autres. (2006) Testing metabolic ecology theory for allometric scaling of tree size, growth, and mortality in tropical forests. *Ecology Letters* 9, 575-588
54. G Chust, A Perez-Haase, J Chave, J LI Pretus. 2006. Linking floristic patterns and plant traits of Mediterranean communities in fragmented habitats. *Journal of Biogeography* 33, 1235-1245
55. D. Sheil, A. Salim, J. Chave, J. Vanclay, and W. Hawthorne. 2006. Competition for light amongst tropical tree species. *Journal of Ecology* 94, 494-507
56. G. Chust, J. Chave, R. Condit, S. Aguilar, R. Perez, S. Lao. 2006. Determinants and spatial modeling of tree beta-diversity in a tropical forest landscape in Panama *Journal of Vegetation Science* 17, 83-92
57. S.A. Schnitzer, S.J. DeWalt, J. Chave. 2006. Censusing and measuring lianas: A quantitative comparison of the common methods. *Biotropica* 38, 581-591

58. JJ Gerwing, SA Schnitzer, RJ Burnham, F Bongers, J Chave, SJ DeWalt, C.E.N. Ewango, RB Foster, M. Martinez-Ramos, H.C. Muller-Landau, M. Parren, N. Parthasarathy, DR Pérez-Salicrup, DW Thomas 2006. Censusing lianas in tropical forests. *Biotropica* 38, 256-261
59. J. Chave, C. Andalo, S. Brown, M.A. Cairns, J.Q. Chambers, D. Eamus, H. Fölster, F. Fromard, N. Higuchi, T. Kira, J.-P. Lescure, H. Puig, B. Riéra, T. Yamakura. 2005. Tree allometry and improved estimation of carbon stocks and balance in tropical forests. *Oecologia* 145, 87-99
60. J. Chave, G. Chust, R. Condit, S. Aguilar, R. Perez, S. Lao. 2005. Error propagation and scaling for tropical forest biomass estimates. Eds OL Phillips and Y Malhi. *Tropical Forests and Global Atmospheric Change*. Oxford University Press pp 155-163
61. Y. Malhi, T.R. Baker, O.L. Phillips, S. Almeida, E. Alvarez, L. Arroyo, J. Chave, C.I. Czimczik, A. Di Fiore, N. Higuchi, T.J. Killeen, S.G. Laurance, W.F. Laurance, S.L. Lewis, L.M.M. Montoya, A. Monteagudo, D.A. Neill, P. Nunez V., S. Patiño, N.C.A. Pitman, C.A. Quesada, J.N.M. Silva, A.T. Lezama, R. Vasques Martinez, J. Terborgh, B. Vinceti, and J. Lloyd. 2004 The above-ground coarse wood productivity of 104 Neotropical forest plots. *Global Change Biology* 10, 563-591
62. J Chave. 2004. Neutral theory and community ecology. *Ecology Letters* 7, 241-253
63. S. DeWalt and J. Chave. 2004. Structure and biomass of four Neotropical forests. *Biotropica* 36, 7-19
64. C. Favier, J. Chave, A. Fabing, D. Schwartz, M.A. Dubois. 2004. Modelling forest-savanna mosaic dynamics in man-influenced environments: effects of fire, climate and soil heterogeneity *Ecological Modelling* 171, 85-102
65. J. Chave, R. Condit, S. Aguilar, A. Hernandez, S. Lao, R. Perez. 2004 Error propagation and scaling for tropical forest biomass estimates. *Philosophical Transactions of the Royal Society of London B* 359, 409-420
66. S.L. Lewis, O.L. Phillips, T.R. Baker, J. Lloyd, Y. Malhi, S. Almeida, N. Higuchi, W.F. Laurance, D. Neill, N. Silva, J. Terborgh, A. Torres Lezama, R. Vásquez M, S. Brown, J. Chave, C. Kuebler, P. Núñez, B. Vinceti. 2004 Concerted Changes in Tropical Forest Structure and Dynamics: Evidence from 50 South American long-term plots . In press. *Philosophical Transactions of the Royal Society of London B* 359, 421-436
67. O. Phillips, T. Baker, L. Arroyo, N. Higuchi, T. Killeen, W. F. Laurance, S. L. Lewis, J. Lloyd, Y. Malhi, A. Monteagudo, D. Neill, P. Núñez Vargas, N. Silva, J. Terborgh, R. Vásquez Martínez, M. Alexiades, S. Almeida, S. Brown, J. Chave, J. A. Comiskey, C. I. Czimczik, A. Di Fiore, T. Erwin, C. Kuebler, S. G. Laurance, H. E. M. Nascimento, W. Palacios, S. Patiño, N. Pitman, J. Olivier, C. A. Quesada, M. Saldias, A. Torres Lezama, B. Vinceti. 2004 Pattern and process in Amazon tree turnover, 1976-2001. *Philosophical Transactions of the Royal Society of London B* 359, 381-408
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