

# Curriculum Vitae

Name	Ruokolainen, Kalle
Gender	Male
ORCID	0000-0002-7494-9417
ResearcherID	G-3141-2013
Date of birth	March 28, 1964
Citizenship	Finnish
Residence	Turku, Finland

## Education

PhD in plant ecology, University of Turku, PhD graded "laudatur"	1996
MSc in plant systematics and ecology, University of Helsinki	1990
Senior graduation, Hollolan lukio	1983

## Adjunct professorships (title of docent)

Nominated as adjunct professor in biogeography at the University of Turku in 2008

## Professional appointments

Part-time (50%) teaching associate professor, Department of Biology - Ecoinformatics and Biodiversity, Aarhus University	1.8.2023 (the contract ends 31.7.2024)
Lecturer in plant ecology, Department of Biology, University of Turku (kasviekologian yliopistonlehtori)	1.8.2018- 31.8.2020
Researcher in the project "Large-scale subclimax in the Amazonian lowland forest due to pre-colombian deforestation" funded by the Finnish Academy and run at the University of Turku and University of Helsinki	1.10.2016- 31.7.2018
Lecturer in plant ecology, Department of Biology, University of Turku (kasviekologian yliopistonlehtori)	1.9.2011- 27.6.2016
Teaching assistant in botany, Department of Biology, University of Turku (kasvitieteen asistentti)	1.8.2007- 31.8.2011
Lecturer in biodiversity research, Department of Biology, University of Turku (biodiversiteettitutkimuksen lehtori)	1.8.2003- 31.7.2008
Teaching assistant in botany, Department of Biology, University of Turku (kasvitieteen asistentti)	1.9.2001- 31.8.2006
Technical assistant in a Finnish-Peruvian development aid project "Biological Diversity of Peruvian Amazon" with special reference to regional analysis of biodiversity in lowland Amazonia	fourteen months between 1.10.1999- 30.9.2002
Researcher in the project "Developing multi-source forest inventory	1.1.2000-

methods and the use of indicator species for surveying tropical rain forests" funded by the Finnish Academy and run at the University of Turku and Finnish Forest Research Institute	31.7.2002
PI in the phytogeographical subproject of the "Origin and maintenance of biodiversity in the western Amazon: a multidisciplinary approach" funded by the Finnish Academy and run at the University of Turku	1997-1999
Research assistant of the Finnish Academy	1.8.1996- 31.7.1997
Research assistant, Department of Biology, University of Turku	1990-1996

## **Memberships in editorial boards of scientific journals**

Associate editor in Journal of Biogeography 2018–2021

## **Positions of trust**

Member of the Committee for the Development of the Library of the Faculty of Mathematics and Natural Sciences of the University of Turku (Turun yliopiston matemaattis-luonnontieteellisen tiedekunnan kirjaston neuvottelukunta) 2013 – 2015

Deputy member of the Faculty Council of the Faculty of Mathematics and Natural Sciences of the University of Turku (Turun yliopiston matemaattis-luonnontieteellisen tiedekunnan johtokunnan varajäsen) 1.4.2010 – 31.12.2013.

Chairman of the Turku Society for Zoological and Botanical Research (Turun Eläin- ja Kasvitieteellinen Seura, <http://org.utu.fi/harrastus/TEKS/>) 1.1.2004 – 31.12.2023.

Member of the Steering Committee of the Laboratory of Computerized Cartography at the University of Turku 2003–2016.

Member in the Steering Committee of the Management of Ruissalo Recreational Area in Turku (Ruissalon kehitystyöryhmän jäsen) 2003-2007.

## **Prices and acknowledgements**

The Department of Biology at the University of Turku evaluated my teaching skills as excellent, the best possible category, in an evaluation carried out in March 8th 2013 as a part of a process for nominating a new lecturer in ecology.

The Finnish association of nature conservation, section of Lapland (Suomen luonnon suojeleliiton Lapin luonnon suojelelii), year 2007 price for action for the environment through signing a petition for the conservation of forests in Lapland (<http://www.sll.fi/lappi/tiedotus/tiedote5kesakuu07>).

Honorary mention of the Faculty of Biosciences at the University of Helsinki for good supervision of master's thesis in the year 2007. In Finnish: "Helsingin yliopiston biotieteellisen tiedekunnan kunniamaininta hyvästä pro gradu -tutkielman ohjauksesta 2007".

## **Appointments in academic dissertations**

One of the three members of the evaluation committee of the PhD-thesis of Maximilien Guèze, Universitat Autònoma de Barcelona, Spain. Defence on December 20, 2011.

Member of the PhD committee of Mark Higgins, Duke University, Durham, USA. Defence on June 7, 2010.

Member of the PhD committee of Lazarus Pomara, University of Texas, Austin, USA. Defence on November 11, 2009.

One of the three members of the evaluation committee of the PhD-thesis of Neil Gale, January 1998, University of Aarhus, Denmark

## **Supervision of students**

### **PhD thesis; 11 completed, 3 abandoned academic career before completing the thesis:**

Jaana Vormisto, University of Turku. Palms in the rainforests of Peruvian Amazonia: Uses and distribution. 1996-2000. Co-supervision with Hanna Tuomisto.

Leif Schulman, University of Turku. The roles of ecology and environmental history in the evolution of the species of Adelobotrys, Melastomataceae. 1997-2003.

Sari Roponen, University of Stockholm. Floristic variation in eastern Ecuadorian mountain rain forests. Began 1998 and left without finishing for other work in 2004. Co-supervision with Bertil Ståhl.

Kati Salovaara, University of Turku. Habitat heterogeneity and mammalian diversity in the Peruvian Amazonia. 2003-2005. Co-supervision with Hanna Tuomisto.

Sirpa Thessler, University of Turku. Use of remote sensing techniques in revealing environmental and floristic patterns in Amazonian rainforests. 2000-2008. Co-supervision with Risto Kalliola and Erkki Tomppo.

Lazarus Pomara, University of Texas, Austin, USA. The distribution of Amazonian forest bird species in relation to geographic, climatic and vegetational differences. 2005-2009. (Member of the PhD committee.)

Mark Higgins, Duke University, USA. A practical procedure for mapping Amazonian rain forest vegetation. 2004-2010. (Member of the PhD committee.)

Outi Lähteenoja, University of Turku. Carbon dynamics and ecosystem diversity of Amazonian peatlands. 2008-2011. Co-supervision with Leif Schulman.

Riitta Kotiluoto, University of Turku. Forest plantations and their impact on biodiversity in Zanzibar. Began 2004, switched to another work without finishing in 2007.

Johanna Toivonen, University of Turku. Determinants of *Polylepis* (Rosaceae) forest distribution and treeline formation in the High Andes. 2005-2014

Nelly Llerena, University of Turku. Melastomataceae as an indicator family for forest types in Amazonia. Began 2005, switched to another work without finishing in 2010.

Jussi Lampinen, University of Turku. Conservation of plant species typical to dry meadows in Finland. 2014-2020.

Lassi Suominen, University of Turku. Towards forest site types as land use planning tools in western Amazonia: a trial of indicator species use and an exploration of forest structure across an edaphic boundary. 2006-2023. Co-supervision with Hanna Tuomisto

Pablo Pérez Chaves, University of Turku. Amazonian forest ecology seen from the air. 2017-2021. Co-supervision with Risto Kalliola and Hanna Tuomisto

### **Member in the advisory committee of a PhD-work:**

Kukka Kyrö, University of Helsinki. The effect of roof gardens on invertebrate diversity. Began in 2012.

Pavel Matos Maravi, University of Turku. On the diversification processes and the origin of diversity of satyrine butterflies (Lepidoptera, Nymphalidae, Satyrinae). Began 2011, my membership ceased in 2012 due to a change in the thesis topic of Pavel.

### **Master's thesis; 29 completed, 1 left university before completing the thesis:**

Juha Järvinen, University of Turku. Kenttämääritysopas Iquitosin alueen Virola -suvun lajeille. 1995-1998.

Hannele Koivunen, University of Turku. Lajien välisestä ja sisäisestä morfologisesta ja ekologisesta muuntelusta *Clidemia longifoliana* ja *Clidemia epiphytiana* varieteettien välillä. 1997-1998.

Johanna Toivonen, University of Turku. Reasons for different distance-decay of floristic similarity in geologically different surfaces in Peruvian Amazonia. 1999-2002.

- Lasse Ruokolainen, University of Turku. Kasvilajien sisäinen vaihtelu resurssiallokaatiossa lajien välisten runsausvaihteluiden selittäjänä. 2003-2004.
- Nelly Llerena, University of Turku. What determines the beta diversity of Melastomataceae at landscape scale? 2003-2004.
- Samuli Haataja, University of Turku. Ichneumonidae-loispistäisten habitaattipreferenssit Perun Amazonian tulvimattomissa sademetsissä. 2003-2005. Co-supervision with Ilari Sääksjärvi.
- Pirjo Isotupa, University of Turku. Jäkälälajiston vaihtelu hautausmaan kivillä kiven iän, kemian ja aspektin funktiona. 2004-2005.
- Suvi Kiviluoto, University of Turku. Aaltorasituksen vaikutus saariston moreenirantojen kasvillisuuteen. 2004-2006.
- Petra Mikkolainen, University of Turku. Irapayn (*Lepidocaryum tessmannii*) levin-neisyyteen ja runsauteen vaikuttavat tekijät Iquitos-Nauta -tien varrella. 2005-2006.
- Mikko Paajanen, University of Turku. Sekundaarimetsien hyväksikäyttöpotentiaalin paikallistuntemus Perun Amazoniassa. 2002-2006.
- Outi Lähteenaja, University of Helsinki. Iquitosin alueen palmusoiden turvevarannot. 2006-2007. Co-supervision with Leif Schulman.
- Anu Veijalainen, University of Turku. Loispistäislajiston lateraalinen, vertikaalinen ja temporaalinen vaihtelu Länsi-Amazoniassa. 2006-2008. Co-supervision with Ilari Sääksjärvi.
- Karen Eckhardt, University of Turku. Bird species distributions in Loreto. 2005-2008.
- Pia Winberg, University of Turku. Species inventories in megadiverse Peru – spatial distribution of vascular, butterfly and beetle surveys. 2006-2016. Co-supervision with Ilari Sääksjärvi.
- Illich Arista Tuanama, Universidad Nacional de la Amazonía Peruana, Iquitos, Peru. La importancia de vacíos de información biogeográfica para la planificación de áreas de conservación en Loreto. Began 2007, switched to another work without finishing in 2010.
- Emilia Ainikkämäki, University of Turku. The Implementation of Nature Conservation and Oil Production in Nature Reserves - cases Pacaya Samiria and Pucacuro in Peruvian Amazon. 2008-2010. Co-supervision with Matti Salo.
- Emma Kosonen, University of Turku. Lepakoiden aktiivisuuden alueellinen ja ajallinen vaihtelu Kaarinassa. 2009-2012.
- Maiju Kyyhkynen, University of Turku. Pomponrahkan lettosammallajiston muutos. 2011-2013.
- Javier Muro, University of Turku. Along-scan radiometric gradient in Landsat images: understanding the relation between floristic and remote sensing information in tropical forests. 2012-2014.
- Lasse Kurvinen, University of Turku. Linking habitat and environmental variables to changes in abundance of the Common Eider (*Somateria mollissima*) in the Archipelago Sea (SW Finland). 2012-2014. Co-supervision with Mikael Kilpi and Mikael Nordström.
- Hanna Urtti, University of Turku. Amazonian ombrótrofisten kohosoiden kasvillisuus. 2010-2014. Co-supervision with Outi Lähteenaja.
- Edwin Moses, University of Turku. Variation in structural features of Amazonian Melastomataceae along different edaphic gradients. 2013-2014.
- Huy Nguyen, University of Turku. Oak-inhabiting polypore species in Ruissalo national protected reserve. 2012-2015. Co-supervision with Seppo Huhtinen.
- Anna Koskela, University of Turku. The effects of reindeer grazing and habitat on the soil seed banks of calcium-rich arctic tundra heath vegetation. 2012-2015. Co-supervision with Lauri Oksanen.
- Merja Helve, University of Turku. Multifunctional neighbour trees – diversifying small-scale cocoa agroforestry systems in the upper Peruvian Amazon. 2013-2016. Co-supervision with Matti Salo.
- Fanny Vera, University of Turku. Can the timber volumes extracted in forest concessions in Peruvian lowland Amazonia be considered realistic? 2014-2015. Co-supervision with Matti Salo.

- Carol Castillo, University of Turku. Temporal and spatial variation of Pimplinae (Hymenoptera: Ichneumonidae) through an altitudinal gradient in the tropical Andes. Began 2014-2016. Co-supervision with Ilari Sääksjärvi.
- Kristiina Mutkala, University of Turku. Puulajikooostumuksen vaikutus metsän kenttäkerroskasvillisuuden sukkessioon. 2014-2016. Co-supervision with Kai Ruohomäki.
- Anni Pykönén, University of Turku. Classification of Finnish hemiboreal and southern boreal forests following the phytosociological classification system. 2016–2017. Co-supervision with Milan Chytry and Hanna Tuomisto.
- Fatih Kayaanan, University of Turku. Detecting patches of bamboo forest in the border zone between Brazil and Peru. 2017-2018. Co-supervision with Hanna Tuomisto and Jasper Van doninck.

**Tesis de biólogo; 3 completed:**

Victor Vargas, Universidad Nacional de la Amazonía Peruana, Iquitos, Peru. Posibilidad de usar 10 especies de palmeras como indicadores florísticos, utilidad de las palmeras y los valores de uso en los caseríos Puerto Izango y Nueva Esperanza Distrito de Pebas, Loreto - Perú. 1997-2000.

Rommel Montufar, Universidad Católica, Quito, Ecuador. Ecología de algunas palmeras económicamente importantes en el parque nacional Yasuní. 1997-1999.

Luis Rodriguez, Universidad Nacional de la Amazonía Peruana, Iquitos, Peru. Comparación de la estructura de bosques en dos superficies geológicamente diferentes. 2001-2004.

**Tesis de ingeniero forestal; 3 completed, 1 abondened:**

Alberto Torres, Universidad Nacional de la Amazonía Peruana, Iquitos, Peru. La ecología de las especies de Myristicaceae en los bosques de tierra firme de la zona de Iquitos. 1990-1996.

Alejandro Navarro, Universidad Nacional de la Amazonía Peruana, Iquitos, Peru. Variación del área basal en los bosques primarios de la Amazonía Peruana. Began 1998, left without finishing in 2001.

Kadir Zevallos Morey, Universidad de la Amazonía Peruana, Iquitos, Peru. Caracterización ecológica y aprovechamiento de dos especies del género Aspidosperma (Apocynaceae) en tres comunidades del río Nanay, Iquitos – Perú. 2001-2003.

Pablo Pérez Chaves, Universidad Nacional Agraria la Molina, Lima, Peru. Modelo predictivo del género *Dipteryx* en una concesión forestal con fines maderables en Madre de Dios. 2013-2014.

**Teaching in university appointments**

I've given lectures and hands-on teaching altogether for more than 2000 hours in courses under 34 different titles. In 20 of those, I've been the main responsible teacher of the course. The courses have dealt with plant ecology, plant morphology, taxonomy, biogeography, numerical analysis methods in ecology, application of GIS in ecology and identification of tropical plant families, Finnish vascular plants and Finnish macrofungi. Most of the teaching has taken place at the University of Turku but, I've also given three courses in Universidad Nacional de la Amazonía Peruana, one course in Pontificia Universidad Católica del Ecuador, one course in University of Göttingen and one course in Universiti Malaysia Sabah.

## List of publications of Kalle Ruokolainen

May 1, 2024

### Articles in scientific journals with referee practice

82. Matas-Granados, L., Draper, F., Cayuela, L., de Aledo, J., Arellano, G., Ben Saadi, C., Baker, T., Phillips, O., Honorio, E., Ruokolainen, K., García-Villacorta, R., Roucoux, K., Guèze, M., Valderrama Sandoval, E., Fine, P., Amasifuen Guerra, C., Zarate Gomez, R., Stevenson, P., Monteagudo-Mendoza, A., Vasquez, R., Socolar, J., Disney, M., del Aguila Pasquel, J., Flores Llampazo, G., Vega Arenas, J., Reyna Huaymacari, J., Grandez Rios, J., Macía, M. 2024. Understanding different dominance patterns in western Amazonian forests. **Ecology Letters** 27:e14351. <https://doi.org/10.1111/ele.14351>
81. Zuquim, G., Van doninck, J., Chaves, P.P., Quesada, C.A., Ruokolainen, K. & Tuomisto, H. 2023. Introducing a map of soil base cation concentration, an ecologically relevant GIS-layer for Amazonian forests. **Geoderma Regional** 33: e00645. <https://doi.org/10.1016/j.geodrs.2023.e00645>
80. Virtanen, P.K., Apurinã, F., Ruokolainen, K. & Manchineri, L. 2022. The Role of Guadua Bamboo in Land Management and Indigenous Perspectives on Bamboo Ecosystems in Southwestern Amazonia. **Human Ecology** 50: 1077–1088. <https://doi.org/10.1007/s10745-022-00376-8>
79. Moulatlet, G.M., Rennó, C.D., Figueiredo, F.O.G., Ruokolainen, K., Banon, L., Emilio, T., Balslev, H. & Tuomisto, H. 2022. The role of topographic-derived hydrological variables in explaining plant species distributions in Amazonia. **Acta Amazonica** 52(3): 218–228. <https://doi.org/10.1590/1809-4392202103682>
78. Chaves, P.P., Ruokolainen, K., Van doninck, J. & Tuomisto, H. 2022. Impact of spatial configuration of training data on the performance of Amazonian tree species distribution models. **Forest Ecology & Management** 504: 119838. <https://doi.org/10.1016/j.foreco.2021.119838>
77. Kalliola, R., Linna, A., Ruokolainen, K., Tyystjärvi, E. & Lange, C. 2022. Foliar element distributions in Guadua bamboo, a major forest dominant in southwestern Amazonia. **SN Applied Sciences** 4:81. <https://doi.org/10.1007/s42452-021-04927-4>
76. Zuquim, G., Tuomisto, H., Chaves, P.P., Emilio, T., Moulatlet, G.M., Ruokolainen, K., Van doninck, J. & Balslev, H. 2021. Revealing floristic variation and map uncertainties for different plant groups in western Amazonia. **Journal of Vegetation Science** 32(5): e13081. <https://doi.org/10.1111/jvs.13081>
75. ForestPlots.net (Ruokolainen K. no. 325 in the total list of 602 authors). 2021. Taking the pulse of Earth's tropical forests using networks of highly distributed plots. **Biological Conservation** 260: 108849. <https://doi.org/10.1016/j.biocon.2020.108849>
74. Draper, F.C. et al. (Ruokolainen K. no. 21 in the total list of 143 authors). 2021. Amazon tree dominance across forest strata. **Nature ecology & evolution** 5: 757–767 DOI: 10.1038/s41559-021-01418-y
73. Asevedo, L., Ranzi, A., Kalliola, R., Pärssinen, M., Ruokolainen, K., Cozzuol, M.A., Rodrigues do Nascimento, E., Negri, F.R., Souza-Filho, J.P., Cherkinsky, A. & Dantas, M.A.T. 2021. Isotopic paleoecology ( $\delta^{13}\text{C}$ ,  $\delta^{18}\text{O}$ ) of late Quaternary herbivorous mammal assemblages from southwestern Amazon. **Quaternary Science Reviews** 251(106700). <https://doi.org/10.1016/j.quascirev.2020.106700>
72. Chaves, P.P., Reategui Echeverri, N., Ruokolainen, K., Kalliola, R., Van doninck, J., Gómez Rivero, E., Zuquim, G. & Tuomisto, H. 2021. Using forestry inventories and satellite imagery to assess floristic and structural variation in bamboo-dominated forests in Peruvian Amazonia. **Journal of Vegetation Science** 32(1): e12938. <https://doi.org/10.1111/jvs.12938>
71. Van doninck, J., Westerholm, J., Ruokolainen, K., Tuomisto, H. & Kalliola, R. 2020. Dating flowering cycles of Amazonian bamboo-dominated forests by supervised Landsat time

- series segmentation. **International Journal of Applied Earth Observations and Geoinformation** 93(102196). <https://doi.org/10.1016/j.jag.2020.102196>
70. Chaves, P.P., Zuquim, G., Ruokolainen, K., Van doninck, J., Kalliola, R., Gómez Rivero, E. & Tuomisto, H. 2020. Mapping Floristic Patterns of Trees in Peruvian Amazonia Using Remote Sensing and Machine Learning. **Remote Sensing** 12(1523). <https://doi.org/10.3390/rs12091523>
  69. Ferreira, E., Kalliola, R. & Ruokolainen, K. 2020. Bamboo, climate change and forest use: A critical combination for southwestern Amazonian forests? **Ambio** 49: 1353–1363. <https://doi.org/10.1007/s13280-019-01299-3>
  68. Van doninck, J., Jones, M.M., Zuquim, G., Ruokolainen, K., Moulatlet, G.M., Sirén, A., Cárdenas, G., Lehtonen, S. & Tuomisto, H. 2020. Multispectral canopy reflectance improves spatial distribution models of Amazonian understory species. **Ecography** 43: 128–137. <https://doi.org/10.1111/ecog.04729>
  67. Kalliola, R., Linna, A., Toivainen, L. & Ruokolainen, K. 2019. Phytolith assemblages in the leaves of *Guadua* Bamboo in Amazonia. **Journal of Bamboo and Rattan** 18(2): 31-43. [http://www.jbronline.org/articles/JBR\\_18%282%29\\_31-43.pdf](http://www.jbronline.org/articles/JBR_18%282%29_31-43.pdf)
  66. Ruokolainen, K., Moulatlet, G.M., Zuquim, G., Hoorn, C. & Tuomisto, H. 2019. Geologically recent rearrangements in central Amazonian river network and their importance for the riverine barrier hypothesis. **Frontiers of Biogeography** 11(3). <https://doi.org/10.21425/F5FBG45046>
  65. Rossetti, D.F., Moulatlet, G.M., Tuomisto, H., Gribel, R., Toledo, P.M., Valeriano, M.M., Ruokolainen, K., Cohen, M.C.L., Cordeiro, C.L.O., Rennó, C.D., Coelho, L.S. & Ferreira C.A.C. 2019. White sand vegetation in an Amazonian lowland under the perspective of a young geological history. **Annals of the Brazilian Academy of Sciences** 91(4). <https://doi.org/10.1590/0001-3765201920181337>
  64. Tuomisto, H., Van doninck, J., Ruokolainen, K., Moulatlet, G., Figueiredo, F., Sirén, A., Cárdenas, G., Lehtonen, S. & Zuquim, G. 2019. Discovering floristic and geoevolutional gradients across Amazonia. 2019. **Journal of Biogeography** 46: 1734–1748. <https://doi.org/10.1111/jbi.13627>
  63. Zuquim, G., Stropp, J., Moulatlet, G., Van doninck, J., Quesada, C.A., Figueiredo, F., Costa, F., Ruokolainen, K. & Tuomisto, H. 2019. Making the most of scarce data: mapping soil gradients in data-poor areas using species occurrence records. **Methods in Ecology and Evolution** 10: 788–801. <https://doi.org/10.1111/2041-210X.13178>
  62. Pérez Chaves, P., Ruokolainen, K. & Tuomisto, H. 2018. Using remote sensing to model tree species distribution in Peruvian lowland Amazonia. **Biotropica** 50: 758–767. <https://doi.org/10.1111/btp.12597>
  61. Honkola, T., Ruokolainen, K., Syrjänen, K.J.J., Leino, U.-P., Tammi, I., Wahlberg, N. & Vesakoski, O. 2018. Evolution within a language: Environmental differences contribute to divergence of dialect groups. **BMC Evolutionary Biology** 18: 132. <https://doi.org/10.1186/s12862-018-1238-6>
  60. Slik, F. et al. (Ruokolainen K. no. 131 in the total list of 185 authors). 2018. A phylogenetic classification of the world's tropical forests. **PNAS** 115: 1837–1842. <https://doi.org/10.1073/pnas.1714977115>
  59. Toivonen, J.M., Gonzales-Inca, C.A., Bader, M.Y., Ruokolainen, K. & Kessler, M. 2018. Elevational shifts in the topographic position of *Polylepis* forest stands in the Andes of southern Peru. **Forests** 9(1), 7. <https://doi.org/10.3390/f9010007>
  58. Moulatlet, G., Zuquim, G., Figueiredo, F.O.G., Lehtonen, S., Emilio, T., Ruokolainen, K. & Tuomisto, H. 2017. Using digital soil maps to infer edaphic affinities of plant species in Amazonia: problems and prospects. **Ecology and Evolution** 7: 8463–8477. <https://doi.org/10.1002/ece3.3242>
  57. Cámará-Leret, R., Tuomisto, H., Ruokolainen, K., Balslev, H. & Kristiansen, S.M. 2017. Modelling responses of western Amazonian palms to soil nutrients. **Journal of Ecology** 107: 367–381. <https://doi.org/10.1111/1365-2745.12708>

56. Tuomisto, H., Ruokolainen, K., Vormisto, J., Duque, A., Sánchez, M., Vargas Paredes, V. & Lähteenoja, O. 2017. Effect of sampling grain on patterns of species richness and turnover in Amazonian forests. **Ecography** 40: 840–852. <https://doi.org/10.1111/ecog.02453>
55. Coelho de Souza, F. et al. (Ruokolainen K. no. 56 in the total list of 77 authors) 2016. Evolutionary heritage influences Amazon tree ecology. **Proceedings of the Royal Society B: Biological Sciences** 283: 20161587.
54. Tuomisto, H., Moulatlet, G., Balslev, H., Emilio, T., Figuereido, F.O.G., Pedersen, D. & Ruokolainen, K. 2016. A compositional turnover zone of biogeographical magnitude within lowland Amazonia. **Journal of Biogeography** 43: 2400–2411.
53. Jones, M., Ruokolainen, K., Llerena Martínez, N.C. & Tuomisto, H. 2016. Differences in topographic and soil habitat specialisation between trees and two understorey plant groups in a Costa Rican lowland rainforest. **Journal of Tropical Ecology** 32: 482–497.
52. Muro, J., Van doninck, J., Tuomisto, H., Higgins, M., Moulatlet, G.M. & Ruokolainen, K. 2016. Floristic composition and across-track reflectance gradient in Landsat images over Amazonian forests. **ISPRS Journal of Photogrammetry and Remote Sensing** 119: 361–372.
51. Lampinen, J., Ruokolainen, K. & Huhta, A.-P. 2015. Urban Power line Corridors as Novel Habitats for Grassland and Alien Plant Species in South-Western Finland. **PLOS ONE**. <https://doi.org/10.1371/journal.pone.0142236>
50. Schulman, L.E. & Ruokolainen, K. 2015. *Adelobotrys tessmannii* (Merianieae, Melastomataceae) and allies: a refined circumscription and description of two new Amazonian species with notes on their ecology. **Phytotaxa** 234: 101–120.
49. Suominen, L., Ruokolainen, K., Pitkänen, T. & Tuomisto, H. 2015. Similar understorey structure in spite of edaphic and floristic dissimilarity in Amazonian forests. **Acta Amazonica** 45: 393–404.
48. Slik, F. et al. (Ruokolainen, K. no. 134 in the total list of 186 authors) 2015. An estimate of the number of tropical tree species. **PNAS** 112: 7472–7477.
47. Fauset, S. et al. (Ruokolainen, K. no. 23 in the total list of 99 authors) 2015. Hyperdominance in Amazonian forest carbon cycling. **Nature Communications** 6 no. 6857. <https://doi.org/10.1038/ncomms7857>.
46. Toivonen, J., Horna, V., Kessler, M., Ruokolainen, K. & Hertel, D. 2014. Interspecific variation in functional traits in relation to species climatic niche optima in Andean *Polyplepis* (Rosaceae) tree species: evidence for climatic adaptations. **Functional Plant Biology** 41: 301–312.
45. Pomara, L., Ruokolainen, K. & Young, K. R. 2014. Avian species composition and biogeographical partition: the roles of dispersal limitation and environmental heterogeneity at the Amazon River. **Journal of Biogeography** 41: 784–796.
44. Suominen, L., Ruokolainen, K., Tuomisto, H., Llerena, N. & Higgins, M.A. 2013. Predicting soil properties from floristic composition in western Amazonian rainforests: performance of k-nearest neighbour estimation and weighted averaging calibration. **Journal of Applied Ecology** 50: 1441–1449. <https://doi.org/10.1111/1365-2664.12131>
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