

COUTERON Pierre - Curriculum vitae - 14/07/2016

<p>COUTERON Pierre 01 June 1962</p>	<p>pierre.couteron@ird.fr <i>Postal professional addresses:</i> IRD, BP 1857, Yaounde, Cameroon, Phone : +237 651189278 UMR AMAP, Boulevard de la Lironde, TA A-51 /PS2, 34398 Montpellier cedex 5, France</p>
<p>Main topics/ key-words</p>	<p>Tropical vegetation, Spatial statistics, Image analysis, Forest structure and resource assessment, Community ecology.</p>
<p>Positions held</p>	<ul style="list-style-type: none"> • Senior Scientist (<i>Directeur de Recherche</i>) at IRD (www.ird.fr), posted at ENS-Univ. Yaounde 1, in Cameroon • 2010- 2014 Head of the AMAP lab 'Botany and Computational Plant Architecture'. The AMAP lab (http://amap.cirad.fr) is a joint laboratory of several French research agencies (Cirad, CNRS, INRA, IRD) and the University of Montpellier. It carries out researches at the interface between plant /vegetation science and applied mathematics. It features 112 staff members among which 50 permanent scientists holding PhD. • 2008- Directeur de Recherche (senior scientist) of IRD at UMR AMAP. IRD (<i>Institut de recherché pour le Développement</i>) is the French agency for research overseas and in the tropics • 2005-2008: Head of the Ecology Department of the French Institute of Pondicherry (India) • 2002-2005: Head of the teaching department for tropical forestry at ENGREF • 1988 – 2002: Assistant Professor in the tropical forestry department of ENGREF (National School for Forest and Water Engineering)
<p>Diplomas</p>	<ul style="list-style-type: none"> • 2006 - <i>Habilitation à Diriger des Recherches</i> - (Univ. Montpellier, UM2) • 1998 - PhD in Tropical Ecology (Univ. Toulouse III, France) • 1992 – Degree in Biostatistics (Univ. Montpellier, UM2, France) • 1985 - Forestry Engineer
<p>Other institutional functions</p>	<ul style="list-style-type: none"> • 2009 - 2014 In charge of the Pluridisciplinary Regional Program coordinating IRD teams in Central Africa • 2008 – in charge of coordinating one research team “Organization and dynamics of tree stands and landscape” of the AMAP lab • 2008 – 2015 Elected at the recruitment board of the University of Montpellier
<p>Teaching</p>	<ul style="list-style-type: none"> • 2008 - Tropical ecology, modeling (Msc), University of Montpellier • 2008 - spatial statistics for geomatics (M. Eng.) at ENGREF • 2005 – 2008 Community ecology (Msc), University of Pondicherry (India) • 1988 – 2005 Forest resource assessment, forest ecology (M. Eng.), ENGREF
<p>PhD supervision</p>	<p>Supervision of 8 PhD defended between 2004 and 2015. Supervisor of 5 ongoing PhD projects</p>

	<ul style="list-style-type: none"> • 80 publications referenced in the Web of Science (WoS) : 72 indexed journal papers plus 7 edited proceedings • 7 papers in non-indexed journals and 12 book chapters • Over 1,300 citations since 2011 in Google Scholar, > 2,600 overall (h=28) ; http://scholar.google.fr/citations?user=wKp9RhEAAA&hl=fr
<p>Selection of publications</p>	<ul style="list-style-type: none"> • Bastin, J.-F., Barbier, N., Couteron, P. et al.2014. Aboveground biomass mapping of African forest mosaics using canopy texture analysis: towards a regional approach. <i>Ecological Applications</i>, 24 (8): 1984-2001. • Couteron, P., Anthelme, F., Clerc, M., Escaff, D., Fernandez-Oto, C., Tlidi, M., 2014. Plant clonal morphologies and spatial patterns as self-organized responses to resource-limited environments. <i>Philosophical Transactions of the Royal Society A</i>, 372 (2027): 1471-2962. • Zhou J., Proisy C., Descombes X., le Maire G., Nouvellon Y., Stape J.-L., Viennois G., Zerubia J. & Couteron P. (2013) Mapping local density of young Eucalyptus plantations by individual tree detection in high spatial resolution satellite images. <i>Forest Ecology and Management</i>, 129-141. • Munoz F., Couteron P. & Hubbell S.P. (2012). Comment on “Global Correlations in Tropical Tree Species Richness and Abundance Reject Neutrality”, <i>Science</i>, 336, 1639. <ul style="list-style-type: none"> • Ploton P., Pélissier R., Proisy C., Flavenot T., Barbier N., Rai S.N., Couteron P. (2012) Assessing aboveground tropical forest biomass using Google Earth canopy images, <i>Ecological Applications</i>, 22(3), 993–1003. • Deblauwe V., Couteron P., Bogaert J., Barbier N. (2012) Determinants and dynamics of banded vegetation pattern migration in arid climates, <i>Ecol. Monographs</i>, 82, 3–21. • Barbier N., Proisy C., Véga, C., Sabatier D., & Couteron P. (2011) Bidirectional texture function of high resolution optical images of tropical forest: An approach using LiDAR hillshade simulations. <i>Remote Sensing of Environment</i>, 115, 167–179. • Barbier N., Couteron P., Proisy C., Y. Malhi & Gastellu-Etchegorry J.-Ph. (2010) The variation of apparent crown size and canopy heterogeneity across lowland Amazonian forests. <i>Global Ecol. and Biogeogr.</i>, 19, 72-84. • Munoz F., Couteron P. & Ramesh B.R. (2008) Beta-diversity in spatially-implicit neutral models: a new way to assess species migration. <i>Am. Nat.</i>, 172, 116-127. • Proisy Ch., Couteron P. & Fromard F. (2007) Predicting and mapping mangrove forest biomass from canopy grain analysis using Fourier-based textural ordination of IKONOS images, <i>Remote Sensing of Environment</i>, 109, 379-392. • Couteron P., Barbier N. & Gautier D. (2006) Textural ordination based on Fourier spectral decomposition: a method to analyze and compare landscape patterns. <i>Landscape Ecology</i>, 21, 555-567. • Couteron P., Pélissier R., Nicolini E. & Paget D. (2005) Predicting tropical forest stand structure parameters from Fourier transform of very high resolution canopy images. <i>Journal of Applied Ecology</i>, 42, 1121-1128. • Couteron P. & Ollier S. (2005) A generalized, variogram-based framework for multiscale ordination. <i>Ecology</i>, 86, 828-834. • Couteron P. (2002) Quantifying change in patterned semi-arid vegetation by Fourier analysis of digitized aerial photographs. <i>Int. J. for Remote Sensing</i>, 23, 3407-3425. • Couteron P. & Lejeune O. (2001) Periodic spotted patterns in semiarid vegetation explained by a propagation-inhibition model. <i>J. Ecol.</i>, 89, 616-628. (Cited 115 times)