研究队伍

万人计划
杰出青年
研究员
副研究员
人才招聘

黄建国

姓　名:	黄建国	性　　别:	男
职　务:	生态及环境科学研究中心副主任	职　　称:	研究员
学　历:	博士	通讯地址:	广州市天河区兴科路723号
电　话:	020-37264225	邮政编码:	510650
传　真:		电子邮件:	huangjg@scbg.ac.cn

简历：

个人主页：http://www.cef-cfr.ca/index.php?n=Membres.JianGuoHuang
教育背景
2004.9-2010.1 加拿大魁北克大学 环境科学博士学位 [Ph.D. in Environmental Sciences (Major: Forest Ecology and Climate Change), Institute of Environmental Sciences, University of Quebec (AT), Rouyn-Noranda, Quebec, Canada]
2000.9-2003.8 中国科学院寒区旱区环境与工程研究所 自然地理学硕士学位
1995.9-1999.7 兰州大学资源与环境学院水文与工程地质 本科
科研工作经历
2014.1至今，中国科学院华南植物园，生态及环境科学研究中心，森林生态和模拟（Forest Ecology and Modeling Research Group）研究组首席研究员，博导
2013.8-2014.1，加拿大魁北克大学Chicoutimi分校博士后 [Postdoctoral Research Fellow, Département de Sciences Fondamentales, Université du Québec à Chicoutimi, Chicoutimi, Quebec, Canada]
2012.11-2013.7，美国普渡大学农学院森林与自然资源系博士后 [Postdoctoral Research Associate, Department of Forestry and Natural Resources, College of Agriculture, Purdue University, West Lafayette, IN, USA]
2010.1-2012.10，加拿大艾伯塔大学可持续资源系博士后 [Postdoctoral Research Fellow, Department of Renewable Resources, Faculty of Agricultural, Life and Environmental Sciences, University of Alberta, AB, Canada]

研究领域：

1. 用树木解剖学的方法来探索生长季内树干次级生长（形成层发育和木质部形成）和初级生长（枝，叶和芽）的生长动态及协调机制，及定量它们与环境因子如气象因子的潜在关系。
2. 用树木年轮学和生态学的方法来调研并定量树木生长与气候，竞争及其他因子的潜在关系。
3. 研究气候变化对树木物候的影响以及评估全球变化下树种种群分布及群落演替机制。
4. 通过统计建模及模型模拟来评估未来树木的生长，森林组分，群落及结构和功能的潜在变化，进一步估算森林生产率及固碳潜力，为全球碳平衡提供科学依据。

承担科研项目情况：

1. 国际合作与交流项目-贝尔蒙特论坛气候变化项目，主要参与人，经费：130万
2. 广东省自然科学基金自由申请，经费：10万，主持
3. 国家自然科学基金委面上项目，经费：76.2万，主持
4. 中国科学院人才项目，200万，主持
5. 中国科学院华南植物园科研启动项目， 经费：70万 ，主持
6. 2013年获得加拿大MITACS工业研究基金（2013.9-2014.1） 15000加元，主持
7. 国家自然科学基金委国际组织间项目（中国-加拿大魁北克国际合作项目），主持
8. 中国科学院对外交流国际合作重点项目，主持
9. 中国科学院国际人才计划项目（7项），主持

社会任职：

1. 于2005年成为中华海外生态协会会员至今，并担任2010-2014届中华海外生态协会执行理事和中国联络员。担任中华海外生态协会会刊SINO-ECO Newsletters主编之一，担任中华海外生态协会陈含熙生态学奖励基金委员会成员，详情请见中华海外生态协会官网：http://www.sino-eco.org/。
2. 2011年始成为国际树木年轮协会（Tree-Ring Society）会员。
3. 2015.7月起受聘为Frontiers in Plant Science副主编，IF=4.495 （2016）
4. 2015年7月-2019年6月担任中国科学院第四届青年联合会委员
5. 中国国家自然基金网络评审人，荷兰自然基金（Dutch Research Council）特邀评审人。
6. 多个国际SCI杂志如Global Change Biology，New Phytologist，Journal of Ecology等期刊的审稿人。
7. 被聘为科技部基础专项会评专家。

获奖及荣誉：

获中科院2016年度青年科学家国际合作伙伴奖（全院仅二对中外科学家获此殊荣）
2013年获得加拿大MITACS工业研究基金（2013.9-2014.1）(http://www.mitacs.ca/r/32882)
2012年获得加拿大自然科学与工程研究委员会(Natural Science and Engineering Research Council of Canada) pre-approved Industrial Development and Research Fellowships 工业研究与发展基金 http://www.nserc-crsng.gc.ca/Students-Etudiants/PD-NP/IRDF-BPRDI/IRDFPreAppDetail-BPRDIPreAppDetail_eng.asp?ID=9
2008年获得了中国国家留学基金委颁发的国家级奖励“2007年度国家优秀自费留学生奖”，中国驻加拿大兰立俊大使在渥太华中国使馆为本人及其他8名获此殊荣的优秀博士生颁发了获奖证书和奖金，并与大家举行亲切座谈。http://ca.chineseembassy.org/chn/zjgx_1/jyjl/t480110.htm
优秀博士论文：
博士学位论文于2010年1月被加拿大魁北克大学评为优秀博士论文。http://www.uqat.ca/universite/medias/communiques/index.asp?RefCom=531
美国ScienceDaily新闻报道且该报道被国际科学媒体广泛转载：
ScienceDaily http://www.sciencedaily.com/releases/2011/05/110516102251.htm
加拿大国家媒体采访：
基于出色的科研成绩，2010年1月19日应邀接受加拿大国家广播电台（Radio Canada）的采访和报道：http://www.radio-canada.ca/regions/abitibi/2010/01/19/003-foret-boreale-rechauffement.shtml，该报道被加拿大Quebec省地方杂志多次报道和转载。

代表论著：

Published in the peer-reviewed journals (* corresponding author): (Total IF=155.072, of which IF as 1st or corresponding authorship 23/32; updated on March 18 2018)

1. Jiang, X.Y., Huang, J.G.*, Cheng, J., Dawson, A., Stadt, K., Comeau, P., and Chen, H.Y.H. (2018) Interspecific variation in growth responses to tree size, competition and climate of western Canadian boreal mixed forests. Science of the Total Environment, in press. IF=4.9
2. Zhang SK, Rossi S, Huang JG*, Jiang SW, Yu BY, Zhang W, Ye Q. (2018) Intra-annual dynamics of xylem formation in Liquidambar formosana subjected to canopy and understory N addition. Frontiers in Plant Science 9:79. Doi:10.3389/fpls.2018.00079. IF= 4.298
3. Chen L., Huang JG*, Dawson A., Zhai LH, Stadt K., Comeau P., Whitehouse C. (2018) Contributions of insects and droughts to growth decline of trembling aspen mixed boreal forest of western Canada. Global Change Biology, 24:655-667. IF=8.502
4. Alam S, Huang JG*, Stadt K, Comeau PG, Dawson A, Gea-Izquierdo G, Aakala T, H? ltt? T, Vesala T, M? kel? A, Berninger F. (2017) Effects of competition, drought stress and photosynthetic productivity on the radial growth of white spruce in western Canada. Frontiers in Plant Science 8:1915. Doi:10.3389/fpls.2017.01915. IF= 4.298
5. Guo XL, Yu BY, Liang HX, Huang JG* (2017). Advancement in studies of tree growth and ecophysiology incorporating micro-sampling approach. Chinese Journal of Plant Ecology, 41, 795－804. doi: 10.17521/cjpe.2017.0009
6. Luo DW, Huang JG*, Jiang XY, Ma QQ, Liang HX, Guo XL, Zhang SK. (2017) Effect of climate and competition on radial growth of Pinus massoniana and Schima superba in China’s subtropical monsoon mixed forest. Dendrochronologia 46:24-34, IF=2.259.
7. Zhang SK., Huang J.G.*, Rossi S., Ma Q.Q., Yu B.Y., Zhai L.H., Luo D.W., Guo X.L., Fu S.L., Zhang W. (2017) Intra-annual dynamics of xylem growth in Pinus massoniana submitted to an experimental N addition in central China. Tree Physiology 37:1546-1553 doi:10.1093/treephys/tpx079 IF=3.653
8. Shi P.J., Chen Z., Reddy G.V.P., Hui C., Huang J.G., Xiao M. (2017) Timing of cherry tree blooming: Contrasting effects of rising winter low temperatures and early spring temperatures. Agriculture and Forest Meteorology 240-241:78-89 IF=3.887
9. Shi P.J., Fan M.L., Ratkowsky D.A., Huang J.G.*, Wu H.I., Chen L., Fang S.Y., and Zhang C.X. (2017) Comparison of two ontogenetic growth equations for animals and plants. Ecological Modelling 349:1-10. IF=2.363
10. Chen L., Huang JG*, Alam S., Zhai LH, Dawson A., Stadt K., Comeau P. (2017) Drought causes reduced growth of trembling aspen in western Canada. Global Change Biology, 23：2887-2902, doi: 10.1111/gcb.13595. IF=8.502
11. Chen L., Huang JG*, Stadt K., Comeau P., Zhai LH, Dawson A. and S. Alam (2017) Drought explains variation in the radial growth of white spruce in western Canada. Agriculture and Forest Meteorology 233: 133-142. IF=3.887
12. Rossi, S., Anfodillo T., ? ufar K., Cuny H., Deslauriers A., Fonti P., Frank D., Gri? ar J., Gruber A., Huang J.G.*, Jyske T., Ka? par J., King G., Krause C., Liang E., Makinen H., Morin H., N? jd P., Oberhuber W., Prislan P., Rathgeber, C.B.K., Saracino A., Swidrak I., and Treml V. (2016) Pattern of xylem phenology in conifers of cold ecosystems at the Northern Hemisphere. Global Change Biology, 22:3804-3813. Doi:10.1111/gcb.13317 (coauthors in alphabetic order) IF=8.502
13. Deslauriers, A., Huang JG*, Beaulieau, M., Balducci, L., Rossi S. (2016) The contribution of carbon and water in modulating wood format

ion in black spruce saplings. Plant Physiology, 170: 2072-2084. IF=6.456

14. Jiang, X.Y., Huang, J.G.*, Stadt, K., Comeau, P., and Chen, H.Y.H. (2016) Spatial climate-dependent growth response of western Canadian boreal mixedwood forest. Global and Planetary Change, 139: 141-150. IF=3.915
15. Cuny, H.E., Rathgeber, C.B.K., Frank D., Fonti P., M? kinen H., Prislan P., Rossi S., del Castillo E., Campelo F., Vavr? ík H., Camarero J., Bryukhanova M.V., Jyske T., Gri? ar J., Gryc J., Luis M., Vieira J., ? ufar K., Kirdyanov A.V., Oberhuber W., Treml V., Huang J.G., Li X., Swidrak I., Deslauriers A., Liang E., N? jd P., Gruber A., Nabais C., Morin H., Krause C., King G., and Fournier M. (2015) Wood biomass production lags stem-girth increase by over one month in coniferous forests. Nature Plants 15160 doi:10.1038/NPLANTS.2015.160 IF= 10.3
16. Shi, P.J., Huang, J.G.*, Cang, H., Grissino-Mayer, H., Tardif, J., Zhai, L.H., Wang, F.S., and Li, B.L. (2015) Capturing spiral radial growth of conifers using the superellipse to model tree-ring geometric shape. Frontiers in Plant Science, 6:856. Doi:10.3389/fpls.2015.00856 (co-first author) IF= 4.298
17. Zhang W, Sheng WJ, Zhu SD, Wan SQ, Luo YQ, Yan JH, Wang KY, Liu L, Dai H., Li P., Dai K., Zhang WX., Liu ZF., Wang FM., Kuang YW., Li Z., Lin Y., Rao XQ., Li J., Zou B., Cai X., Mo JM., Zhao P., Ye Q., Huang JG, Fu SL (2015). CAN canopy addition of nitrogen better illustrate the effects of atmospheric nitrogen deposition on forest ecosystem? Scientific Reports, 5:11245 doi:10.1038/srep11245. IF= 4.259
18. Rossi S., Huang JG., and Morin H. 2015. Assessing responses of tree growth to climate changes at inter- and intra-annual temporal scale. Routledge Handbook of Forest Ecology, Edit by Peh K., Corlett R.T., Bergeron Y. September 2015, page 499-517, Routledge Taylor & Francis Group, London, UK.
19. Huang, J.G.*, Deslauriers, A., and Rossi, S. (2014) Xylem formation can be modeled statistically as a function of primary growth and cambium activity. New Phytologist 203:831-841. IF=7.33
20. Gea-Izquierdo G.*, Bergeron Y., Huang J.G., Lapointe-Garant M.P., Grace J., and Berninger F. (2014) Species-specific scale dependent relationships between ecosystem productivity and tree ring growth in boreal coniferous forests. Boreal Environment Research 19:363-378. IF=1.805
21. Huang, J.G.*, Stadt K., Dawson, A., and Comeau, P. (2013) Modelling growth-competition relationships in trembling aspen and white spruce mixed boreal forests of western Canada PLoS ONE, 8(10):e77607) doi:10.1371/journal.pone.0077607 IF=2.806
22. Huang, J.G.*, Bergeron, Y., Berninger, F., Zhai, L.H., Tardif, J., and Denneler, B. (2013) Impact of future climate on radial growth of four major boreal tree species in the eastern Canadian boreal forest. PLOS ONE, 8(2) e56758. doi:10.1371/journal.pone.0056758. IF=2.806
23. Zhai, L.H., Bergeron, Y., Huang, J.G.*, and Berninger F. (2012) Variation in intra-annual wood formation, and foliage and shoot development of three major Canadian boreal tree species. American Journal of Botany. 99(5): 827-837. IF=3.05
24. Huang, J.G., Bergeron, Y., Zhai, L.H.*, and Denneler, B. (2011) Variation in intra-annual radial growth (xylem formation) of Picea mariana (Pinaceae) along a latitudinal gradient in western Quebec, Canada. American Journal of Botany, 98(5): 792-800. Doi/10.3732/ajb.1000074 2009. IF=3.05
This article is highlighted by AJB (http://www.amjbot.org/) and featured in ScienceDaily http://www.sciencedaily.com/releases/2011/05/110516102251.htm and Eurekalert http://www.eurekalert.org/pub_releases/2011-05/ajob-wgc051611.php
25. Lapointe-Garant, M.P.*, Huang, J.G., Guillermo, G.I., Raulier, F., Bernier, P., and Berninger, F. (2010) Use of tree rings to study the effect of climate change on trembling aspen in Quebec. Global Change Biology, 16: 2039-2051. doi: 10.1111/j.1365-2486.2009.02048.x. IF=8.502
26. Huang, J.G.*, Tardif, J., Bergeron, Y., Denneler, B., Berninger, F., and Girardin, M. (2010) Radial growth response of four dominant boreal tree species to climate along a latitudinal gradient in the eastern Canadian boreal forest. Global Change Biology, 16: 711-731. doi: 10.1111/j.1365-2486.2009.01990.x. IF=8.502
27. Huang, J.G.*, Tardif, J., Denneler, B., Bergeron, Y., and Berninger, F. (2008) Tree-ring evidence extends the historic northern range limit of severe defoliation by insects in the aspen stands of western Quebec, Canada. Canadian Journal of Forest Research, 38:2535-2544. IF=1.827
28. Li, J.B.*, Cook, E.R., D'Arrigo, R., Chen, F., Gou, X.H., Peng, J.F., and Huang, J.G. (2008) Common tree growth anomalies over the northeastern Tibetan Plateau during the last six centuries: Implications for regional moisture change. Global Change Biology, 14, 2096-2107. doi:10.1111/j.1365-2486.2008.01603.x. IF=8.502

29. Huang, J.G.*, Bergeron, Y., Denneler, B., Berninger, F., and Tardif, J. (2007) Response of forest trees to increased atmospheric CO_2. Critical Reviews in Plant Sciences, 26(5): 265-283. DOI:10.1080/07352680701626978 IF=6.825
This article was Top 5 highly-cited articles from 2007-2009, top 20 most cited articles for the journal reported by Journal of Citation Reports 2010 (http://www.tandfonline.com/action/showMostCitedArticles?journalCode=bpts20).
30. Huang, J.G.*, Lin, J.D., and Miao, S.L. (2007) Tibet: holy place, not ‘‘Western Storehouse’’! Frontiers in Ecology and the Environment, 5(3), 122-123. IF=8.039
31. Huang, J.G., and Zhang, Q.B.* (2007) Tree rings and climate for the last 680 years in Wulan area of northeastern Qinghai-Tibetan Plateau. Climatic Change 80, 369-377, DOI 10.1007/s10584-006-9135-1. IF=3.496
32. Zhang, Q.B.*, Cheng, G.D., Yao, T.D., Kang, X.C., and Huang, J.G. (2003) A 2326-year tree-ring record of climate variability on the northeastern Qinghai-Tibetan Plateau. Geophysical Research Letters, Vol. 30, No.14, 1739, doi:10.1029/2003GL017425. IF=4.253

Report and thesis:

1. Huang, J.G. (2009) Effects of climate and of potential future climate on radial growth of four dominant boreal tree species (Trembling aspen, paper birch, black spruce, and jack pine) in the mixed and coniferous boreal forest of western Quebec, Canada. Ph.D. Dissertation, Université du Québec en Abitibi-Témiscamingue, Québec, Canada. 287 pp. Available from the following link: http://bibliotheque.uqat.ca/documents/theses/jianguohuang.pdf
2. Huang, J.G. (2006) Is CO2 enrichment responsible for better growth of trees? Synthèse remis comme exigence partielle du programme de doctorat en science de l'environnement. 50 p.
3. Huang, J.G. (2003) Dendroclimatological studies of Sabina przewalskii Kom. in Wulan and Tongren areas of northeastern Qinghai-Tibetan Plateau (in Chinese with English abstract). M.S. Thesis, Cold and Arid Regions Environmental and Engineering Research Institute (CAREERI), Chinese Academy of Sciences, Lanzhou, P.R. China. 80 pp.