

Prof. Dr. Henning Wildhagen

Tätigkeiten als Gutachter/Peer-review contributions (see also at Publons)

Gutachter für internationale Fachzeitschriften, u.a. New Phytologist; Journal of Experimental Botany; Plant, Cell & Environment; Tree Physiology; Physiologia Plantarum; Plant Biology

Veröffentlichungen/Peer-reviewed publications

2018

Du B, Kreuzwieser J, Dannenmann M, Junker LV, Kleiber A, Hess M, Jansen K, Eiblmeier M, Gessler A, Kohnle U, Ensminger I, Rennenberg H, Wildhagen H. 2018. Foliar nitrogen metabolism of adult Douglas-fir trees is affected by soil water availability and varies little among provenances. **PLoS One 13(3):e0194684**.

Wildhagen H, Paul S, Allwright M, Smith HK, Malinowska M, Schnabel SK, Paulo MJ, Cattonaro F, Vendramin V, Scalabrin S, Janz D, Douthe C, Brendel O, Buré C, Cohen D, Hummel I, Le Thiec D, van Eeuwijk F, Keurentjes JJB, Flexas J, Morgante M, Robson P, Borgeat-Triboulot M-B, Taylor G, Polle, A. 2018. Genes and gene clusters related to genotype and drought-induced variation in saccharification potential, lignin content and wood anatomical traits in *Populus nigra*. **Tree Physiology 38: 320-339**. Article first published online on May 24, 2017. Epub ahead of print May 24: 1-20. DOI: [10.1093/treephys/tpx054](https://doi.org/10.1093/treephys/tpx054)

2017

Paul S, Wildhagen H, Janz D, Polle A. 2017. Drought effects on the tissue- and cell-specific cytokinin activity in poplar. [Annals of Botany PLANTS, plx067, https://doi.org/10.1093/aobpla/plx067](https://doi.org/10.1093/aobpla/plx067)

Wildhagen H, Paul S, Allwright M, Smith HK, Malinowska M, Schnabel SK, Paulo MJ, Cattonaro F, Vendramin V, Scalabrin S, Janz D, Douthe C, Brendel O, Buré C, Cohen D, Hummel I, Le Thiec D, van Eeuwijk F, Keurentjes JJB, Flexas J, Morgante M, Robson P, Borgeat-Triboulot M-B, Taylor G, Polle, A. 2017. Genes and gene clusters related to genotype and drought-induced variation in saccharification potential, lignin content and wood anatomical traits in *Populus nigra*. [Tree Physiology, Epub ahead of print May 24: 1-20. DOI: 10.1093/treephys/tpx054](https://doi.org/10.1093/treephys/tpx054)

Junker LV, Kleiber A, Jansen K, Wildhagen H, Hess M, Kayler Z, Kammerer B, Schnitzler J-P, Kreuzwieser J, Gessler A, Ensminger I. 2017. Variation in short-term and long-term responses of photosynthesis and isoprenoid-mediated photoprotection to soil water availability in four Douglas-fir provenances. [Scientific Reports 7:40145](#)

2016

Allwright MR, Payne A, Emiliani G, Milner S, viger M, Rouse F, Keurentjes JJB, Bérard A, Wildhagen H, Faivre-Rampant P, Polle A, Morgante M, Taylor G. 2016. Biomass traits and candidate genes for bioenergy revealed through association genetics in coppiced European *Populus nigra* (L.). [Biotechnology for Biofuels 9: 195](#)

Hess M, Wildhagen H, Junker LV, Ensminger I. 2016. Transcriptome responses to temperature, water availability and photoperiod are conserved among mature trees of two divergent Douglas-fir provenances from a coastal and an interior habitat. [BMC Genomics 17:682](#)

Paul S, Wildhagen H, Janz D, Teichmann T, Hänsch R, Polle A. 2016. Tissue- and cell-specific cytokinin activity in *Populus x canescens* monitored by ARR5::GUS reporter lines in summer and winter. [Frontiers in Plant Science 7:653](#)

Neophytou C, Weisser A-M, Landwehr D, Šeho M, Kohnle U, Ensminger I, Wildhagen H. 2016. Assessing the relationship between height growth and molecular genetic variation in Douglas-fir (*Pseudotsuga menziesii*) provenances. [European Journal of Forest Research 135: 465](#)

2015

Müller T, Freund F, Wildhagen H, Schmid KJ. 2015. Targeted re-sequencing of five Douglas-fir provenances reveals population structure and putative target genes of positive selection. [Tree Genetics & Genomes 11:816](#)

2013

Wildhagen H, Bilela S, Rennenberg H. 2013. Low temperatures counteract short-day induced nitrogen storage, but not accumulation of bark storage protein transcripts in bark of grey poplar (*Populus x canescens*) trees. *Plant Biology* 15: 44-56

Malcheska F, Honsel A, Wildhagen H, Dürr J, Larisch C, Rennenberg H, Herschbach C. 2013. Differential expression of specific sulphate transporters underlies seasonal and spatial patterns of sulphate allocation in trees. *Plant, Cell & Environment* 7:1285-1295

Hess M, Wildhagen H, Ensminger I. 2013. Suitability of Illumina deep mRNA

sequencing for reliable gene expression profiling in a non-model conifer species (*Pseudotsuga menziesii*). *Tree Genetics & Genomes* 9: 1513 - 1527

2012

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Larisch C, Dittrich M, Wildhagen H, Lautner S, Fromm J, Polle A, Hedrich R, Rennenberg H, Müller T, Ache P. 2012. *Plant Physiology* 160: 1515-1529

2011

Luo Z-B, Li K, Gai Y, Göbel C, Wildhagen H, Jiang X, Feußner I, Rennenberg H, Polle A. 2011. The ectomycorrhizal fungus (*Paxillus involutus*) modulates leaf physiology of poplar towards improved salt tolerance. *Environmental and Experimental Botany* 72: 304-311

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Wildhagen H, Dürr J, Ehlting B, Rennenberg H. 2010. Seasonal nitrogen cycling in the bark of field-grown Grey poplar is correlated with meteorological factors and gene expression of bark storage proteins. *Tree Physiology* 30: 1096-1110

Rennenberg H, Wildhagen H, Ehlting B. 2010. Nitrogen nutrition of poplar trees. *Plant Biology* 12: 275-291

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2009

Luo Z-B, Janz D, Jiang X, Göbel C, Wildhagen H, Tan Y, Rennenberg H, Feussner I, Polle A. 2009. Upgrading root physiology for stress tolerance by ectomycorrhizas: insights from metabolite and transcriptional profiling into reprogramming for stress anticipation. *Plant Physiology* 151: 1902-1917