

Publication list Christoph Leuschner

2023

- 421) Diekmann M, Heinken T, Becker T, Dörfler I, Heinrichs S, **Leuschner C**, Peppler-Lisbach C, Osthaus M, Schmidt W, Strubelt I, Wagner E-R (2023) Resurvey studies of terricolous bryophytes and lichens indicate a widespread nutrient enrichment in German forest. *J Veg Sci* 34: e13201.
- 420) **Leuschner C**, Hohnwald S, Petritan A, Walentowski H (2023) Vertical temperature and air humidity gradients in beech and oak forests, and the forest interior climate created by beech. *Flora* 305, 152317.
- 419) **Leuschner C**, Weithmann G, Bat-Enerel B, Weigel R (2023) The future of European beech in Northern Germany – Climate change vulnerability and adaptation potential. *Forests* 14, 1448.
- 418) **Leuschner C**, Bat-Enerel B, Weithmann G, Weigel R (2023) Die Zukunft der Buche in Norddeutschlands: Klimasensitivität und Anpassungsvermögen. *Allg Forst- u. Jagdz.* (in press).
- 417) Rodenwald N, Sutcliffe LMW, **Leuschner C**, Batory P (2023) Weak evidence for biocontrol spillover from both flower strips and grassy field margins in conventional cereals. *Agric Ecosyst Env* 355: 108614.
- 416) Schnee L., Sutcliffe, LME, **Leuschner C**, Donath TW (2023) Weed seed banks in intensive farmland and the influence of tillage, field position and sown flower strips. *Land* 12, 926.
- 415) Schneider H, Meyer P, Aljes M, Culmsee H, Diers M, Förster A, Leuschner C (2023) Wie kann Naturnähe im Wald gemessen werden? *Natur u. Landschaft* 98: 49-57.
- 414) Waite P-A, Leuschner C, Delzon S, Triadiati T, Saad A, Schuldt B (2023) Plasticity of wood and leaf traits related to hydraulic efficiency and safety is linked to evaporative demand and not soil moisture in rubber (*Hevea brasiliensis*). *Tree Physiol* (in press).
- 413) Zerbe S, Storz ST, Leitinger G, Zoe Joelson N, Bava J, Heinrichs S, **Leuschner C**, Loguercio G, Simon A, Urretavizcaya MF, Walentowski H (2023) Regeneration of *Nothofagus dombeyi* (Mirb.) Ørst. in little to moderately disturbed southern beech forests in the Andes of Patagonia (Argentina). *For Ecosyst* 10, 100126.
- 412) Zweifel R, Pappas C, Peters RL, Babst F, Balanztegui D, Basler D, Bastos A, Beloiu M, Buchmann N, Bose AK, Braun S, **Leuschner C** et al. (2023) Networking the forest infrastructure towards near real-time monitoring – A white paper. *Sci Tot Env* 872, 162167.

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- 411) Ali, AA, Fan, Y, Corre MD, Kotowska M, Hassler E, Cahyo, AN, Moyano FE, Stiegler C, Röll A, Meijide A, Olchev A, Ringeler A, **Leuschner C**, Ariani R, June T, Tarigan S, Kreft H, Hölscher D, Xu C, Koven CD, Dagon K, Fisher RA, Veldkamp E, Knohl A (2022) Implementing a new rubber plant functional type in the Community Land Model (CLM5) improves the accuracy of carbon and water flux estimation. *Land* 11: 183.
- 410) Bat-Enerel B, Weigel R, **Leuschner C** (2022) Changes in the thermal and hydrometeorological forest growth climate during 1948-2017 in northern Germany. *Front For Glob Change* 5, 830977.

- 409) Diers M, Weigel R, **Leuschner C** (2023) Both climate sensitivity and growth trend decline in European beech in the north German lowlands, while Scots pine still thrives, despite growing sensitivity. *Trees* 37: 523-543.
- 408) Dulamsuren C, Bat-Enerel B, Meyer P, **Leuschner C** (2022) Did stand opening 60 years ago predispose a European beech population to death? *Trees For People* 8, 100265.
- 407) Dulamsuren C, Coners H, **Leuschner C**, Hauck M (2023) Climatic control of high-resolution stem radius changes in a drought-limited southern boreal forest. *Trees* 37: 797-810. <https://doi.org/10.1007/s00468-022-02384-z>
- 406) Kasper J, **Leuschner C**, Walentowski H, Weigel R (2022) Higher growth synchrony and climate change-sensitivity in European beech and silver linden than in temperate oaks. *J Biogeogr.* 50: 209-222. doi: 10.1111/jbi.14525.
- 405) Kotowska M, et al. (2022) Consequences of tropical rainforest conversion to tree plantations on fine root dynamics and functional traits. *Oikos* 2023: e08898.
- 404) **Leuschner C**, Tückmantel T, Meier IC (2022) Temperature effect on root exudation in mature beech (*Fagus sylvatica L.*) forests along an elevation gradient. *Plant Soil.* 481: 147-163. doi.org/10.1007/s11104-022-05629-5
- 403) **Leuschner C**, Homeier J (2022) Global forest biodiversity: Current state, trends and threats. *Progress in Botany* 83: 125-159.
- 402) **Leuschner C**, Förster A, Diers M, Culmsee H (2022) Are Northern German Scots pine plantations climate smart? The impact of large-scale conifer planting on climate, soil and the water cycle. *For Ecol Manage* 507, 120013.
- 401) **Leuschner C**, Feldmann E, Pichler V, Glatthorn J, Hertel D (2022) Forest management impact on soil organic carbon: A paired-plot study in primeval and managed European beech forests. *For Ecol Manage* 512, 120163.
- 400) Luick R, Hennenberg K, **Leuschner C**, Grossmann M, Jedicke E, Schoof N, Waldenspuhl T (2021) Primeval, natural and commercial forests in the context biodiversity and climate protection. Part 2: *Naturschutz u. Landschaftsplanung* 54: 22-35.
- 399) Martinez del Castillo, E., Zang C, Buras A, Hacket-Pain A, Esper J, **Leuschner C**, et al. (2022) Climate-change-driven growth decline of European beech forests. *Communications Biology* 5: 163.
- 398) Pierick K, **Leuschner C**, Homeier J (2022) Elevational trends of tree fine root traits in species-rich tropical Andean forests. *Oikos* 2023: e08975.
- 397) Schneider H, Meyer P, Aljes M, Culmsee H, Diers M, Förster A, Leuschner C (2023) Wie kann Naturnähe von Wäldern bewertet werden? *Natur u. Landschaft* 98: 49-57.
- 396) Sutcliffe L, **Leuschner C** (2022) Auswirkungen von Biodiversitätsmaßnahmen auf die Segetalflora auf intensiv bewirtschafteten landwirtschafteten Flächen. *Ergebnisse aus dem F.R.A.N.Z.-Projekt. Naturschutz und Landschaftsplanung* 54: 22-29.
- 395) Weigel R, Bat-Enerel B, Dulamsuren C, Muffler L, Weithmann G, **Leuschner C** (2023) Summer drought exposure, stand structure, and soil properties jointly control the growth of European beech along a steep precipitation gradient in northern Germany. *Glob Change Biol.* 29: 763-779.
- 394) Weithmann G., Schuldt B., **Leuschner C.** (2022) Soil water availability and branch age explain variability in xylem safety of European beech in Central Europe. *Oecologia* 198: 629-644.
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- 392) Albrecht J, Peters MK, Becker JN, Behler C, Classen A, Ensslin A, **Leuschner, C**,Schleuning M (2021) Species richness is more important for ecosystem functioning than species turnover along an elevational gradient. *Nat. Ecol. Evol.* 5: 1582-1593. doi.org/10.1038/s41559-021-01550-9.
- 391) Bendix J, Aguire N, Beck E, Bräuning A, Brandl R, Breuer L, Böhning-Gaese K, Dantas de Paula M, Hickler T, Homeier J, Inclan D, **Leuschner C**, Neuschulz E L, Schleuning M, Suarez J P, Trachte K, Wilcke W, Windhorst D, Farwig N (2021) A research framework for projecting ecosystem change in highly diverse tropical mountain ecosystem. *Oecologia* 195: 589-600. doi.org/10.1007/s00442-021-04852-8.
- 390) Diers M, Weigel R, Culmsee H, **Leuschner C** (2021) Soil carbon and nutrient stocks under Scots pine plantations in comparison to European beech forests: a paired-plot study across forests with different management history and precipitation regimes. *Forest Ecosystems* 8: 47. doi.org/10.1186/s40663-021-00330-y.
- 389) Erasmy M, **Leuschner C**, Balkenhol N, Dietz M (2021) Shed light in the dark – How do natural canopy gaps influence temperate bat activity and diversity? *For. Ecol. Manage.* 497, 119509.
- 388) Erasmy M, **Leuschner C**, Balkenhol N, Dietz M (2021) Three-dimensional stratification pattern in an old-growth lowland forest: how does height in canopy and season influence temperate bat activity? *Ecology and Evolution* 11: 17273-17288.
- 387) Förster A, Werner R, Hertel D, **Leuschner C** (2021) Belowground consequences of converting broadleaf to conifer forest: Comparing the fine root systems of European beech and Scots pine. *For. Ecol. Manage.* 496, 119457.
- 386) Fuchs S, Schuldt B, **Leuschner C** (2021) Identification of drought-tolerant tree species through climate sensitivity analysis of radial growth in Central European mixed broadleaf forests. *For Ecol Manage* 330: 126-136.
- 385) Fuchs, **Leuschner C**, Link R., Schuldt B (2021) Hydraulic variability of three temperate broadleaf tree species along a water availability gradient in Central Europe. *New Phytol.* 231: 1387-1400.
- 384) Glatthorn J, Annighöfer P, Balkenhol N, **Leuschner C**, Polle A, Scheu S, Schuldt A, Schuldt B, Ammer C (2021) An interdisciplinary framework to describe and evaluate the functioning of forest ecosystems. *Basic Appl Ecol* 52: 1-14.
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- 382) Heinrichs S, Öder V, Indreica A, Bergmeier E, **Leuschner C**, Walentowski H (2021) The influence of *Tilia tomentosa* Moench on plant species diversity and composition in mesophilic forests of Western Romania – A potential tree species for warming forests in Central Europe? *Sustainability* 13, 7996. doi.org/10.3390/su13147996.
- 381) Homeier J, Seeler T, Pierick K, **Leuschner C** (2021) Leaf trait variation in species-rich tropical Andean forests. *Sci Rep* 11: 9993.
- 380) Kasper J, Weigel R, **Leuschner C** (2021) Winners and losers of climate warming: Declining growth in *Fagus* and *Tilia* vs. stable growth in three *Quercus* species in the natural beech-oak forest ecotone (western Romania). *For. Ecol. Manage.* 506, 119892.
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- 374) Luick, R, Hennenberg K, **Leuschner C**, Grossmann M, Jedicke E, Schoof N, Waldenspuhl T (2021) Primeval, natural and commercial forests in the context biodiversity and climate protection. Part 1: Functions for biodiversity and as carbon sinks and reservoirs. *Naturschutz u. Landschaftsplanung* 53: 12-25.
- 373) Meyer P, Aljes M, Culmsee H, Feldmann E, Glatthorn J, **Leuschner C**, Schneider H (2021) Quantifying old-growthness of lowland European beech forests by a multivariate indicator for forest structure. *Ecol. Indic.* 125, 107575.
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- 371) Pierick K, Homeier J, **Leuschner C** (2021) Topography as a factor driving small-scale variation in tree fine root traits and root functional diversity in a species-rich tropical montane forest. *New Phytol* 230: 129-138. <https://doi.org/10.1111/nph.17136>.
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- 366) Weithmann G, Schuldt B, Link RM, Heil D, Hoeber S, John H, Müller-Haubold H, Schüller, L-M, Schumann K, **Leuschner C** (2022) Leaf trait modification in European beech trees in response to climatic and edaphic drought (2021) *Plant Biology* 24: 1272-1286.
- 365) Wietzke A, von Waveren C-S, Bergmeier E, Meyer S, **Leuschner C** (2021) Current state and drivers of arable plant diversity in conventionally managed farmland in Northwest Germany. *Diversity* 12: 469.
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