List of Publications **Date: May 6, 2025**

Heli Peltola

A. Peer-reviewed scientific articles (226)

226. Muhonen, O., Peltola, H., Lauren, A., Ikonen, V-P., Nevalainen, J., Pikkarainen L., Kilpeläinen, A., Launiainen, S., Palviainen, M. 2025. Spatial evenness of fertilization and short-term volume growth responses of Scots pine and Norway spruce to fertilization intensity. Silva Fennica, in print.

225. Simon, D-C., Lyytikäinen-Saarenmaa, P., Pelto-Arvo, M., Tuviala, J., Kosunen, M., Honkavaara, E., Näsi, R., Tikkanen, O-P., Kilpeläinen. A., Peltola, H. 2025. Infestation symptoms as indicators of a sustained bark beetle outbreak in conserved and managed Norway spruce forests in south-eastern Finland. European Journal of Forest Research, in print (Preprint in Research Square 2024, DOI: 10.21203/rs.3.rs-5355177/v).

224. Jetsonen, J. Laurén, A., Peltola, H., Laurén, K., Launiainen, S., Palviainen, M. 2025. Volume growth responses of Scots pine and Norway spruce to nitrogen fertilization: quantitative synthesis of fertilization experiments in Finland. Silva Fennica 59(1), id 24041. https://doi.org/10.14214/sf.24041

223. Kemppainen, K., Kärhä, K., Laitila, J., Sairanen, A., Kankaanhuhta, V., Viiri, H., Peltola, H. 2025. Evaluation of the productivity and costs of excavator-based mechanized tree planting in Finland based on automated data collection. Silva Fennica 59(1), id 25004. https://doi.org/10.14214/sf.25004

222. Kivimäenpää, M., Virjamo, V., Nissinen, K., Pikkarainen, L., Ghimire, R.P., Julkunen-Tiitto, R., Peltola, H. 2025. Responses of needle terpene concentrations and characteristics of resin canals to different warming treatments in Scots pine and Norway spruce seedlings grown in a field experiment. Canadian Journal of Forest Research *55*: 1-9. https://doi.org/10.1139/cjfr-2024-0153

221. Seipulis, A., Gardiner, B., Peltola, H., Nicoll, B., Rust, S., Matisons, R., Elferts, D., Jansons, A. 2024. Geographic variation in resistance of Scots pine (*Pinus sylvestris* L.) to wind loading across different wind environments in Europe. Forest Ecology and Management 571, id 122237.

220. Palviainen, M., Pumpanen, J., Mosquera, V., Maher Hasselquist, H., Laudon, H., Ostonen, I., Kull, A., Renou Wilson, F., Peltomaa, E., Könönen, M., Launiainen, S., Peltola, H., Ojala, A., Laurén, A. 2024. Extending the SUSI Peatland simulator to include dissolved organic carbon formation, transport and biodegradation - Proper water management reduces lateral carbon fluxes and improves carbon balance. Science of the Total Environment 950, id 175173.

219. Junttila, S., Blomqvist, M., Laukkanen, V., Heinaro, E., Polvivaara, A., O'Sullivan, H., Yrttimaa, T., Vastaranta, M., Peltola H. 2024. Significant increase in tree mortality in boreal forests in Southern Finland. Forest Ecology and Management 565, id 122020.

218. Petty, A., Senko, S., Strandman, H., Jyrkinen, E., Tikkanen, O-P., Kilpeläinen, A., Peltola, H. 2024. Effects of forest management intensity and climate change severity on forest growth, timber yield, carbon stocks, and the amount of dead wood in Scots pine, Norway spruce and silver birch stands in boreal conditions. Canadian Journal of Forest Research 54(9): 1032–1047.

217. Silvennoinen H., Pikkarainen L., Nakola, H., Koivula M., Tyrväinen L., Tikkanen J., Chambers P., Peltola, H. 2024. Consistency of video and photo surveys in measuring attractiveness of forest stands managed with varying intensities. Silva Fennica 58(3), id 23030.

216. Pulgarin Díaz, J. A. Melin, M., Ylioja, T., Lyytikäinen-Saarenmaa, P., Peltola, H., Tikkanen, O-P. 2024. Relationship between stand and landscape attributes and *Ips typographus* salvage loggings in Finland. Silva Fennica 58(3), id 23069.

215. Pikkarainen, L., Strandman H., Vento, E., Petty A., Tikkanen, O-P., Kilpeläinen, A., Peltola, H. 2024. Effects of forest conservation and management on timber, ecosystem carbon, dead wood and habitat suitability area in a boreal forest under climate change. Silva Fennica 58(2), id 23045.

214. Jetsonen, J., Laurén, A., Peltola, H., Muhonen, O., Nevalainen, J., Ikonen, V-P., Kilpeläinen, A., Tuittila, E-S., Männistö, E., Kokkonen, N., Palviainen, M. 2024. Effects of nitrogen fertilization on the ground vegetation cover and soil chemical properties in Scots pine and Norway spruce stands. Silva Fennica 58(1), id 23058.

213. Gopalakrishnan, R., Korhonen, L., Mõttus, M., Rautiainen, M., Hovi, A., Mehtätalo, L., Maltamo, M., Peltola, H., Packalen, P. 2023. Evaluation of a forest radiative transfer model using an extensive boreal forest inventory database. Science of Remote Sensing 8, id 100098.

212. Leinonen, A., Salmivaara, A., Palviainen, M., Finèr, L., Peltola, H., Laurèn, A. 2023. Identifying Nutrient Export Hotspots Using Spatially Distributed Nutrient Export Model in Boreal Forested Catchments. Forests 14(3), id 612.

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209. Ruotsalainen, R., Pukkala, T., Ikonen, V-P., Packalen, P., Peltola, H. 2023. Mitigating the risk of wind damage at the forest landscape level by using stand neighbourhood and terrain elevation information in forest planning. Forestry: An International Journal of Forest Research 96(1): 121–134.

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207. Hetemäki, L., Kangas, J., Asikainen, A., Jänis, J., Seppälä, J., Venäläinen, A., Peltola, H. 2022. The Way Forward: Management and Policy Actions. In: Hetemäki, L., Kangas, J., Peltola, H. (eds) Forest Bioeconomy and Climate Change. Managing Forest Ecosystems, vol 42. Springer. https://doi.org/10.1007/978-3-030-99206-4_14.

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204. Venäläinen, A., Ruosteenoja, K., Lehtonen, I., Laapas, M., Tikkanen, OP., Peltola, H. 2022. Climate Change, Impacts, Adaptation and Risk Management. In: Hetemäki, L., Kangas, J., Peltola, H. (eds) Forest Bioeconomy and Climate Change. Managing Forest Ecosystems, vol 42. Springer. https://doi.org/10.1007/978-3-030-99206-4_3.

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201. Pikkarainen L., Luoranen J., Peltola H. 2021. Early Field Performance of Small-Sized Silver Birch and Scots Pine Container Seedlings at Different Planting Depths. Forests 12(5), id 519.

200. Sobuj, N., Nissinen, K., Virjamo, V., Salonen, A., Sivadasan, U., Randriamanana, T, Ikonen, V., Kilpeläinen, A., Julkunen-Tiitto, R., Nybakken, L., Mehtätalo, L., Peltola, H. 2021. Accumulation of phenolics and growth of dioecious Populus tremula (L.) seedlings over three growing seasons under elevated temperature and UVB radiation. Plant Physiology and Biochemistry 165: 114–122.

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D. Publications intended for professional communities (25)

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E. Publications intended for the general public, linked to the applicants's research (5)

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F. Theses (3)

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