

## KANSAINVÄLISET REFEROIDUT JULKAISUT

Abarenkov, K., Nilsson, R.H. Larsson, K.-H., Alexander, I.J., Eberhardt, U., Erland, S., Høiland, K., Kjølner, R., Larsson, E., Pennanen, T., Sen, R., Taylor, A.F.S., Tedersoo, L., Ursing, B.M., Vrålstad, T., Liimatainen K., Peintner, U. & Kõljalg, U. The UNITE database for molecular identification of fungi - recent updates and future perspectives. *New Phytologist* 186(2): 281-285.

Adamczyk, B., Smolander, A., Kitunen, V. & Godlewski, M. Proteins as nitrogen source for plants. A short story about exudation of proteases by plant roots. *Plant Signalling & Behavior* 5(7): 1-3.

Ahtikoski, A., Alenius, V. & Mäkitalo, K. Scots pine stand establishment with special emphasis on uncertainty and cost-effectiveness, the case of northern Finland. *New Forests* 40(1): 69-84.

Alfaro, R.I. (convening lead author), Battisti, A., Carroll, A., Fleming, R. & Hantula, J. Forest health in a changing environment. In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 113-134.

Anttila, U., Julkunen-Tiitto, R., Rousi, M., Yang, S., Rantala, M.J. & Ruuhola, T. Effects of elevated ultraviolet-B radiation on a plant-herbivore interaction. *Oecologia* 164: 163-175.

Asikainen, A. Simulation of stump crushing and truck transport of chips. *Scandinavian Journal of Forest Research* 25: 245-250.

Asikainen, A. (convening lead author), Anttila, P., Heinimö, J., Smith, T., Stupak, I. & Ferreira Quirino, W. Forests and bioenergy production. In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 183-200.

Barua, S.K., Kuuluvainen, J., Laturi, J. & Uusivuori J. Effects of forest taxation and amenity preferences on nonindustrial private forest owners. *European Journal of Forest Research* 129(2): 163-172.

Bonet, J.A., Palahí, M., Colinas, C., Pukkala, T., Fischer, C.R., Miina, J. & Martínez de Aragón, J. Modelling the production and species richness of wild mushrooms in pine forests of the Central Pyrenees in northeastern Spain. *Canadian Journal of Forest Research* 40(2): 347-356.

Botella, L., Tuomivirta, T.T., Kaitera, J., Carrasco, V., Diez, J.J. & Hantula, J. Spanish population of *Gremmeniella abietina* is genetically unique but related to type A in Europe. *Fungal Biology* 114(9): 778-789.

Calama, R., Tomé, M., Sánchez-González, M., Miina, J., Spanos, K. & Palahí, M. Modelling non-wood forest products in Europe: a review. *Forest Systems* 19 (Special Issue): 69-85.

- Cao, Y., Repo, T., Silvennoinen, R., Lehto, T. & Pelkonen, P. An appraisal of the electrical resistance method for assessing root surface area. *Journal of Experimental Botany* 61(9): 2491-2497.
- Cashore, B. and Galloway, G. (convening lead authors), Cubbage, F., Humhreys, D., Katila, P., Levin, K., Maryudi, A., McDermott, C., McGinley, K., Kengen, S., Medrado, M.J.S., Puente, M.C., Temu, A.B. & Zanetti, E.A. Ability of institutions to address new challenges. In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 441-486.
- Cox, F., Barsoum, N., Bidartondo, M.I., Børja, I., Lilleskov, E., Nilsson, L.O., Rautio, P., Tubby, K. & Vesterdal, L. A leap forward in geographic scale for forest mycorrhizas. *Annals of Forest Science* 67(2). 200p1-p6.
- Drewer, J., Lohila, A., Aurela, M., Laurila, T., Minkkinen, K., Penttilä, T., Dinsmore, K.M., McKenzie, R., Helfter, C., Sutton, M.A. & Skiba, U.M. Comparison of greenhouse gas fluxes and nitrogen budgets from an ombrotrophic bog in Scotland and a minerotrophic sedge fen in Finland. *European Journal of Soil Science* 61(5): 640-650.
- Eyvindson, K., Kangas, A., Kurttila, M. & Hujala, T. Using preference information in developing alternative forest plans. *Canadian Journal of Forest Research* 40(12): 2398-2410.
- Fredman, P. & Tyrväinen, L. (eds.). *Frontiers in nature-based tourism*. *Scandinavian Journal of Hospitality and Tourism* 10(3): 173-394.
- Fredman, P. & Tyrväinen, L. Introduction. In: Fredman, P. & Tyrväinen, L. (eds.). *Frontiers in nature-based tourism*. *Scandinavian Journal of Hospitality and Tourism* 10(3): 177-189.
- Gallis, C., Di Stefano, M., Moutsatsou, P., Sarjala, T., Virtanen, V., Holmbom, B., Buhagiar, J.A. & Katalanos, A. Forest products with health-promoting and medicinal properties. In: Nilsson, K., Sangster, M., Gallis, C., Hartig, T., de Vries, S., Seeland, K. & Schipperin, J. (eds.). *Forests, Trees and Human Health*. Springer Science+Business Media, New York, Dordrecht, Heidelberg, London. p. 41-76.
- Galloway, G., Katila, P. & Krug, J. The need for new strategies and approaches. In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 489-499.
- Gerard, S. et al. (32 authors, from FFRI Tuominen, S.). Land cover change in Europe between 1950 and 2000 determined employing aerial photography. *Progress in Physical Geography* 34(2): 183-205.
- Gerasimov, Y. & Karjalainen, T. Energy wood resources in Northwest Russia (in Russian). *Vestnik Moskovskogo gosudarstvennogo universiteta lesa - Lesnoy vestnik* 73(4): 12-13.

Gerasimov, Y. & Katarov, V. Effect of bogie track and slash reinforcement on sinkage and soil compaction in soft terrains. *Croatian Journal of Forest Engineering* 31(1): 35-45.

Gerasimov, Y. & Seliverstov, A. Industrial round-wood losses associated with harvesting systems in Russia. *Croatian Journal of Forest Engineering* 31(2): 111-126.

Goltsev, V., Ilavský, J., Karjalainen, T. & Gerasimov, Y. Potential of energy wood resources and technologies for their supply in Tihvin and Boksitogorsk districts of the Leningrad region. *Biomass & Bioenergy* 34: 1440-1448.

Goltsev, V., Ilavský, J., Gerasimov, Y. & Karjalainen, T. Potential for biofuel development in Tihvin and Boksitogorsk districts of the Leningrad region - The analysis of energy wood supply systems and costs. *Forest Policy and Economics* 12: 308-316.

Gort, J., Zubizarreta-Gerendiain, A., Peltola, H., Kilpeläinen, A., Pulkkinen, P., Jaatinen, R. & Kellomäki, S. Differences in branch characteristics of Scots pine (*Pinus sylvestris* L.) genetic entries grown at different spacing. *Annals of Forest Science* 67(7). 8 p.

Grau, O., Rautio, P., Heikkinen, J., Saravesi, K., Kozlov, M.V. & Markkola, A. An ericoid shrub plays a dual role in recruiting both pines and their fungal symbionts along primary succession gradients. *Oikos* 119: 1727-1734.

Grekin, M. & Verkasalo, E. Variations in basic density, shrinkage, and shrinkage anisotropy of Scots pine wood from mature mineral soil stands in Finland and Sweden. *Baltic Forestry* 16(1): 113-125.

Guivier, E., Galan, M., Malé, P.-J.G., Kallio, E.R., Voutilainen, L., Henttonen, H., Olsson, G., Tersago, K., Sauvage, F., Cosson, J.-F. & Charbonnel, N. Susceptibility to Puumala virus infections in *Myodes glareolus*: what can we learn from Mhc class II gene polymorphism? *Journal of General Virology* 91: 2507-2512.

Guivier, E., Galan, M., Ribas Salvador, A., Xuéreb, A., Chaval, Y., Poulle, M.-L., Henttonen, H., Voutilainen, L., Cosson, J.-F. & Charbonnel, N. Polymorphism of Tnf- $\alpha$  expression and promoter sequences reflects the balance of tolerance/resistance to PUUV infection in European bank vole populations. *Infection, Genetics and Evolution* 10: 1208-1217.

Gundersen, P., Laurén, A., Finér, L., Ring, E., Koivusalo, H., Sætersdal, M., Weslien, J.-O., Sigurdsson, B.D., Högbom, L., Laine, J. & Hansen, K. Environmental services provided from riparian forests in the Nordic countries. *Ambio* 39(8): 555-566.

Guérécheau, A., Ledevin, R., Henttonen, H., Deffontaine, V., Michaux, J.R., Chevret, P. & Renaud, S. Seasonal variation in molar outline of bank voles: an effect of wear? *Mammalian Biology* 75: 311-319.

Hallikainen, V., Hyppönen, M., Pernu, L. & Puoskari, J. Family forest owners' opinions about forest management in northern Finland. *Silva Fennica* 44(2): 363-384.

Hantula, J. *Heterobasidion parviporum* in Finland: expectations for climatic change. In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J.

(eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 266.

Hantula, J., Müller, M. & Lilja, A. New forest epidemics in northern Europe. In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 124.

Harmens, H. et al. (34 authors, from FFRI Kubin, E. & Piispanen, J.). Mosses as biomonitors of atmospheric heavy metal deposition: Spatial patterns and temporal trends in Europe. *Environmental Pollution* 158: 3144-3156.

Haukisalmi, V., Hardman, L.M. & Henttonen, H. Taxonomic review of cestodes of the genus *Catenotaenia* Janicki, 1904 in Eurasia and molecular phylogeny of *Catenotaeniidae* (Cyclophyllidea). *Zootaxa* 2489: 1-33.

Haukisalmi, V., Hardman, L.M., Foronda, P., Feliu, C. & Henttonen, H. Systematic relationships of *Mosgovoyia Spasskii*, 1951 (Cestoda: Anoplocephalidae) and related genera inferred from mitochondrial and nuclear sequence data. *Systematic Parasitology* 77: 71-79.

Haukisalmi, V., Hardman, L.M., Foronda, P., Feliu, C., Laakkonen, J., Niemimaa, J., Lehtonen, J.T. & Henttonen, H. Systematic relationships of hymenolepidid cestodes of rodents and shrews inferred from sequences of 28S ribosomal RNA. *Zoologica Scripta* 39: 631-641.

Hautamäki, S., Kilpeläinen, H., Kannisto, K., Wall, T. & Verkasalo, E. Factors affecting the appearance quality and visual strength grade distributions of Scots pine and Norway spruce sawn timber in Finland and North-Western Russia. *Baltic Forestry* 16(2): 217-234.

Heikkinen, H., Sarkki, S., Jokinen, M. & Fornander, D.E Global area conservation ideals versus the local realities of reindeer herding in Northernmost Finland. *International Journal of Business and Globalisation* 4(2): 110-130.

Heikkinen, J. & Mäkipää, R. Testing hypotheses on shape and distribution of ecological response curves. *Ecological Modelling* 221(3): 388-399.

Helama, S., Mielikäinen, K., Timonen, M. & Eronen, M. Sub-Milankovitch solar forcing of past climates: Mid and late Holocene perspectives. *Geological Society of America Bulletin* 122: 1981-1988.

Helle, S., Suorsa, P., Huhta, E. & Hakkarainen, H. Fluctuating feather asymmetry in relation to corticosterone levels is sex-dependent in Eurasian treecreeper (*Certhia familiaris*) nestlings. *Biology Letters* 6: 521-524.

Herfindal, I., Linnell, J.D.C., Elmhagen, B., Andersen, R., Frafjord, K., Henttonen, H., Kaikusalo, A., Mela, M., Tannerfeldt, M., Dalén, L., Strand, O., Eide, N., Landa, A. & Angerbjörn, A. Population persistence in a landscape context: the case of endangered arctic fox populations in Fennoscandia. *Ecography* 33: 932-941.

Hetemäki, L. Forest biorefinery: an example of policy driven technology. In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 160-161.

Hetemäki, L. and Mery, G. (convening lead authors), Holopainen, M., Hyyppä, J., Vaario, L.-M. & Yrjälä, K. Implications of technological development to forestry. In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 157-181.

Hilli, S., Stark, S. & Derome, J. Litter decomposition rates in relation to litter stocks in boreal coniferous forests along climatic and soil fertility gradients. *Applied Soil Ecology* 46: 200-208.

Holopainen, M., Haapanen, R., Karjalainen, M., Vastaranta, M., Hyyppä, J., Yu, X., Tuominen, S. & Hyyppä, H. Comparing accuracy of airborne laser scanning and TerraSAR-X radar images in the estimation of plot-Level forest variables. *Remote Sensing* 2(2): 432-445.

Hope, A.G., Waltari, E., Dokuchaev, N.E., Abramov, S., Dupal, T., Tsvetkova, A., Henttonen, H., MacDonald, S.O. & Cook, J.A. High latitude diversification within Eurasian least shrews and Alaska tiny shrews. *Journal of Mammalogy* 91: 1041-1057.

Huttunen, P., Kärkkäinen, K., Løe, G., Rautio, P. & Ågren, J. Leaf trichome production and responses to defoliation and drought in *Arabidopsis lyrata* (Brassicaceae). *Annales Botanici Fennici* 47: 199-207.

Hynynen, J., Niemistö, P., Viherä-Aarnio, A., Brunner, A., Hein, S. & Velling, P. Silviculture of birch (*Betula pendula* Roth and *Betula pubescens* Ehrh.) in northern Europe. *Forestry* 83(1): 103-119.

Hytönen, J. & Jylhä, P. Long-term response of weed control intensity on Scots pine survival, and growth and nutrition on former arable land. *European Journal of Forest Research* 130: 91-98.

Häkkinen, M., Heikkinen, J. & Mäkipää, R. Tree influence on carbon stock and C:N ratio of the soil organic layer in boreal Scots pine forests. *Canadian Journal of Soil Science* 90: 559-566.

Hämäläinen, K., Fritze, H., Jungner, H., Karhu, K., Oinonen, M., Sonninen, E., Spetz, P., Tuomi, T., Vanhala, P. & Liski, J. Molecular sieve sampling of CO<sub>2</sub> from decomposition of organic matter for AMS radiocarbon measurements. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms* 268: 1067-1069.

Härkönen, S., Mäkinen, A., Tokola, T., Rasinmäki, J. & Kalliovirta, J. Evaluation of forest growth simulators with NFI permanent sample plot data from Finland. *Forest Ecology and Management* 259: 573-582.

- Härkönen, S., Pulkkinen, M., Duursma, R. & Mäkelä, A. Estimating annual GPP, NPP and stem growth in Finland using summary models. *Forest Ecology and Management* 259: 524-533.
- Hölttä, T., Mäkinen, H., Nöjd, P., Mäkelä, A. & Nikinmaa, E. A physiological model of softwood cambial growth. *Tree Physiology* 30: 1235-1252.
- Ibrahim, M.A., Mäenpää, M., Hassinen, V., Kontunen-Soppela, S., Malec, L., Rousi, M., Pietikäinen, L., Tervahauta, A., Kärenlampi, S., Holopainen, J.K. & Oksanen, E.J. Elevation of night-time temperature increases terpenoid emissions from *Betula pendula* and *Populus tremula*. *Journal of Experimental Botany* 61(6): 1583-1595.
- Islam, M.N., Kurttila, M., Mehtätalo, L. & Pukkala, T. Inoptimality losses in forest management decisions caused by errors in an inventory based on airborne laser scanning and aerial photographs. *Canadian Journal of Forest Research* 40(12): 2427-2438.
- Isotupa, O. & Tyynelä, T. Growing cloned teak seedlings for small-scale farmers in Costa Rica. *Small-scale Forestry* 9: 263-279.
- Jylhä, P., Dahl, O., Laitila, J. & Kärhä, K. The effect of supply system on the wood paying capability of a kraft pulp mill using Scots pine harvested from first thinnings. *Silva Fennica* 44(4): 695-714.
- Jyske, T., Hölttä, T., Mäkinen, H., Nöjd, P., Lumme, I. & Spiecker, H. The effect of artificially induced drought on radial increment and wood properties of Norway spruce. *Tree Physiology* 30(1): 103-115.
- Jyske, T., Kaakinen, S., Nilsson, U., Saranpää, P. & Vapaavuori, E. Effects of timing and intensity of thinning on wood structure and chemistry in Norway spruce. *Holzforschung* 64(1): 81-91.
- Järvinen, E., Toppinen, A., Toivonen, R. & Hänninen, R. Competitive positioning of the wood products industry in the Leningrad and Vologda Regions of Northwest Russia. *Journal of Forest Products Business Research* 7. 10 p.
- Kaitera, J. & Nuorteva, H. Effects of *Melampyrum* extracts on the growth of axenic cultures of *Cronartium flaccidum* and *Peridermium pini*. *Silva Fennica* 44(2): 197-202.
- Kaitera, J., Tillman-Sutela, E. & Kauppi, A. *Chrysomyxa ledi*, a new rust fungus sporulating in cone scales of *Picea abies* in Finland. *Scandinavian Journal of Forest Research* 25(3): 202-207.
- Kaitera, J., Tillman-Sutela, E. & Kauppi, A. Seasonal sporulation revealed complexity in life cycles of Norway spruce cone rusts. In: Pendleton, R., Meyer, S. & Schultz, B. (eds.). *Seed Ecology III. Seeds and Change. Conference Proceedings, June 20 to June 24, 2010, Salt Lake City, Utah, USA. USDA Forest Service, Rocky Mountains Research Station Proceedings.* p. 76-77.
- Kallio, A.M.I. Accounting for uncertainty in a forest sector model using Monte Carlo simulation. *Forest Policy and Economics* 12(1): 9-16.

Kallio, E.K., Begon, M., Henttonen, H., Koskela, E., Mappes, T., Vaheri, A. & Vapalahti, O. Hantavirus infections in fluctuating host populations: the role of maternal antibodies. *Proceedings of the Royal Society of London. Series B. Biological Sciences* 277: 3783-3791.

Kalliokoski, T., Pennanen, T., Nygren, P., Sievänen, R. & Helmisaari, H.-S. Belowground interspecific competition in mixed boreal forests: fine root and ectomycorrhiza characteristics along stand developmental stage and soil fertility gradients. *Plant and Soil* 330: 73-89.

Kalliokoski, T., Sievänen, R. & Nygren, P. Tree roots as self-similar branching structures; axis differentiation and segment tapering in coarse roots of three boreal forest tree species. *Trees - Structure and Function* 24(2): 219-236.

Kangas, A., Mäkinen, H. & Lyhykäinen, H.T. Value of quality information of Scots pine stands in timber bidding. *Canadian Journal of Forest Research* 40(9): 1781-1790.

Kangas, A., Saarinen, N., Saarikoski, H., Leskinen, L.A., Hujala, T. & Tikkanen, J. Stakeholder perspectives about proper participation for Regional Forest Programmes in Finland. *Forest Policy and Economics* 12(3): 213-222.

Kangas, K., Luoto, M., Ihantola, A., Tomppo, E. & Siikamäki, P. Recreation-induced changes in boreal bird communities in protected areas. *Ecological Applications* 20(6): 1775-1786.

Kankaanhuhta, V., Saksa, T. & Smolander, H. The effect of quality management on forest regeneration activities in privately-owned forests in southern Finland. *Silva Fennica* 44(2): 341-361.

Karhu, K., Fritze, H., Hämäläinen, K., Vanhala, P., Jungner, H., Oinonen, M., Sonninen, E., Tuomi, M., Spetz, P., Kitunen, V. & Liski, J. Temperature sensitivity of soil carbon fractions in boreal forest soil. *Ecology* 91(2): 370-376.

Karhu, K., Fritze, H., Tuomi, M., Vanhala, P., Spetz, P., Kitunen, V. & Liski, J. Temperature sensitivity of organic matter decomposition in two boreal forest soil profiles. *Soil Biology & Biochemistry* 42(1): 72-82.

Karjalainen, E., Sarjala, T. & Raitio, H. Promoting human health through forests: overview and major challenges. *Environmental Health and Preventive Medicine* 15(1): 1-8.

Karppinen, H. & Valkeapää, A. Do attitudes about forest differ between ordinary citizens and forest owners? In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 212-213.

Kauppi, P.E., Rautiainen, A., Korhonen, K.T., Lehtonen, A., Liski, J., Nöjd, P., Tuominen, S., Haakana, M. & Virtanen, T. Changing stock of biomass carbon in a boreal forest over 93 years. *Forest Ecology and Management* 259(7): 1239-1244.

Kilpeläinen, A., Routa, J., Peltola, H., Zubizarreta, A., Pulkkinen, P. & Kellomäki, S. Effects of genetic entry and competition on above ground biomass production of Norway spruce grown in southern Finland. *Forest Ecology and Management* 259(12): 2327-2332.

Kivimäenpää, M., Sutinen, S., Calatayud, V. & José Sanz, M. Visible and microscopic needle alterations of mature Aleppo pine (*Pinus halepensis*) trees growing on an ozone gradient in eastern Spain. *Tree Physiology* 30: 541-554.

Koivusalo, H., Hökkä, H. & Lauren, A. A small catchment scale approach for modelling effects of forest management on water cycle in boreal landscape. In: Bredemeier, M. Cohen, S., Godbold, D.L., Lode, E., Pichler, V. & Schleppei, P. (eds.). *Forest Management and the Water Cycle - An Ecosystem-Based Approach*. Springer Verlag, p. 419-434.

Kontunen-Soppela, S., Parviainen, J., Ruhanen, H., Brosché, M., Keinänen, M., Kolehmainen, M., Thakur, R.C., Kolehmainen, M., Kangasjärvi, J., Oksanen, E., Karnosky, D.F. & Vapaavuori, E. Gene expression responses of paper birch (*Betula papyrifera*) to elevated CO<sub>2</sub> and O<sub>3</sub> during leaf maturation and senescence. *Environmental Pollution* 158(4): 959-968.

Kontunen-Soppela, S., Riikonen, J., Ruhanen, H., Brosché, M., Peltonen, P., Kangasjärvi, J., Auvinen, P., Paulin, L., Keinänen, M., Oksanen, E. & Vapaavuori, E. Differential gene expression in senescing leaves of two silver birch genotypes in response to elevated CO<sub>2</sub> and tropospheric ozone. *Plant, Cell and Environment* 33: 1016-1028.

Kontunen-Soppela, S., Sillanpää, M., Tuhkanen, E.-M., Sutinen, S., Kangasjärvi, J., Vapaavuori, E. & Häggman, H. Photosynthetic characteristics in genetically modified sense-RbcS silver birch lines. *Journal of Plant Physiology* 167: 820-828.

Korpela, K.M., Ylén, M., Tyrväinen, L. & Silvennoinen, H. Favorite green, waterside and urban environments, restorative experiences and perceived health in Finland. *Health Promotion International* 2010. 10 p.

Korpela, M., Mäkinen, H., Nöjd, P., Hollmen, J. & Sulkava, M. Automatic detection of onset and cessation of tree stem radius increase using dendrometer data. *Neurocomputing* 73: 2039-2046.

Korpinen, H., Mochan, S. & Uusitalo, J. An activity-based costing method for sawmilling. *Forest Products Journal* 60(5): 420-431.

Koskimäki, J.J., Hankala, E., Suorsa, M., Nylund, S. & Pirttilä, A.M. Mycobacteria are hidden endophytes in the shoots of rock plant [*Pogonatherum paniceum* (Lam.) Hack.] (Poaceae). *Environmental Microbiology Reports* 2(4): 619-624.

Kotamaa, E., Tokola, T., Maltamo, M., Packalen, P., Kurttila, M. & Mäkinen, A. Integration of remote sensing-based bioenergy inventory data and optimal bucking for stand-level decision making. *European Journal of Forest Research* 129: 875-886.

Kotiaho, M., Fritze, H., Merilä, P., Juottonen, H., Leppälä, M., Laine, J., Laiho, R., Yrjälä, K. & Tuittila, E.-S. Methanogen activity in relation to water table level in two



boreal fens. *Biology and Fertility of Soils* 46(6): 567-575.

Kuznetsova, T., Rosenvald, K., Ostonen, I., Helmisaari, H.-S., Mandre, M. & Lõhmus, K. Survival of black alder (*Alnus glutinosa* L.), silver birch (*Betula pendula* Roth.) and Scots pine (*Pinus sylvestris* L.) seedlings in a reclaimed oil shale mining area. *Ecological Engineering* 36(4): 495-502.

Laaksonen, M., Murdoch, K., Siitonen, J. & Várkonyi, G. Habitat associations of *Agathidium pulchellum*, an endangered old-growth forest beetle species living on slime moulds. *Journal of Insect Conservation* 14(1): 89-98.

Laitila, J., Heikkilä, J. & Anttila, A. Harvesting alternatives, accumulation and procurement cost of small-diameter thinning wood for fuel in Central Finland. *Silva Fennica* 44(3): 465-480.

Larmola, T., Tuittila, E.-S., Tirola, M., Nykänen, H., Martikainen, P.J., Yrjälä, K., Tuomivirta, T. & Fritze, H. The role of Sphagnum mosses in the methane cycling of a boreal mire. *Ecology* 91(8): 2356-2365.

Launiainen, S. Seasonal and inter-annual variability of energy exchange above a boreal Scots pine forest. *Biogeosciences* 7(12): 3915-3940.

Lavikainen, A., Haukialmi, V., Lehtinen, M.J., Laaksonen, S., Holmström, S., Isomursu, M., Oksanen, A. & Meri, S. Mitochondrial DNA data reveal cryptic species within *Taenia krabbei*. *Parasitology International* 59(2): 290-293.

Lawrence, M., McRoberts, R.E., Tomppo, E., Gschwantner, Th. & Gabler, K. Comparisons of National Forest Inventories. In: Tomppo, E., Gschwantner, Th., Lawrence, M. & McRoberts, R.E. (eds.). *National Forest Inventories - Pathways for common reporting*. Springer, p. 19-32.

Ledevin, R., Michaux, J.R., Deffontaine, V., Henttonen, H. & Renaud, S. Evolutionary history of the bank vole, *Myodes glareolus* (Rodentia: Arvicolinae): a morphometric perspective. *Biological Journal of the Linnean Society* 100: 681-694.

Lehto, T., Aphalo, P.J., Saranpää, P., Laakso, T. & Smolander, A. Decomposition and element concentrations of Norway spruce needle litter with differing B, N, or P status. *Plant and Soil* 330: 225-238.

Lehto, T., Smolander, A. & Aphalo, P.J. Decomposition and element concentrations of silver birch leaf litter as affected by boron status of litter and soil. *Plant and Soil* 329: 195-208.

Lehtosalo, M., Mäkelä, A. & Valkonen, S. Regeneration and tree growth dynamics of *Picea abies*, *Betula pendula* and *Betula pubescens* in regeneration areas treated with spot mounding in southern Finland. *Scandinavian Journal of Forest Research* 25(3): 213-223.

Lilja, A., Poteri, M., Petäistö, R.-L., Rikala, R., Kurkela, T., & Kasanen, R. Fungal diseases in forest nurseries in Finland. *Silva Fennica* 44(3): 525-545.

Lilley, T., Laaksonen, T., Huitu, O. & Helle, S. Maternal corticosterone but not testosterone level is associated with the ratio of second-to-fourth digit length (2D:4D) in field vole offspring (*Microtus agrestis*). *Physiology & Behavior* 99: 433-437.

Linkosalo, T., Ranta, H., Oksanen, A., Siljamo, P., Luomajoki, A., Kukkonen, J. & Sofiev, M. A double-threshold temperature sum model for predicting the flowering duration and relative intensity of *Betula pendula* and *B. pubescens*. *Agricultural and Forest Meteorology* 150(12): 1579-1584.

Lintunen, A. & Kalliokoski, T. The effect of tree architecture on conduit diameter and frequency from small distal roots to branch tips in *Betula pendula*, *Picea abies* and *Pinus sylvestris*. *Tree Physiology* 30: 1433-1447.

Lintunen, J. & Kangas, H.-L. The case of co-firing: The market level effects of subsidizing biomass co-combustion. *Energy Economics* 32: 694-701.

Lohila, A., Aurela, M., Hatakka, J., Pihlatie, M., Minkkinen, K., Penttilä, T. & Laurila, T. Responses of N<sub>2</sub>O fluxes to temperature, water table and N deposition in a northern boreal fen. *European Journal of Soil Science* 61(5): 651-660.

Lohila, A., Minkkinen, K., Laine, J., Savolainen, I., Tuovinen, J., Korhonen, L., Laurila, T., Tietäväinen, H. & Laaksonen, A. Forestation of boreal peatlands: Impacts of changing albedo and greenhouse gas fluxes on radiative forcing. *Journal of Geophysical Research* 115. 15 p.

Luiro, J., Kukkola, M., Saarsalmi, A., Tamminen, P. & Helmisaari, H.-S. Logging residue removal after thinning in boreal forests: long-term impact on the nutrient status of Norway spruce and Scots pine needles. *Tree Physiology* 30(30): 78-88.

Lukkarinen, A.J., Ruotsalainen, S., Nikkanen, T. & Peltola, H. Survival, height growth and damages of Siberian (*Larix sibirica* Ledeb.) and Dahurian (*Larix gmelinii* Rupr.) larch provenances in field trials located in southern and northern Finland. *Silva Fennica* 44(5): 727-747.

Luoranen, J., Sutinen, S. & Rikala, R. Predicting spring frost sensitivity by bud development and temperature sum in Norway spruce seedlings. *Trees - Structure and Function* 24(5): 809-817.

Magnussen, S., McRoberts, R.E. & Tomppo, E.O. A resampling variance estimator for the k nearest neighbours techniques. *Canadian Journal of Forest Research* 40: 648-658.

Magnussen, S., Tomppo, E. & McRoberts, R.E. A model-assisted k-nearest neighbour approach to remove extrapolation bias. *Scandinavian Journal of Forest Research* 25(2): 174-184.

Malinen, J., Piira, T., Kilpeläinen, H., Wall, T. & Verkasalo, E. Timber assortment recovery models for Southern Finland. *Baltic Forestry* 16(1): 102-112.

Maljanen, M., Alm, J., Martikainen, P.J. & Repo, T. Prolongation of soil frost resulting from reduced snow cover increases nitrous oxide emissions from boreal forest soil.

Boreal Environment Research 15: 34-42.

Maljanen, M., Hytönen, J. & Martikainen, P.J. Cold-season nitrous oxide dynamics in a drained boreal peatland differ depending on land-use practice. *Canadian Journal of Forest Research* 40(3): 565-572.

Marttila, H., Vuori, K.-M., Hökkä, H., Jämsen, J. & Kløve, B. Framework for designing and applying peak runoff control structures for peatland forestry conditions. *Forest Ecology and Management* 260(8): 1262-1273.

Martz, F., Jaakola, L., Julkunen-Tiitto, R. & Stark, S. Phenolic composition and antioxidant capacity of bilberry (*Vaccinium myrtillus*) leaves in Northern Europe following foliar development and along environmental gradients. *Journal of Chemical Ecology* 36(9): 1017-1028.

Martz, F., Turunen, M., Julkunen-Tiitto, R., Suokanerva, H. & Sutinen, M.-L. Different response of two reindeer forage plants to enhanced UV-B radiation: modification of the phenolic composition. *Polar Biology* 32(6): 813-832.

McRoberts, R.E., Cohen, W.B., Naesset, E., Stehman, S.V. & Tomppo, E.O. Using remotely sensed data to construct and assess forest attribute maps and related special products. *Scandinavian Journal of Forest Research* 25: 340-367.

McRoberts, R.E., Ståhl, G., Vidal, C., Lawrence, M., Tomppo, E., Schadauer, K., Chirici, G. & Bastrup-Birk, A. National Forest Inventories: Prospects for harmonised international reporting. In: Tomppo, E., Gschwantner, Th., Lawrence, M. & McRoberts, R.E. (eds.). *National Forest Inventories - Pathways for common reporting*. Springer, p. 33-43.

McRoberts, R.E., Tomppo, E.O. & Naesset, E. Advances and emerging issues in national forest inventories. *Scandinavian Journal of Forest Research* 25: 368-381.

Merilä, P., Malmivaara-Lämsä, M., Spetz, P., Stark, S., Vierikko, K., Derome, J. & Fritze, H. Soil organic matter quality as a link between microbial community structure and vegetation composition along a successional gradient in a boreal forest. *Applied Soil Ecology* 46(2): 259-267.

Mery, G. & Alfaro, R.I. Introduction. In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 13-17.

Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.) *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25. 509 p.

Miettinen, J., Helle, P., Nikula, A. & Niemelä, P. Capercaillie (*Tetrao urogallus*) habitat characteristics in north-boreal Finland. *Silva Fennica* 44(2): 235-254.

Miina, J., Pukkala, T., Hotanen, J.-P. & Salo, K. Optimizing the joint production of timber and bilberries. *Forest Ecology and Management* 259(10): 2065-2071.

Moilanen, M., Saarinen, M. & Silfverberg, K. Foliar nitrogen, phosphorus and potassium concentrations of Scots pine in drained mires in Finland. *Silva Fennica* 44(4): 583-601.

Moiseyev, A., Solberg, B., Michie, B. & Kallio, A.M.I. Modeling the impacts of policy measures to prevent import of illegal wood and wood products. *Forest Policy and Economics* 12(1): 24-30.

Mäkelä, A., Grace, J.C., Deckmyn, G., Kantola, A. & Campioli, M. Simulating wood quality in forest management models. *Forest Systems* 19: 48-68.

Mäkiranta, P., Riutta, T., Penttilä, T. & Minkkinen, K. Dynamics of net ecosystem CO<sub>2</sub> exchange and heterotrophic soil respiration following clearfelling in a drained peatland forest. *Agricultural and Forest Meteorology* 150(12): 1585-1596.

Mäkitalo, K., Alenius, V., Heiskanen, J. & Mikkola, K. Effect of soil physical properties on the long-term performance of planted Scots pine in Finnish Lapland. *Canadian Journal of Soil Science* 90(3): 451-465.

Männistö, M.K., Tirola, M., McConnell, J. & Häggblom, M.H. *Mucilaginibacter frigitolerans* sp. nov., *Mucilaginibacter lappiensis* sp. nov. and *Mucilaginibacter mallensis* sp. nov., isolated from soil and lichen samples. *International Journal of Systematic and Evolutionary Microbiology* 60(12): 2849-2856.

Neuvonen, M., Pouta, E. & Sievänen, T. Intention to revisit a National Park and its vicinity: effect of place attachment and quality perceptions. *International Journal of Sociology* 40(3): 51-70.

Neuvonen, M., Pouta, E., Puustinen, J. & Sievänen, T. Visits to national parks: Effects of park characteristics and spatial demand. *Journal for Nature Conservation* 18(3): 224-229.

Nevalainen, S., Lindgren, M., Pouttu, A., Heinonen, J., Hongisto, M. & Neuvonen, S. Extensive tree health monitoring networks are useful in revealing the impacts of widespread biotic damage in boreal forests. *Environmental Monitoring and Assessment* 168: 159-171.

Nieminen, M., Ahti, E., Koivusalo, H., Mattsson, T., Sarkkola, S. & Laurén, A. Export of suspended solids and dissolved elements from peatland areas after ditch network maintenance in south-central Finland. *Silva Fennica* 44(1): 39-49.

Nikula, S., Vapaavuori, E. & Manninen, S. Urbanization-related changes in European aspen (*Populus tremula* L.): Leaf traits and litter decomposition. *Environmental Pollution* 158: 2132-2142.

Nilsson, C., Jansson, R., Keskitalo, E.C.H., Vlassova, T., Sutinen, M.-L., Moen, J. & Chapin, F.S. Challenges to adaptation in northernmost Europe as a result of global climate change. *Ambio* 39: 81-84.

Nilsson, U., Luoranen, J., Kolström, T., Örländer, G. & Puttonen, P. Reforestation with planting in northern Europe. *Scandinavian Journal of Forest Research* 25(4): 283-294.

Nuutinen, Y., Väättäinen, K., Asikainen, A., Prinz, R. & Heinonen, J. Operational efficiency and damage to sawlogs by feed rollers of the harvester head. *Silva Fennica* 44(1): 121-139.

Ojanen, P., Minkkinen, K., Alm, J. & Penttilä, T. Soil-atmosphere CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O fluxes in boreal forestry-drained peatlands. *Forest Ecology and Management* 260: 411-421.

Olsson, G.E., Leirs, H. & Henttonen, H. Hantaviruses and their hosts in Europe: reservoirs here and there, but not everywhere? *Vector Borne and Zoonotic Diseases* 10: 546-561.

Ovaskainen, O., Hottola, J. & Siitonen, J. Modeling species co-occurrence by multivariate logistic regression generates new hypothesis on fungal interactions. *Ecology* 91(9): 2514-2521.

Ovaskainen, O., Nokso-Koivisto, J., Hottola, J., Rajala, T., Pennanen, T., Ali-Kovero, H., Miettinen, O., Oinonen, P., Auvinen, P., Paulin, L., Larsson, K.-H. & Mäkipää, R. Identifying wood-inhabiting fungi with 454 sequencing - What is the probability that BLAST gives the correct species? *Fungal Ecology* 3: 274-283.

Palviainen, M., Finer, L., Laiho, R., Shorohova, E., Kapitsa, E. & Vanha-Majamaa, I. Phosphorus and base cation accumulation and release patterns in decomposing Scots pine, Norway spruce and silver birch stumps. *Forest Ecology and Management* 260: 1478-1489.

Palviainen, M., Finér, L., Laiho, R., Shorohova, E., Kapitsa, E. & Vanha-Majamaa, I. Carbon and nitrogen release from decomposing Scots pine, Norway spruce and silver birch stumps. *Forest Ecology and Management* 259: 390-398.

Parviainen, J. Sustainable forest management (SFM) and biological diversity under changing needs of society - an example from the European situation. In: Koizumi, T., Okabe, K., Thomson, I., Sugimura, K., Toma, T. & Fujita, K. (eds.). *The Role of Forest Biodiversity in the Sustainable Use of Ecosystem Goods and Services in Agro-Forestry, Fisheries, and Forestry*. Forestry and Forest Products Research Institute, Ibaraki, Japan. p. 78-85.

Parviainen, J., Furu, P. & Kretsch, C. Tools for assessment of human health dimensions in forests. *Schweizerische Zeitschrift für Forstwesen* 161(3): 114-119.

Peltonen, P.A., Vapaavuori, E., Heinonen, J., Julkunen-Tiitto, R. & Holopainen, J.K. Do elevated atmospheric CO<sub>2</sub> and O<sub>3</sub> affect food quality and performance of folivorous insects on silver birch? *Global Change Biology* 16: 918-935.

Peltoniemi, M. & Mäkipää, R. Quantifying distance-independent tree competition for predicting Norway spruce mortality in unmanaged forests. *Forest Ecology and Management* 261: 30-42.

Pihlatie, M.K., Kiese, R., Brüggemann, N., Butterbach-Bahl, K., Kieloaho, A.-J., Laurila,

T., Lohila, A., Mammarella, I., Minkkinen, K., Penttilä, T., Schönborn, J. & Vesala, T. Greenhouse gas fluxes in a drained peatland forest during spring frost-thaw event. *Biogeosciences* 7: 1715-1727.

Primmer, E. & Karppinen, H. Professional judgment in non-industrial private forestry: Forester attitudes and social norms influencing biodiversity conservation. *Forest Policy and Economics* 12(2): 136-146.

Pukkala, T., Hokkanen, T. & Nikkanen, T. Prediction models for the annual seed crop of Norway spruce and Scots pine in Finland. *Silva Fennica* 44(4): 629-642.

Rabinowitsch-Jokinen, R. & Vanha-Majamaa, I. Immediate effects of logging, mounding and removal of logging residues and stumps on coarse woody debris in managed boreal Norway spruce stands. *Silva Fennica* 44(1): 51-62.

Rajala, T., Peltoniemi, M., Pennanen, T. & Mäkipää, R. Relationship between wood-inhabiting fungi determined by molecular analysis (denaturing gradient gel electrophoresis) and quality of decaying logs. *Canadian Journal of Forest Research* 40: 2384-2397.

Ranta, E., Lindström, J., Kaitala, V., Crone, E., Lundberg, P., Hokkanen, T. & Kubin, E. Life history mediated responses to weather, phenology and large-scale population patterns. In: Hudson, I. L & Keatley, M. R. (eds.). *Phenological Research*. Springer, Dordrecht Heidelberg London New York, Netherlands. p. 321-338.

Rantakari, M., Mattsson, T., Kortelainen, P., Piirainen, S., Finér, L. & Ahtiainen, M. Organic and inorganic carbon concentrations and fluxes from managed and unmanaged boreal first-order catchments. *Science of the Total Environment* 408(7): 1649-1658.

Rantala, J. & Laine, T. Productivity of the M-Planter tree-planting device in practice. *Silva Fennica* 44(5): 859-869.

Rantala, J., Saarinen, V.-M. & Hallongren, H. Quality, productivity and costs of spot mounding after slash and stump removal. *Scandinavian Journal of Forest Research* 25(6): 507-514.

Reunanen, P., Fall, A. & Nikula, A. Biodiversity and ecological forest-cover domains in boreal landscapes. *Biodiversity and Conservation* 19(3): 665-678.

Riikonen, J., Percy, K.E., Kivimäenpää, M., Kubiske, M.E., Nelson, N.D., Vapaavuori, E. & Karnosky, D.F. Leaf surface characteristics of *Betula papyrifera* exposed to elevated CO<sub>2</sub> and O<sub>3</sub>. *Environmental Pollution* 158: 1029-1035.

Rikala, R. & Lappi, J. Prediction of height development in first-year Norway spruce (*Picea abies* (L.) Karsten) container seedlings in a nursery. *Baltic Forestry* 16(1): 43-49.

Rodgers, M., O'Connor, M., Healy, M. G., O'Driscoll, C., Asam, Z-u-Z., Nieminen, M., Poole, R., Muller, M. & Xiao, L. Phosphorus release from forest harvesting on an upland blanket peat catchment. *Forest Ecology and Management* 260(12): 2241-2248.

Saari, P., Saari, V., Luotonen H. & Alm, J. Vegetation change in peatland buffers as an indicator of active areas of run-on from forestry. *Annales Botanici Fennici* 47: 425-438.

Saari, S., Sundell, J., Huitu, O., Helander, M., Ketoja, E., Ylönen, H. & Saikkonen, K. Fungal-mediated multitrophic interactions - do grass endophytes in diet protect voles from predators? *PLoS ONE* 5(3): e9845.

Saarsalmi, A., Smolander, A., Kukkola, M. & Arola, M. Effect of wood ash and nitrogen fertilization on soil chemical properties, soil microbial processes, and stand growth in two coniferous stands in Finland. *Plant and Soil* 331: 329-340.

Saarsalmi, A., Tamminen, P., Kukkola, M. & Hautajärvi, R. Whole-tree harvesting at clear-felling: impact on soil chemistry, needle nutrient concentrations and growth of Scots pine. *Scandinavian Journal of Forest Research* 25(2): 148-156.

Salminen, J., Hernesmaa, A., Karjalainen, H., Fritze, H. & Romantschuk, M. Soil faunal activity, bacterial community composition and functional redundancy in coniferous forest soil. *Biology and Fertility of Soils* 46: 113-126.

Sarjala, S., Niemi, K. & Häggman, H. Mycorrhiza formation is not needed for early growth induction and growth-related changes in polyamine metabolism in Scots pine seedlings in vitro. *Plant Physiology and Biochemistry* 48: 596-601.

Sarjala, T. Forests as a source of health-promoting and bioactive compounds. In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 227.

Sarkkola, S., Hökkä, H., Koivusalo, H., Nieminen, M., Ahti, E., Päivänen, J. & Laine, J. Role of tree stand evapotranspiration in maintaining satisfactory drainage conditions in drained peatlands. *Canadian Journal of Forest Research* 40: 1485-1496.

Schröder, W. et al. (22 authors, from FFRI Kubin, E. & Piispanen, J.). First Europe-wide correlation analysis identifying factors best explaining the total nitrogen concentration in mosses. *Atmospheric Environment* 44: 3485-3491.

Schröder, W. et al. (34 authors, from FFRI Kubin, E. & Piispanen, J.). Are cadmium, lead and mercury concentrations in mosses across Europe primarily determined by atmospheric deposition of these metals. *Journal of Soils and Sediments* 10: 1572-1584.

Seliverstov, A., Syuney, V., Gerasimov, Y. & Sokolov, A. Improving the efficiency of harvesters. *Systems. Methods. Technologies* 8(4): 133-139.

Selkimäki, M., Mola-Yudego, B., Röser, D., Prinz, R. & Sikanen, L. Present and future trends in pellet markets, raw materials, and supply logistics in Sweden and Finland. *Renewable & Sustainable Energy Reviews* 14(9): 3068-3075.

Semenzato, P., Sievänen, T., Silveirinha de Oliveira, E., Soares, A.L. & Spaeth, R. Natural elements and physical activity in urban green space planning and design. In: Nilsson, K., Sangster, M., Gallis, C., Hartig, T., de Vries, S., Seeland, K. & Schipperin, J.

(eds.). *Forests, Trees and Human Health*. Springer Science+Business Media, New York, Dordrecht, Heidelberg, London. p. 245-282.

Seo, J.-W., Salminen, H., Jalkanen, R. & Eckstein, D. Chronological coherence between intra-annual height and radial growth of Scots pine (*Pinus sylvestris* L.) in the northern boreal zone of Finland. *Baltic Forestry* 16(1): 57-65.

Silvan, N., Silvan, K. & Laine, J. Excavation-drier method of energy-peat production reduces detrimental effects of this process on watercourses. *Boreal Environment Research* 15: 347-356.

Sirkiä, S., Lindén, A., Helle, P., Nikula, A., Knappe, J. & Lindén, H. Are the declining trends in forest grouse populations due to changes in the forest age structure? A case study of Capercaillie in Finland. *Biological Conservation* 143(6): 1540-1548.

Sletvold, N., Huttunen, P., Handley, R., Kärkkäinen, K. & Ågren, J. Cost of trichome production and resistance to a specialist insect herbivore in *Arabidopsis lyrata*. *Evolutionary Ecology* 24: 1300-1313.

Smolander, A., Kitunen, V., Tamminen, P. & Kukkola, M. Removal of logging residue in Norway spruce thinning stands: Long-term changes in organic layer properties. *Soil Biology & Biochemistry* 42: 1222-1228.

Solberg, B., Moiseyev, A., Kallio, A.M.I. & Toppinen, A. Forest sector market impacts of changed roundwood export tariffs and investment climate in Russia. *Forest Policy and Economics* 12(1): 17-23.

Stark, S., Männistö, M.K. & Smolander, A. Multiple effects of reindeer grazing on the soil processes in nutrient-poor northern boreal forests. *Soil Biology & Biochemistry* 42: 2068-2077.

Stien, A., Voutilainen, L., Haukisalmi, V., Fuglei, E., Mørk, T., Yoccoz, N.G., Ims, R.A. & Henttonen, H. Intestinal parasites of the Arctic fox in relation to the abundance and distribution of intermediate hosts. *Parasitology* 137: 149-157.

Store, R. & Antikainen, H. Using GIS-base multicriteria evaluation and path optimization for effective forest field inventory. *Computers, Environment and Urban Systems* 34: 153-161.

Straková, P., Anttila, J., Spetz, P., Kitunen, V., Tapanila, T. & Laiho, R. Litter quality and its response to water level drawdown in boreal peatlands at plant species and community level. *Plant and Soil* 335: 501-520.

Sutinen, R., Närhi, P., Herva, H., Piekkari, M. & Sutinen, M.-L. Impact of intensive forest management on soil quality and natural regeneration of Norway spruce. *Plant and Soil* 336: 421-431.

Tack, A., Ovaskainen, O., Pulkkinen, P. & Roslin, T. Spatial location dominates over host plant genotype in structuring an herbivore community. *Ecology* 91(9): 2660-2672.



Tahkokorpi, M., Korteniemi, M., Taulavuori, E., Roitto, M., Laine, K., Huttunen, S. & Taulavuori, K. Trace amounts of nickel in belowground rhizomes of *Vaccinium myrtillus* L. decrease anthocyanin concentrations in aerial shoots without water stress. *Environmental and Experimental Botany* 69: 338-342.

Tikkanen, J., Hokajärvi, R. & Hujala, T. Development phases of forest planning on non-industrial private lands in Finland: Perspective of planners' work. *Small-scale Forestry* 9(3): 331-347.

Tillman-Sutela, E. & Kauppi, A. Advanced structural adaptation of seeds to bird-dispersal - profit with risk for survival of tree-line *Cembrae*. In: Pendleton, R., Meyer, S. & Schultz, B. (eds.). *Seed Ecology III. Seeds and Change. Conference Proceedings, June 20 to June 24, 2010, Salt Lake City, Utah, USA. USDA Forest Service, Rocky Mountains Research Station Proceedings.* p. 178-179.

Timonen, J., Siitonen, J., Gustafsson, L., Kotiaho, J.S., Stokland, J.N., Sverdrup-Thygeson, A. & Mönkkönen, M. Woodland key habitats in northern Europe: concepts, inventory and protection. *Scandinavian Journal of Forest Research* 25(4): 309-324.

Tomppo, E., Gabler, K., Schadauer, K., Gschwantner, Th., Lanz, A., Ståhl, G., McRoberts, R.E., Chirici, G., Cienciala, E. & Winter, S. Summary of accomplishments. In: Tomppo, E., Gschwantner, Th., Lawrence, M. & McRoberts, R.E. (eds.). *National Forest Inventories - Pathways for common reporting.* Springer, p. 45-54.

Tomppo, E., Gschwantner, Th., Lawrence, M. & McRoberts, R.E. (eds.) *National Forest Inventories - Pathways for common reporting.* Springer, 612 p.

Tomppo, E., Schadauer, K., McRoberts, R.E., Gschwantner, Th., Gabler, K. & Ståhl, G. Introduction. In: Tomppo, E., Gschwantner, Th., Lawrence, M. & McRoberts, R.E. (eds.). *National Forest Inventories - Pathways for common reporting.* Springer, p. 1-18.

Tuominen, S., Eerikäinen, K., Schibalski, A., Haakana, M. & Lehtonen, A. Mapping biomass variables with a multi-source forest inventory technique. *Silva Fennica* 44(1): 109-119.

Törn, A., Siikamäki, P. & Tolvanen, A. Can horse riding induce the introduction and establishment of alien plant species through endozoochory and gap creation? *Plant Ecology.*

Uotila, K., Rantala, J., Saksa, T. & Harstela, P. Effect of soil preparation method on economic result of Norway spruce regeneration chain. *Silva Fennica* 44(3): 511-524.

Vaaramaa, K., Aro, L., Solatie, D. & Lehto, J. Distribution of <sup>210</sup>Po and <sup>210</sup>Pb in boreal forest soil. *Science of the Total Environment* 408(24): 6165-6171.

Vaario, L.-M., Pennanen, T., Sarjala, T., Savonen, E.-M. & Heinonsalo, J. Ectomycorrhization of *Tricholoma matsutake* and two major conifers in Finland - An assessment of in vitro mycorrhiza formation. *Mycorrhiza* 20: 511-518.

Vainio, E.-J., Korhonen, K., Tuomivirta, T.T. & Hantula, J. A novel putative partitivirus

of the saprotrophic fungus *Heterobasidion ecrustosum* infects pathogenic species of the *Heterobasidion annosum* complex. *Fungal Biology* 114: 955-965.

Vanbergen, A.J. et al. (21 authors, from FFRI Koivula, M.). Trophic level modulates carabid beetle responses to habitat and landscape structure: a pan-European comparison. *Ecological Entomology* 35(2): 226-235.

Vanhanen, H. (convening lead author), Rayner, J., Yasmi, Y., Enters, T., Fabra-Crespo, M., Kanowski, P., Karppinen, H., Mainusch, J. & Valkeapää, A. Forestry in changing social landscapes. In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 201-221.

Varis, S., Reiniharju, J., Santanen, A., Ranta, H. & Pulkkinen, P. Interactions during in vitro germination of Scots pine pollen. *Trees - Structure and Function* 24(1): 99-104.

Varmola, M. (convening lead author), Kanninen, M., Li, N. & Xu, D. Sustainability of wood supply: Risk analysis for a pulp mill in Guangxi, China. In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 385-398.

Vesterinen, J., Pouta, E., Huhtala, A. & Neuvonen, M. Impacts of changes in water quality on recreation behavior and benefits in Finland. *Journal of Environmental Management* 91(4): 984-994.

Vetikko, V., Rantavaara, A. & Moilanen, M. Uptake of <sup>137</sup>Cs by berries, mushrooms and needles of Scots pine in peatland forests after wood ash application. *Journal of Environmental Radioactivity* 101: 1055-1060.

Vikan, J.R., Stokke, B.G., Rutila, J., Huhta, E., Moksnes, A. & Roskaft, E. Evolution of defences against cuckoo (*Cuculus canorus*) parasitism in bramblings (*Fringilla montifringilla*): A comparison of four distant populations in Fennoscandia. *Evolutionary Ecology* 24: 1141-1157.

Vikman, A., Sarkkola, S., Koivusalo, H., Sallantausta, T., Laine, J., Silvan, N., Nousiainen, H. & Nieminen, M. Nitrogen retention by peatland buffer areas at six forested catchments in southern and central Finland. *Hydrobiologia* 641(1): 171-183.

Virtanen, R., Luoto, M., Rämä, T., Mikkola, K., Hjort, J., Grytnes, J.-A. & Birks, H.J.B. Recent vegetation changes at the high-latitude tree line ecotone are controlled by geomorphological disturbance, productivity and diversity. *Global Ecology and Biogeography* 19: 810-821.

Vuosku, J., Sutela, S., Säskilähti, M., Kestilä, J., Jokela, A., Sarjala, T. & Häggman, H. Dealing with the problem of non-specific in situ mRNA hybridization signals associated with plant tissues undergoing programmed cell death. *Plant Methods* 6(1): 1-9.

Wallenius, T., Niskanen, L., Virtanen, T., Hottola, J., Brumelis, G., Angervuori, A., Julkunen, J. & Pihlström, M. Loss of habitats, naturalness and species diversity in Eurasian forest landscapes. *Ecological Indicators* 10(6): 1093-1101.

Wallenius, T.H., Kauhanen, H., Herva, H. & Pennanen, J. Long fire cycle in northern boreal Pinus forests in Finnish Lapland. *Canadian Journal of Forest Research* 40(10): 2027-2035.

Werhahn-Mees, W., Palosuo, T., Garcia-Gonzalo, J., Röser, D. & Lindner, M. Sustainability impact assessment of increasing resource use intensity in forest bioenergy production chains. *Global Change Biology, Bioenergy*.2010. 16 p..

Windisch, J., Sikanen, L., Röser, D. & Gritten, D. Supply chain management application for forest fuel procurement - cost or benefit? *Silva Fennica* 44(5): 845-858.

Yasmi, Y., Vanhanen, H., Tissari, J., Enters, T. & Broadhead, J. (eds.) *Asian Forests: Working for People and Nature*. IUFRO-WFSE, FAO and RECOFTC, Helsinki. 25 p.

Yrjälä, K. & Vaario, L.-M. Endophytic bacteria to improve fitness of woody plants. In: Mery, G., Katila, P., Galloway, G., Alfaro, R.I., Kanninen, M., Lobovikov, M. & Varjo, J. (eds.). *Forests and Society - Responding to Global Drivers of Change*. IUFRO World Series 25: 169.

Zvereva, E.L., Roitto, M. & Kozlov, M.V. Growth and reproduction of vascular plants in polluted environments: a synthesis of existing knowledge. *Environmental Reviews* 18: 355-367.

## KANSALLISET REFEROIDUT JULKAISUT

Aarnio, J., Petäjistö, L. & Selby, A. Uusien metsästäjien metsästysmahdollisuudet alueittain: erityistapauksena hirvenmetsästys. *Suomen Riista* 56: 95-110.

Finér, L., Mattsson, T., Joensuu, S., Koivusalo, H., Laurén, A., Makkonen, T., Nieminen, M., Tattari, S., Ahti, E., Kortelainen, P., Koskiaho, J., Leinonen, A., Nevalainen, R., Piirainen, S., Saarelainen, J., Sarkkola S. & Vuollekoski, M. Metsäisten valuma-alueiden vesistökuormituksen laskenta. *Suomen ympäristö* 10/2010. 33 s.

Himanen, K., Helenius, P. & Nygren, M. Liotuskäsittelyiden vaikutus kuusen siementen itämiseen. *Metsätieteen aikakauskirja* 2/2010: 103-114.

Hynninen, A., Saari, P., Nieminen, M. & Alm, J. Pintavalutus metsätaloustoimien valumavesien puhdistamisessa - kirjallisuustarkastelu (Summary: Use of peatland buffer areas for water purification in forested catchments - A review). *Suo - Mires and Peat* 61(3-4): 77-85.

Hyppönen, M., Hyvönen, J., Morri, P., Puoskari, J. & Hallikainen, V. Keräilyn, metsästyksen ja kalastuksen merkitys Ylä-Lapin kuntien kotitalouksille. *Metsätieteen aikakauskirja* 1/2010: 65-73.

Jokinen, A., Nikula, A., Nygren, N., Tersa, P. & Haila, Y. Liito-oravan elinympäristöjen mallitus ja ennakointi Tampereen kaupunkiseudulla. *Suomen ympäristö* 11/2010. 71 s.

Karppinen, H. & Tiainen, L. "Semmonen niinkun metsäkansa" - suurten ikäluokkien perijät tulevaisuuden metsänomistajina. Metsätieteen aikakauskirja 1/2010: 19-38.

Kietäväinen, A. Rintamamiesmökin emännän kotoinen tila. Julkaisussa: Vilkko, A., Suikkanen, A. & Järvinen-Tassopoulos, J. (toim.). Kotia paikantamassa. Lapin yliopistokustannus, Rovaniemi. s. 126-145.

Korhonen, K.T., Ihalainen, A., Miina, J., Saksa, T. & Viiri, H. Metsänuudistamisen tila Suomessa VMI10:n aineistojen perusteella. Metsätieteen aikakauskirja 4/2010: 425-478.

Lilja, A., Hantula, J., Rytönen, A., Müller, M., Parikka, P., Pouttu, P. & Kurkela, T. Vieras- ja tulokaslajit tautien aiheuttajina metsäpuilla. Metsätieteen aikakauskirja 3/2010: 283-301.

Mattila, U. & Korhonen, K.T. Yleiskaavamerkintöjen ja -määräysten aiheuttamat puuntuotannon rajoitukset Pohjois-Karjalassa valtakunnan metsien 10. inventoinnin mukaan. Metsätieteen aikakauskirja 1/2010: 5-18.

Rovanperä, S., Luhta, V., Hallikainen, V., Hyppönen, M. & Tuulentie, S. Matkailijoiden näkemyksiä Inarin metsä- ja maankäyttökysymyksistä. Metsätieteen aikakauskirja 4/2010: 383-397.

Saari, P., Saari, V., Saarnio, S., Kukkonen, J.V.K., Akkanen, J., Luotonen, H., Lyytikäinen, V., Heikkinen, S.M., Hirvonen, T. & Alm, J. Kasvillisuus kertoo suometsätalouden ravinnekuormituksen vähäisyydestä. Luonnon Tutkija 114(1): 8-12.

Saarikoski, H., Mustajoki, J., Marttunen, M., Ahtikoski, A., Hallikainen, V., Helle, T., Hyppönen, M., Jokinen, M., Naskali, A., Tuulentie, S., Varmola, M., Vatanen, E. & Ylisirniö, A.-L. Monitavoitearviointi Ylä-Lapin metsien kestävä käytön mahdollisuuksista. Metsätieteen aikakauskirja 1/2010: 39-63.

Saksa, T. & Miina, J. Perkaustavan ja -ajankohdan vaikutus männyn istutustaimikon kehitykseen Etelä-Suomessa. Metsätieteen aikakauskirja 2/2010: 115-127.

Silfverberg, K., Huotari, N. & Kokkonen, A.-M. Puu- ja turvetuhkan vaikutukset kasvillisuuteen ja männyn taimettumiseen päätehakatulla turvekankaalla. Metsätieteen aikakauskirja 4/2010: 341-353.

Vastaranta, M., Ojansuu, R. & Holopainen, M. Puustotunnusten laskennallisen ajantasaistuksen luotettavuus - tapaustutkimus Pohjois-Savossa. Metsätieteen aikakauskirja 4/2010: 367-381.

Viitala, E.-J. Stora Enson ja Metsäliitto-konsernin metsien omistusjärjestelyt vuosina 2001-2005. Metsätieteen aikakauskirja 3/2010: 239-260.

Viitala, E.-J. Laajamittaisen metsänomistuksen kannattavuus: Tornatorin ja Finsilvan taloudellinen toiminta. Metsätieteen aikakauskirja 3/2010: 261-282.