

## **Julkaisut vuonna 2006 – Publications in 2006**

### **Väitöskirjat/Doctoral dissertations**

Anschlag, K. 2006: Regeneration der Fjellbirke (*Betula pubescens* ssp. *czerepanovii*) und Wurzelsysteme ihres Jungwuchses im Waldgrenzökoton, Finnische Subarktis. Doc. thesis Fachbereich Geowissenschaften, Westfälische Wilhelms-Universität, Münster. Arbeiten aus dem Institut für Landschaftsökologie 16, Westfälische Wilhelms-Universität, Münster, 133 pp.

Wäli, P. 2006: Environment and genetic background affecting endophyte-grass symbiosis. – Doc. thesis, Acta Universitatis Ouluensis, Scientiae Rerum Naturalium A 466. 57 pp. + 5 articles.

### **Muut julkaisut/Other publications**

Buschbom, J. & Mueller, G.M. 2006: Testing “species pair” hypothesis: evolutionary processes in the lichen-forming species complex *Porpidia flavocoerulescens* and *Porpidia melinodes*. – *Molecular Biology and Evolution* 23(3): 574-586. doi: 10.1093/molbev/msj063

Haviola, S., Saloniemi, I., Ossipov, V. & Haukioja, E. 2006: Additive genetic variation of secondary and primary metabolites in mountain birch. – *Oikos* 112(2): 382-391. doi: 10.1111/j.0030-1299.2006.14361.x

Heiskanen, J. 2006: Estimating aboveground tree biomass and leaf area index in a mountain birch forest using ASTER satellite data. – *International Journal of Remote Sensing* 27(6): 1135-1158. doi: 10.1080/01431160500353858

Holtmeier, F.-K. & Broll, G. 2006: Radiocarbon-dated peat and wood remains from the Finnish Subarctic: evidence of treeline and landscape history. – *The Holocene* 16(5): 743-751. doi: 10.1191/095968306hl968rp

Juntunen, V. & Neuvonen, S. 2006: Natural regeneration of Scots pine and Norway spruce close to the timberline in northern Finland. *Silva Fennica* 40(3): 443-458.

Kaitaniemi, P. & Ruohomäki, K. 2006: Uncaged larvae elicit a combination of local and integrated growth responses within mountain birch crown. – *Oikos* 115(3): 537-548. doi: 10.1111/j.2006.0030-1299.14878.x

Kapari, L., Haukioja, E., Rantala, M.J. & Ruuhola, T. 2006: Defoliating insect immune defense interacts with induced plant defense during a population outbreak. – *Ecology* 87(2): 291-296. doi.org/10.1890/05-0362

Karonen, M., Ossipov, V., Lojonen, J., Haukioja, E. & Pihlaja, K. 2006: Quantitative analysis of polymeric proanthocyanidins in birch leaves with normal-phase HPLC. – *Phytochemical Analysis* 17(3): 149-156. doi: 10.1002/pca.898

Klemola, T., Huitu, O. & Ruohomäki, K. 2006: Geographically partitioned spatial synchrony among cyclic moth populations. – *Oikos* 114(2): 349-359. doi: 10.1111/j.2006.0030-1299.14850.x

- Lahtinen, M., Kapari, L., Haukioja, E. & Pihlaja, K. 2006: Effects of increased content of leaf surface flavonoids on the performance of mountain birch feeding sawflies vary for early and late season species. – *Chemoecology* 16(3): 159-167. doi: 10.1007/s00049-006-0343-y
- Leinonen, T., Cano, J.M., Mäkinen, H. & Merilä, J. 2006: Contrasting patterns of body shape and neutral genetic divergence in marine and lake populations of threespine sticklebacks. – *Journal of Evolutionary Biology* 19(6): 1803-1812. doi: 10.1111/j.1420-9101.2006.01182.x
- Osmonen, O., Iso-Iivari, L. & Sihvo, J. 2006: Linnut. – Teoksessa: Stolt, E. (toim.): Paistunturin erämaa-alueen ja Kevon luonnonpuiston luonto, käyttö ja paikannimistö. Metsähallituksen luonnonsuojelujulkaisuja A 161: 70-76.
- Riihimäki, J., Vehviläinen, H., Kaitaniemi, P. & Koricheva, J. 2006: Host tree architecture mediates the effect of predators on herbivore survival. – *Ecological Entomology* 31(3): 227-235. doi: 10.1111/j.1365-2311.2006.00784.x
- Ruuhola, T. & Yang, S. 2006: Wound-induced oxidative responses in mountain birch leaves. – *Annals of Botany* 97(1): 29-37. doi: 10.1093/aob/mcj005
- Sinkkonen, A. 2006: Sexual reproduction advances autumn leaf colours in mountain birch (*Betula pubescens* ssp. *czerepanovii*). – *Journal of Evolutionary Biology* 19(5): 1722-1724. doi: 10.1111/j.1420-9101.2005.00991.x

## **Julkaistut vuonna 2007 – Publications in 2007**

### **Väitöskirjat/Doctoral dissertations**

Yang, S. 2007: Regulation of mountain birch-autumnal moth interaction: from plant defence to immune resistance of insects. – Doc. thesis, *Annales Universitatis Turkuensis A II* 204. 85 pp.

### **Pro gradu -tutkielmat/Master's theses**

Ammunét, T. 2007: Larval parasitism of autumnal moth reduces defoliation intensity of mountain birch. – M. Sc. thesis, Department of Biology, University of Turku. 43 pp + 2 app.

### **Muut julkaisut/Other publications**

Broll, G., Holtmeier, F.-K., Anschlag, K., Brauckmann, H.-J., Wald, S. & Drees, B. 2007: Landscape mosaic on Rodjanoaivi, Finnish Subarctic. - *Fennia* 185(2): 89-105.

Emberlin, J., Laaidi, M., Detand, M., Gehrig, R., Jaeger, S., Myszkowska, D., Nolard, N., Rantio-Lehtimäki, A. & Stach, A. 2007: Changement climatique et évolution du contenu pollinique de l'air dans sept pays européens: exemple du bouleau. – *Revue Française d'Allergologie et d'Immunologie Clinique* 47(2): 57-63. doi.org/10.1016/j.allerg.2006.11.005

- Gross, J., Fatouros, N.E., Neuvonen, S. & Hilker, M. 2007: The role of competitors for *Chrysomela lapponica*, a north Eurasian willow pest, in pioneering a new host plant . – Journal of Pest Science 80(3): 139-143. doi: 10.1007/s10340-007-0165-x
- Haviola, S., Kapari, L., Ossipov, V., Rantala, M. J., Ruuhola, T. & Haukioja, E. 2007: Foliar phenolics are differently associated with *Epirrita autumnata* growth and immunocompetence. – Journal of Chemical Ecology 33(5): 1013-1023. doi: 10.1007/s10886-007-9271-8
- Heino, S. 2007: Ruska hehkuu viimeisillään. – Turun Sanomat 12.10.2007.
- Helander, M., Ahlholm, J., Sieber, T.N., Hinneri, S. & Saikkonen, K. 2007: Fragmented environment affects birch leaf endophytes. – New Phytologist 175(3): 547-553. doi: 10.1111/j.1469-8137.2007.02110.x
- Hjort, J., Luoto, M. & Seppälä, M. 2007: Landscape scaling determinants of periglacial features in subarctic Finland: a grid-based modelling approach. – Permafrost and Periglacial Process 18(2): 115-127. doi: 10.1002/ppp.584
- Holtmeier, F.-K. & Broll, G. 2007: Treeline advance – driving processes and adverse factors. – Landscape Online 1: 1-33. doi: 10.3097/LO.200701
- Karlsen, S.R., Solheim, I., Beck, P.S.A., Høgda, K.A. & Wielgolaski, F.E. 2007: Variability of the start of the growing season in Fennoscandia, 1982–2002. – International Journal of Biometeorology 51(6): 513-524. doi: 10.1007/s00484-007-0091-x
- Klemola, T., Klemola, N., Andersson, T. & Ruohomäki, K. 2007: Does immune function influence population fluctuation and level of parasitism in the cyclic geometrid moth? – Population Ecology 49(2): 165-178. doi: 10.1007/s10144-007-0035-7
- Klemola, N., Klemola, T., Rantala, M.J. & Ruuhola, T. 2007: Natural host-plant quality affects immune defence of an insect herbivore. – Entomologia Experimentalis et Applicata 123(2): 167-176. doi: 10.1111/j.1570-7458.2007.00533.x
- Kytöviita, M.-M. & Crittenden, P.D. 2007: Growth and nitrogen relations in the mat-forming lichens *Stereocaulon paschale* and *Cladonia stellaris*. – Annals of Botany 100(7): 1537-1545. doi: 10.1093/aob/mcm249
- Lazutin, L.L., Kozelova, T.V., Meredith, N.P., Danielides, M., Kozelov, B.V., Jussila, J. & Korth, A. 2007: Studies of the substorm on March 12, 1991: 1. Structure of substorm activity and auroral ions. – Cosmic Research 45(1): 27-38. doi: 10.1134/S0010952507010042
- Ruuhola, T., Salminen, J.-P., Haviola, S., Yang, S. & Rantala, M.J. 2007: Immunological memory of mountain birches: effects of phenolics on performance of the autumnal moth depend on herbivory history of trees. – Journal of Chemical Ecology 33(6): 1160-1176. doi: 10.1007/s10886-007-9308-z
- Saikkonen, K. 2007: Forest structure and fungal endophytes. – Fungal Biology Reviews 21(2-3): 67-74. doi.org/10.1016/j.fbr.2007.05.001

Yang, S., Haviola, S. & Ruuhola, T. 2007: Temporal and spatial variation in mountain birch foliar enzyme activities during the larval period of *Epirrita autumnata*. – *Chemoecology* 17(2): 71-80. doi: 10.1007/s00049-006-0362-8

Yang, S., Ruuhola, T., Haviola, S. & Rantala, M.J. 2007: Temperature as a modifier of plant-herbivore interaction. – *Journal of Chemical Ecology* 33(3): 463-475. doi: 10.1007/s10886-006-9239-0

Yang, S., Ruuhola, T. & Rantala, M. J. 2007: Impact of starvation on immune defense and other life-history traits of an outbreaking geometrid, *Epirrita autumnata*: a possible causal trigger for the crash phase of population cycle. – *Annales Zoologici Fennici* 44(2): 89-96.

## **Julkaisut vuonna 2008 – Publications in 2008**

### **Väitöskirjat/Doctoral dissertations**

van Ooik, T. 2008: Effects of heavy metal pollution and host plant leaf chemistry on the immune defense and life history traits of an insect herbivore. – Doc. thesis, *Annales Universitatis Turkuensis*, A II 224. 96 pp.

### **Pro gradu -tutkielmat/Master's theses**

Andersson, T. 2008: Tunturimittarinaaraisiin kohdistuva saalistus populaatiosyklin eri vaiheissa. [Predation on autumnal moth females in different phases of a population cycle.] – M. Sc. thesis, Department of Biology, University of Turku. 21 pp.

Anttila, U. 2008: UV-B radiation interacts with the relationship between autumnal moth and its host plant, mountain birch. – M. Sc. thesis, Department of Biology, University of Turku. 51 pp. + 1 app.

### **Muut julkaisut/Other publications**

Anschlag, K., Broll, G. & Holtmeier, F.-K. 2008: Mountain birch seedlings in the treeline ecotone, Subarctic Finland: variation in above-ground and below-ground growth depending on microtopography. – *Arctic, Antarctic and Alpine Research* 40(4):609-616. doi.org/10.1657/1523-0430(07-087)[ANSCHLAG]2.0.CO;2

Hjort, J. & Luoto, M. 2008: Can abundance of geomorphological features be predicted using presence-absence data? – *Earth Surface Processes and Landforms* 33(5): 741-750. doi: 10.1002/esp.1572

Huitu, O., Helander, M., Lehtonen, P. & Saikkonen, K. 2008: Consumption of grass endophytes alters the ultraviolet spectrum of vole urine. – *Oecologia* 156(2): 333-340. doi: 10.1007/s00442-008-0984-3

- Karlsen, S.R., Tolvanen, A., Kubin, E., Poikolainen, J., Høgda, K.A., Johansen, B., Danks, F.S., Aspholm, P., Wielgolaski, F.E. & Makarova, O. 2008: MODIS-NDVI-based mapping of the length of the growing season in northern Fennoscandia. – *International Journal of Applied Earth Observation and Geoinformation* 10(3): 253-266. doi.org/10.1016/j.jag.2007.10.005
- Klemola, T., Andersson, T. & Ruohomäki, K. 2008: Fecundity of the autumnal moth depends on pooled geometrid abundance without a time lag: implications for cyclic population dynamics. – *Journal of Animal Ecology* 77(3): 597-604. doi: 10.1111/j.1365-2656.2008.01369.x
- Klemola, N., Kapari, L. & Klemola, T. 2008: Host plant quality and defence against parasitoids: no relationship between levels of parasitism and a geometrid defoliator immunoassay. – *Oikos* 117(6): 926-934. doi: 10.1111/j.0030-1299.2008.16611.x
- Koponen, S. 2008: Mapping the spider fauna (Araneae) of Finland. – In Makarov, S.E. & Dimitrijevic, R.N. (eds.): *Advances in Arachnology and Developmental Biology. Papers dedicated to Prof. Dr. Božidar Čurčić*. SASA, Belgrade & UNESCO MAB Serbia. Vienna – Belgrade – Sofia, Monographs 12: 349-354.
- Kujala, K., Seppälä, M. & Holappa, T. 2008: Physical properties of peat and palsa formation. – *Cold Regions Science and Technology* 52(3): 408-414. doi.org/10.1016/j.coldregions.2007.08.002
- Laine, K., Järvinen, A., Luoto, M., Siikamäki, P., Pohjonen, V., Saikkonen, K. & Inkeröinen, J. 2008: Northern long-term socio-ecological research platform (Northern LTSER Platform) - a new tool for collaborative research in Northern Finland. The 2nd SAON workshop. Edmonton, Canada, April 9-11, 2008.
- Luoto, M. & Hjort, J. 2008: Downscaling of coarse-grained geomorphological data. – *Earth Surface Processes and Landforms* 33(1): 75-89. doi: 10.1002/esp.1529
- Mäkinen, H.S., Cano, J.M. & Merilä, J. 2008: Identifying footprints of directional and balancing selection in marine and freshwater three-spined stickleback (*Gasterosteus aculeatus*) populations. – *Molecular Ecology* 17(15): 3565-3582. doi: 10.1111/j.1365-294X.2008.03714.x
- Mäntylä, E., Alessio, G.A., Blande, J.D., Heijari, J., Holopainen, J.K., Laaksonen, T., Piirtola, P. & Klemola, T. 2008: From plants to birds: Higher avian predation rates in trees responding to insect herbivory. – *PloS ONE* 3(7): e2832. doi: 10.1371/journal.pone.002832
- Mäntylä, E., Klemola, T., Sirkiä, P., & Laaksonen, T. 2008: Low light reflectance may explain the attraction of birds to defoliated trees. – *Behavioral Ecology* 19(2): 325-330. doi: 10.1093/beheco/arm135
- van Ooik, T., Pausio, S. & Rantala, M.J. 2008: Direct effects of heavy metal pollution on the immune function of a geometrid moth, *Epirrita autumnata*. – *Chemosphere* 71(10): 1840-1844. doi.org/10.1016/j.chemosphere.2008.02.014
- Pehkonen, T. & Tolvanen, A. 2008: Relationships between *Vaccinium vitis-idaea* and the frequency of its fungal pathogen *Exobasidium splendidum*, and the environment. – *Arctic, Antarctic and Alpine Research* 40(3): 561-567. doi.org/10.1657/1523-0430(07-041)[PEHKONEN]2.0.CO;2

- Pudas, E., Leppälä, M., Tolvanen, A., Poikolainen, J., Venäläinen, A. & Kubin, E. 2008: Trends in phenology of *Betula pubescens* across the boreal zone in Finland. – International Journal of Biometeorology 52(4): 251-259. doi: 10.1007/s00484-007-0126-3
- Pudas, E., Tolvanen, A., Poikolainen, J., Sukuvaara, T. & Kubin, E. 2008: Timing of plant phenophases in Finnish Lapland in 1997-2006. – Boreal Environment Research 13(1): 31-43.
- Ranta, H., Sokol, C., Hicks, S., Heino, S., & Kubin, E. 2008: How do airborne and deposition pollen samplers reflect the atmospheric dispersal of different pollen types? An example from northern Finland. – GRANA 47(4): 285-296. doi: 10.1080/00173130802457230
- Ruuhola, T., Yang, S., Ossipov, V. & Haukioja, E. 2008: Foliar oxidases as mediators of the rapidly induced resistance of mountain birch against *Epirrita autumnata*. – Oecologia 154(4): 725-730. doi: 10.1007/s00442-007-0869-x
- Saikkonen, K. 2008: Ilmastomuutoksen vaikutus päiväkohtaisin haaste kansainväliselle tutkimukselle. Lapin tutkimuslaitos Kevo toiminut 50 vuotta. – Turun Sanomat 18.9.2008.
- Saikkonen, K. 2008: Kasvit ja kasvinsyöjät. Syöjien ja syötävien ikuista hiljaista taistelua. – Teoksessa: Piirainen, M., Enroth, J., Vauras, R., & Väre, H. (toim.): Luonnossa. Kasvit 2. Helsinki: Wellin+Göös Oy, s. 202-209.
- Sillanpää, S. 2008: How do quality and larval crowding affect performance of the autumnal moth, *Epirrita autumnata*? – Entomologia Experimentalis et Applicata 129(3): 286-294. doi: 10.1111/j.1570-7458.2008.00776.x
- Wäli, P.R., Helander, M., Nissinen, O., Lehtonen, P. & Saikkonen, K. 2008: Endophyte infection, nutrient status of the soil and duration of snow cover influence the performance of meadow fescue in sub-arctic conditions. – Grass and Forage Science 63(3): 324-330. doi: 10.1111/j.1365-2494.2008.00639.x

## **Julkaisut vuonna 2009 – Publications in 2009**

### **Väitöskirjat/Doctoral dissertations**

- Klemola, N. 2009: Trophic interactions and cyclic population dynamics of the autumnal moth: the importance of hymenopteran parasitoids. – Doc. thesis, Annales Universitatis Turkuensis, A II 237. 114 pp.
- Mäntylä, E. 2009: Mutualistic interactions between plants and birds: behavioural mechanisms and ecological importance. – Doc. thesis, Annales Universitatis Turkuensis, A II 234. 71 pp.

## **Muut julkaisut/Other publications**

- Ammunét, T., Klemola, N., Heisswolf, A. & Klemola, T. 2009: Larval parasitism of the autumnal moth reduces feeding intensity on the mountain birch. – *Oecologia* 159(3): 539-547. doi: 10.1007/s00442-008-1240-6
- Andersson, T., Klemola, T. & Ruohomäki, K. 2009: Kaikkiruokaiset mittarit. – *Suomen Luonto* 68: 73.
- Beylich, A.A. 2009: Chemical and mechanical fluvial denudation in cold environments: Comparison of denudation rates from three catchments in sub-Arctic Eastern Iceland, sub-Arctic Finnish Lapland and Arctic Swedish Lapland. – *Jökull* 59: 19-32.
- Heisswolf, A., Klemola, N., Ammunét, T. & Klemola, T. 2009: Responses of generalist invertebrate predators to pupal densities of autumnal and winter moths under field conditions. – *Ecological Entomology* 34(6): 709-717. doi: 10.1111/j.1365-2311.2009.01121.x
- Heisswolf, A., Klemola, T., Andersson, T. & Ruohomäki, K. 2009: Shifting body weight-fecundity relationship in a capital breeder: maternal effects on egg numbers of the autumnal moth under field conditions. – *Bulletin of Entomological Research* 99(1): 73-81.
- Hjort, J. & Luoto, M. 2009: Interaction of geomorphic and ecological features across altitudinal zones in a subarctic landscape. – *Geomorphology* 112(3-4): 324-333. doi.org/10.1016/j.geomorph.2009.06.019
- Huusko, A. & Hicks, S. 2009: Conifer pollen abundance provides a proxy for summer temperature: evidence from the latitudinal forest limit in Finland. – *Journal of Quaternary Science* 24(5): 522-528.
- Klemola, N., Heisswolf, A., Ammunét, T., Ruohomäki, K. & Klemola, T. 2009: Reversed impacts by specialist parasitoids and generalist predators may explain a phase lag in moth cycles: a novel hypothesis and preliminary field tests. – *Annales Zoologici Fennici* 46(5): 380-393.
- Marmion, M., Hjort, J., Thuiller, W. & Luoto, M. 2009: Statistical consensus methods for improving predictive geomorphology maps. – *Computers & Geosciences* 35(3): 615-625.
- Nevalainen, L. 2009: Autumnal chydorid fauna (Anomopoda, Chydoridae) in Kevo region, northern Finnish Lapland. – *Kevo Notes* 13: 4-20.
- Olofsson, J., Oksanen, L., Callaghan, T., Hulme, P.E., Oksanen, T. & Suominen, O. 2009: Herbivores inhibit climate driven shrub expansion on the tundra. – *Global Change Biology* 15(11): 2681-2693. doi: 10.1111/j.1365-2486.2009.01935.x
- Pepin, N.C., Schaefer, M.K. & Ridley, L.D. 2009: Quantification of the cold-air pool in Kevo Valley, Finnish Lapland. – *Weather* 64(3): 60-67. doi: 10.1002/wea.260
- Ruuhola, T., Rantala, L.M., Neuvonen, S., Yang, S. & Rantala, M.J. 2009: Effects of long-term simulated acid rain on the mountain birch - autumnal moth interaction. – *Basic and Applied Ecology* 10(7): 589-596. doi.org/10.1016/j.baae.2009.07.002

Saari, S., Lehtonen, P., Helander, M. & Saikkonen, K. 2009: High variation in frequency of infection by endophytes in cultivars of meadow fescue in Finland. – *Grass and Forage Science* 64(2): 169–176. doi: 10.1111/j.1365-2494.2009.00680.x

Varis, S.; Pakkanen, A.; Galofré, A. & Pulkkinen, P. 2009: The extent of south-north pollen transfer in Finnish Scots pine. *Silva Fennica* 43(5): 717-726.

Wäli, P., Helander, M., Saloniemi, I., Ahlholm, J. & Saikkonen, K. 2009: Variable effects of endophytic fungus on seedling establishment of fine fescues. – *Oecologia* 159(1): 49-57. doi: 10.1007/s00442-008-1202-z

## **Julkaisut vuonna 2010 - Publications in 2010**

### **Väitöskirjat / Doctoral dissertations**

Leinonen, T. 2010: Evolutionary genetics in the wild – from populations to individuals. – Doc. thesis, Department of Biosciences, Faculty of Biological and Environmental Sciences, University of Helsinki. 30 pp. + 6 articles.

Ruuskanen, S. 2010: Maternal effects in birds – the ecological and evolutionary significance of yolk androgens and other yolk components. – Doc. thesis, *Annales Universitatis Turkuensis*, AII 254, 36 pp. + 5 articles.

Saari, S. 2010: Plant endophyte in food chain – friend or foe? – Doc. thesis, *Annales Universitatis Turkuensis*, AII 249, 30 pp. + 5 articles.

Uusitalo, M. 2010: Revision of the family Alycidae (Acariformes, Acari), with special reference to European species. – Doc. thesis, Helsinki University Print, Helsinki 2010. 143 pp.

Varis, S. 2010: The role of pollen in the changing environmental conditions of Scots pine. – Doc. thesis, *Dissertationes Forestales* 105. 37 pp. + 5 articles.

### **Pro gradu -tutkielmat/Master's theses**

Lukkala, T. 2010: Porolaidunnuksen vaikutus sammalten monimuotoisuuteen tuottavilla ja vähätuottoisilla tuntureilla pohjoisessa Fennoskandiassa. M. Sc. thesis, Department of Biological and Environmental Science, University of Jyväskylä. 46 pp. + 2 app.

### **Muut julkaisut/Other publications**

Alho, P., Mäkinen, J. 2010: Hydraulic parameter estimations of a 2D model validated with sedimentological findings in the point bar environment. – *Hydrological Processes* 24(8): 2578-2593. doi: 10.1002/hyp.7671

Ammunét, T., Heisswolf, A. & Klemola, N. 2010: Expansion of the winter moth outbreak range: no restrictive effects of competition with the resident autumnal moth. – *Ecological Entomology* 35(1): 45-52. doi: 10.1111/j.1365-2311.2009.01154.x



- Anttila, U., Julkunen-Tiitto, R., Rousi, M., Yang, S., Rantala, M.J. & Ruuhola, T. 2010: Effects of elevated ultraviolet-B radiation on a plant-herbivore interaction. – *Oecologia* 164(1): 163-175. doi: 10.1007/s00442-010-1658-5
- Bennie, J., Kubin, E., Wiltshire, A., Huntley, B. & Baxter, R. 2010: Predicting spatial and temporal patterns of bud-burst and spring frost risk in north-west Europe: the implications of local adaptation to climate. – *Global Change Biology* 16(5): 1503-1514. doi: 10.1111/j.1365-2486.2009.02095.x
- Christiansen, H.H., Etzelmüller, B., Isaksen, K., Juliussen, H., Farbrot, H., Humlum, O., Johansson, M., Ingeman-Nielsen, T., Kristensen, L., Hjort, J., Holmlund, P., Sannel, A.B.K., Sigsgaard, C., Åkerman, H.J., Foged, N., Blikra, L.H., Pernosky, M.A. & Ødegård, R.S. 2010: The Thermal State of Permafrost in the Nordic Area during the International Polar Year 2007-2009. – *Permafrost and Periglacial Processes* 21(2): 156-181. doi: 10.1002/ppp.687
- Eeva, T., Rainio, K. & Suominen, O. 2010: Effects of pollution on land snail abundance, size and diversity as resources for pied flycatcher, *Ficedula hypoleuca*. – *Science of the Total Environment* 408(19): 4165-4169. doi.org/10.1016/j.scitotenv.2010.05.028
- Fronzek, S., Carter, T.R., Räisänen, J., Ruokolainen, L. & Luoto, M. 2010: Applying probabilistic projections of climate change with impact models: a case study for subarctic tundra mires in Fennoscandia. – *Climatic Change* 99(3-4): 515-534. doi: 10.1007/s10584-009-9679-y
- Hjort, J. & Luoto, M. 2010: Geodiversity of high-latitude landscapes in northern Finland. – *Geomorphology* 115(1-2): 109-116. doi.org/10.1016/j.geomorph.2009.09.039
- Holtmeier, F.-K. & Broll, G. 2010: Altitudinal and Polar Treelines in the Northern Hemisphere – Causes and Response to Climate Change. – *Polarforschung* 79(3): 139-153. doi: 10.2312/polarforschung.79.3.139
- Holtmeier, F.-K. & Broll, G. 2010: Wind as an ecological agent at treelines in North America, the Alps, and the European subarctic. – *Physical Geography* 31(3): 203-233. doi: 10.2747/0272-3646.31.3.203
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