

Julkaisut vuonna 1991 – Publications in 1991

Väitöskirjat/Doctoral dissertations

Ruohomäki, K. 1991: Density fluctuation as a modifier of individuals and populations in *Epirrita autumnata*. – Doc. thesis, Reports from the Department of Biology, University of Turku 29. 21 pp. + 5 app.

Lisensiaatin tutkielmat/Licentiate theses

Suomela, J. 1991: Tunturikoivu tunturimittarin ravintona: puun sisäinen ja puiden välinen vaihtelu. – Lic. thesis, Department of Biology, University of Turku. 25 pp. + 3 app.

Pro gradu -tutkielmat/Master's theses

Aho, J. 1991: Inarin Lapin vuoden 1965 koivutuoalueiden kasvillisuudesta. – M. Sc. thesis, Department of Biology, University of Turku. 68 + 1 pp.

Leppä, M. 1991: Kivisimpun ravinnosta, kasvusta ja saalistusaktiiviteetista Utsjoessa. – M. Sc. thesis, Department of Biology, University of Joensuu. 46 + 11 pp.

Liira, T. 1991: Kevojkilaakson pahtarapautumista ja talusmuodostumien kehityksestä postglasiaalikaudella. – M. Sc. thesis, Department of Geography, University of Turku. 59 pp. + 5 app.

Repka, S. 1991: Kokeellisen herbivorian vaikutus tunturikoivun (*Betula pubescens* ssp. *tortuosa*) kääpiöversojen menestymiseen. – M. Sc. thesis, Department of Biology, University of Turku. 28 + 7 pp.

Vieno, M. 1991: Ruohokanukan (*Cornus suecica* L.) kasvuun ja lisääntymiseen vaikuttavista tekijöistä Utsjoen Kevolla. – M. Sc. thesis, Department of Biology, University of Turku. 39 pp.

Muut julkaisut/Other publications

Anon. 1991: Koekalastustuloksia Luttojoen vesistöalue, Vaskojoen vesistöalue. Rysäpyynti, sähkökoekalastukset 1988-90. – Mim., RKTL/KTO, Teno station.

Anon. 1991: Koekalastustuloksia. Pysyvät näytealueet, Teno, Utsjoki, Inarijoki v. 1989-90. – Mim., RKTL/KTO, Teno station.

Anon. 1991: Koekalastustuloksia Tenojoen vesistön sivujoista. Rysäpyynti, sähkökoekalastukset 1989-90. – Mim., RKTL/KTO, Teno station.

Berg, B., Jansson, P.-E., Olofsson, J. & Reurslag, A. 1991: Climatic influence on decomposition of Scots pine needle litter along a NW European transect. – Department of Ecology and Environmental Research, Swedish University of Agricultural Sciences, Report 46: 1-386.

Berg, B., Booltink, H., Breymeyer, A., Ewertsson, A., Gallardo, A., Holm, B., Johansson, M.-B., Koivuoja, S., Meentemeyer, V., Nyman, P., Olofsson, J., Pettersson, A.-S., Reurslag, A., Staaf, H., Staaf, I. & Uba, L. 1991: Data on needle litter decomposition and soil climate as well as site characteristics for some coniferous forest sites. Part 1. Site characteristics. 2nd ed. – Department of Ecology and Environmental Research, Swedish University of Agricultural Sciences, Report 41.

Berg, B., Booltink, H., Breymeyer, A., Ewertsson, A., Gallardo, A., Holm, B., Johansson, M.-B., Koivuoja, S., Meentemeyer, V., Nyman, P., Olofsson, J., Pettersson, A.-S., Reurslag, A., Staaf, H., Staaf, I. & Uba, L. 1991: Data on needle litter decomposition and soil climate as well as site characteristics for some coniferous forest sites. Part 2. Decomposition data. 2nd ed. – Department of Ecology and Environmental Research, Swedish University of Agricultural Sciences, Report 42.

Clayhills, T. 1991: The distribution and habitat of *Stenus (Hemistenus) audax* J. Sahlberg 1900 (Coleoptera, Staphylinidae) in Finland. – *Entomologica Fennica* 2(1): 25-26.

Haukioja, E. 1991: Induction of defenses in trees. – *Annual Review of Entomology* 36: 25-42. doi. 10.1146/annurev.en.36.010191.000325

Haukioja, E. 1991: The influence of grazing on the evolution, morphology and physiology of plants as modular organisms. – *Philosophical Transactions of the Royal Society of London B* 333(1267): 241-247. doi: 10.1098/rstb.1991.0073

Haukioja, E., Ruohomäki, K., Suomela, J. & Vuorisalo, T. 1991: Nutritional quality as a defense against herbivores. – *Forest Ecology and Management* 39: 237-245. doi.org/10.1016/0378-1127(91)90179-Y

Jortikka, S., Rantio-Lehtimäki, A., Helander, M., Ranta, H. & Haapanen, U. 1991: Sienet ja happosade. – *Luonnon Tutkija* 95(1-2): 31-33.

Kiilunen, S. 1991: Triploidin haavan ominaisuudet ja mikrolisäys. – *Luonnon Tutkija* 95(1-2): 100-102.

Koponen, S. 1991: Spiders (Araneae) on snow surface in subarctic Lapland. – *Aquilo, Series Zoologica* 24: 91-94.

Lehikoinen, E., Eeva, T. & Veistola, S. 1991: The role of food-weather interactions in limiting breeding performance of box-nesting birds in the far north of Finland. – 3rd hole breeders' meeting, Sempach, Sveitsi 21-26.10.1991.

Lodenius, M. 1991: Mobilization of cadmium and mercury after artificial acidification. – In: Pulkkinen, E. (ed.): *Environmental geochemistry in northern Europe: Proceedings of the first symposium on environmental geochemistry in northern Europe, Rovaniemi, Finland, 17-19 October, 1989*. Geologian tutkimuskeskus. Espoo. pp. 61-67.

Neuvonen, S. 1991: Field experiments on the effects of pollution at Kevo Subarctic Research Station. – *Metsäntutkimuslaitoksen Tiedonantoja* 373: 109-114.

- Neuvonen, S. & Haukioja, E. 1991: The effects of inducible resistance in host foliage on birch-feeding herbivores. – In: Tallamy, D.W. & Raupp, M.J. (eds.): Phytochemical induction by herbivores. John Wiley & Sons, New York. pp. 277-291.
- Neuvonen, S. & Niemelä, P. 1991: Do differences in inducible resistance explain the population dynamics of birch and pine defoliators? – In: Baranchikov, Y N., Mattson, W J., Hain, F.P. & Payne, T.L. (eds.): Forest insect guilds: patterns of interaction with host trees. pp. 103-112. (U.S. Dep. Agric. For. Serv. Gen. Techn. Rep. NE-153).
- Neuvonen, S., Nyssönen, T., Ranta, H. & Kiilunen, S. 1991: Simulated acid rain and the reproduction of mountain birch [*Betula pubescens* ssp. *tortuosa* (Ledeb.) Nyman]: a cautionary tale. – *New Phytologist* 118(1): 111-117. Stable URL: <http://jstor.org/stable/2557693>
- Niemelä, E. & Kärki, P. 1991: Näätämojoen vesistöalueen järvet ja joet. Luettelo ja kartasto. – Mim., RKTL/KTO, Teno station.
- Niemelä, E. & Kärki, P. 1991: Tenojoen vesistöalueen järvet ja joet. Luettelo ja kartasto. – Mim., RKTL/KTO, Teno station.
- Niemelä, E. & Kärki, P. 1991: Tuulomajoen latvavesistöalueen järvet ja joet. Luettelo ja kartasto. – Mim., RKTL/KTO, Teno station.
- Niemelä, E. & Kärki, P. 1991: Uutuanjoen vesistöalueen järvet ja joet. Luettelo ja kartasto. – Mim., RKTL/KTO, Teno station.
- Ojala, A. 1991: Pohjanvariksenmarjan lisääntymisstrategiasta. – *Luonnon Tutkija* 95(1-2): 53-55.
- Turunen, M. & Huttunen, S. 1991: Effect of simulated acid rain on the epicuticular wax of Scots pine needles under northerly conditions. – *Canadian Journal of Botany* 69(2): 412-419. doi: 10.1139/b91-057
- Turunen, M., Huttunen, S., Staszewski, T. & Poborski, P. 1991: Influence of the climate and air pollution on needle surface characteristics in the Scots pine (*Pinus sylvestris* L.). – In: Teller, A., Mathy, P. & Jeffers, J. (eds.): Responses of forest ecosystems to environmental changes. pp. 643-644.
- Valanne, T. & Sulkinoja, M. 1991: Lapin koivujen risteytymisestä. – *Luonnon Tutkija* 95(1-2): 83-87.

Julkaisut vuonna 1992 – Publications in 1992

Lisensiaatin tutkielmat/Licentiate theses

Helander, M. L. 1992: Happaman sadetuksen vaikutukset metsäpuiden epi- ja endofyyttisiin mikrosieniin. – Lic. thesis, Department of Biology, University of Turku. 21 pp. + 3 app.

Pro gradu -tutkielmat/Master's theses

Kaitaniemi, P. 1992: Kärkisilmujen poiston ja lehtien vaurioituksen vaikutukset tunturikoivun (*Betula pubescens* ssp. *tortuosa*) lehtien laatuun tunturimittarin (*Epirrita autumnata*) ravintona. – M. Sc. thesis, Department of Biology, University of Turku. 23 pp.

Kirchhefer, A. 1992: Der Einfluß des Standorts auf das Wachstum der Kiefer, *Pinus sylvestris*, und Birke, *Betula pubescens* coll., in Nordnorwegen im Spiegel von Jahrringen. – Diploma thesis, Institute of Geography, Westfälische Wilhelms-Universität Münster. 92 pp.

Nyysönen, T. 1992: Hapansadetuksen ja lehtimassan poiston vaikutus tunturikoivun (*Betula pubescens* ssp. *tortuosa* (Ledeb.) Nyman) lisääntymiseen ja kasvuun luonnonpopulaatiossa. – M. Sc. thesis, Department of Biology, University of Turku. 45 + 10 pp.

Siik, K. 1992: Happosadetuksen vaikutus männyn (*Pinus sylvestris*) neulasten hienorakenteeseen ja alkuainepitoisuuksiin. – M. Sc. thesis, Department of Biology, University of Turku. 59 pp.

Tikkanen, P. 1992: Lapin ilmasto-olot ja topografian vaikutus Kevon mikroilmastoon kesällä 1982. – M. Sc. thesis, Department of Geography, University of Turku. 143 pp.

Muut julkaisut/Other publications

Erkinaro, J. & Kylmäaho, M. 1992: Lohen vaelluspoikasten pyynnissä Tenojoen vesistöalueella käytetyt rysätyypit. – Suomen Kalastuslehti 99: 28-30.

Erkinaro, J., Niemelä, E. & Rask, M. 1992: Lapin happamoitumistutkimus. Taimenen poikastutkimukset Lutto- ja Paatsjoen vesistöalueilla. – RKTL/KTO, Kalatutkimuksia 54: 14-33.

Hakala, K. & Sewón, P. 1992: Reserve lipid accumulation and translocation of ¹⁴C in the photosynthetically active and senescent shoot parts of *Dicranum elongatum*. – *Physiologia Plantarum* 85(1): 111-119.

Hanhimäki, S. & Senn, J. 1992: Sources of variation in rapidly inducible responses to leaf damage in the mountain birch - insect herbivore system. – *Oecologia* 91(3): 318-331. Stable URL: <http://www.jstor.org/stable/4220075>

Hieke, F. 1992: Die Laufkäfer von Utsjoki-Lappland (Nord-Finnland) (Insecta, Coleoptera: Carabidae). – *Faunistiche Abhandlungen Staatliches Museum für Tierkunde in Dresden* 18(11): 153-171.

Koponen, S. 1992: Insect herbivores and herbivory on mountain birch in the North Atlantic area. – Disturbance related dynamics of birch and birch dominated ecosystems. A Nordic Symposium, Illugastadir, Fnjóskadalur (Iceland Forest Research Station, Mógilsá). pp. 22-24.

Koponen, S. 1992: Postfire succession of soil arthropod groups in subarctic birch forest. – XI International Colloquium on Soil Zoology, Jyväskylä 10-14.8.1992, Program and Abstracts. p. 171.

Koponen, S. & Hurme, H. 1992: Paavo Kallio (1914-1992). – Arctic 45(4): 410.

Neuvonen, S. 1992: Anthropogenic environmental changes and the risk of forest insect outbreaks. – Publications of the Academy of Finland 3/92: 269-273.

Neuvonen, S. 1992: Ihmisen aiheuttamat ympäristömuutokset ja tuhohyönteisten joukkoesiintymien riski. – Suomen Akatemian julkaisuja 2/92: 267-271.

Neuvonen, S. & Komulainen, M. 1992: Kokeellinen tutkimus Kevolla. – Ilmansuojelu-uutiset 16(3): 34-37.

Neuvonen, S. & Saikkonen, K. 1992: Anthropogenic environmental changes and the interactions among three trophic levels. – IPP-conference proceedings, September 1992, Norwich.

Neuvonen, S., Palokangas, P. & Haapala, S. 1992: Effects of early season foliar damage on *Phratora polaris* (Coleoptera, Chrysomelidae) and its defensive ability. – In: Menken, S. B. J., Visser, J. H. & Harrewijn, P. (eds.): Proc. 8th Int. Symp. Insect-Plant Relationships, Dordrecht, pp. 345-346.

Neuvonen, S., Routio, I. & Haukioja, E. 1992: Combined effects of simulated acid rain and aphid infestation on the growth of Scots pine (*Pinus sylvestris*) seedlings. – *Annales Botanici Fennici* 29: 101-106.

Neuvonen, S., Virtanen, T., Ranta, H. & Nikula, A. 1992: Rikki- ja raskasmetallilaskeuman sekä typpilannoituksen vaikutus männyn tuholais- ja tautialttiuteen. – *Metsäntutkimuslaitoksen Tiedonantoja* 413: 186-193.

Niemelä, E., Erkinaro, J. & Kylmäaho, M. 1992: Koekalastustuloksia vuodelta 1991. – *Mim.*, RKTL/KTO, Teno station, Raportti 1/92.

Niemi, M. 1992: Riekonmetsästys elinkeinona ja virkistysmuotona Ylä-Lapissa metsästyskausina 1989/90 ja 1991/92. – *Maatilahallitus*. 86 pp. + 5 app.

Palokangas, P. & Neuvonen, S. 1992: Differences between species and instars of *Phratora* leaf beetles (Coleoptera, Chrysomelidae) in the probability of being preyed on. – *Annales Zoologici Fennici* 29(4): 273-278.

- Palokangas, P., Neuvonen, S. & Haapala, S. 1992: Effect of host plants on growth and defence in two *Phratora* (Coleoptera: Chrysomelidae) species. – In: Menken, S.B.J., Visser, J.H. & Harrewijn, P. (eds.): Proc. 8th Int. Symp. Insect-Plant Relationships, Dordrecht. pp. 343-344.
- Pautamo, J. 1992: Luttojoen taimenkantojen kalastus, nykytila ja kehittäminen. – Opinnäyte, Evon metsäoppilaitos.
- Rautiainen, V.-P. 1992: Pensaskanervan (*Myricaria germanica*) esiintyminen Utsjoella vuonna 1991. – Mim., Loppuraportti ympäristöministeriölle, 26 pp.
- Ruohomäki, K. 1992: Wing size variation in *Epirrita autumnata* (Lep., Geometridae) in relation to larval density. – *Oikos* 63(2): 260-266. doi: 10.2307/3545386
- Ruohomäki, K. & Haukioja, E. 1992: Interpopulation differences in pupal size and fecundity are not associated with occurrence of outbreaks in *Epirrita autumnata* (Lepidoptera, Geometridae). – *Ecological Entomology* 17(1): 69-75. doi: 10.1111/j.1365-2311.1992.tb01041.x
- Ruohomäki, K. & Haukioja, E. 1992: No evidence of genetic specialization to different natural host plants within or among populations of a polyphagous geometrid moth *Epirrita autumnata*. – *Oikos* 63(2): 267-272. doi: 10.2307/3545387
- Ruohomäki, K., Hanhimäki, S., Haukioja, E., Iso-Iivari, L., Neuvonen, S., Niemelä, P. & Suomela, J. 1992: Variability in the efficacy of delayed inducible resistance in mountain birch. – *Entomologia Experimentalis et Applicata* 62(2): 107-115. doi: 10.1111/j.1570-7458.1992.tb00649.x
- Saikkonen, K. & Neuvonen, S. 1992: Simulated acid rain and the susceptibility of the European pine sawfly (*Neodiprion sertifer*) larvae to nuclear polyhedrosis virus. – In: Menken, S.B.J., Visser, J.H. & Harrewijn, P. (eds.): Proc. 8th Int. Symp. Insect-Plant Relationships, Dordrecht. pp. 347-348.
- Senn, J., Hanhimäki, S. & Haukioja, E. 1992: Among-tree variation in leaf phenology and morphology and its correlation with insect performance in the mountain birch. – *Oikos* 63: 215-222. doi: 10.2307/3545381

Julkaisut vuonna 1993 – Publications in 1993

Väitöskirja/Doctoral dissertations

- Hanhimäki, S. 1993: Leaf quality and leaf chewers: an experimental approach to variation in the mountain birch-insect herbivore system. – Doc. thesis, Reports from the Department of Biology, University of Turku 31. 20 pp. + 5 app.

Kytöviita, M.-M. 1993: Effects of acid rain on growth and nutrient relations in mat-forming lichens. – Doc. thesis, Department of Botany, University of Nottingham. 218 pp. + 4 app.

Mutikainen, P. 1993: Plant responses to herbivory: the role of plant structure and environmental factors. – Doc. thesis, Reports from the Department of Biology, University of Turku 36. 21 pp. + 6 app.

Ovaska, J. 1993: Compensatory photosynthesis as a response to foliage damage in birch (*Betula L.*). – Doc. thesis, Reports from the Department of Biology, University of Turku 35. 22 pp. + 5 app.

Pro gradu -tutkielmat/Master's theses

Lappalainen, J. 1993: Tunturikoivun lehtien epifyyttisienten ja koivunruostesienen vaikutus tunturimittarin (*Epirrita autumnata*) ja lehtikuoriaisen (*Phratora polaris*) kasvuun. – M. Sc. thesis, Department of Biology, University of Turku. 30 pp.

Pölkki, J. 1993: Happo- ja raskasmetallisadetuksen vaikutukset varpujen ravinnetalouteen. – M. Sc. thesis, Department of Biology, University of Turku. 42 + 2 pp.

Vesanto, S. 1993: Raskasmetallikuormituksen ja happaman sadetuksen vaikutus männynneulaskarikkeen hajoamiseen. – M. Sc. thesis, Department of Biology, University of Turku. 33 pp.

Virtanen, T. 1993: Haposadetuksen, raskasmetallien ja typpilannoituksen vaikutus oksakirvojen (*Cinara pinea* Mordv.) menestymiseen männyllä (*Pinus sylvestris L.*). – M. Sc. thesis, Department of Biology, University of Turku. 37 + 1 pp.

Kandidaatin tutkielmat/Bachelor's theses

Aho, J. 1993: Koivu metsänrajapuuna. – B. Sc. thesis, Department of Biology, University of Turku. 23 pp.

Muut julkaisut/Other publications

Berg, B., Berg, M. P., Bottner, P., Box, E., Breymeyer, A., Calvo de Anta, R., Couteaux, M., Escudero, A., Gallardo, A., Kratz, W., Madeira, M., Mälkönen, E., McClaugherty, C., Meentemeyer, V., Munoz, F., Piussi, P., Remacle, J. & Virzo De Santo, A. 1993: Litter mass loss rates in pine forests of Europe and Eastern United States: some relationships with climate and litter quality. – *Biogeochemistry* 20(3): 127-159. Stable URL: <http://jstor.org/stable/1469216>

Berg, B., Berg, M.P., Box, E., Bottner, P., Breymeyer, A., Calvo de Anta, R., Couteaux, M.-M., Gallardo, A., Escudero, A., Kratz, W., Madeira, M., McClaugherty, C., Meentemeyer, V., Munoz, F., Piussi, P., Remacle, J. & Virzo De Santo, A. 1993: Litter mass loss in pine forests of Europe: relationships with climate and litter quality. – Institute of geography and spatial organization, Polish Academy of Sciences, Conference papers 18: 81-109.

- Elo, K. 1993: Gene flow and conservation of genetic variation in anadromous Atlantic salmon (*Salmo salar*). – *Hereditas* 119(2): 149-159. doi: 10.1111/j.1601-5223.1993.00149.x
- Helander, M.L., Ranta, H. & Neuvonen, S. 1993: Responses of phyllosphere microfungi to simulated sulphuric and nitric acid deposition. – *Mycological Research* 97(5): 533-537. doi.org/10.1016/S0953-7562(09)81175-1
- Helander, M.L., Neuvonen, S., Sieber, T. & Petrini, O. 1993: Simulated acid rain affects birch leaf endophyte populations. – *Microbial Ecology* 26(3): 227-234. Stable URL: <http://www.jstor.org/stable/4251323>
- Holtmeier, F.-K. 1993: Timberlines as indicators of climatic changes: problems and research needs. – *Paläoklimaforschung* 9: 211-222.
- Huhtinen, S. & Ohenoja, E. 1993: Paavo Kallio in memoriam. – *Bibliotheca Mycologica* 150: 100-102. (Arctic and Alpine Mycology 3-4, Proceedings of the 3. and 4. International Symposium of Arctic-Alpine Mycology).
- Mutikainen, P. & Ojala, A. 1993: Simulated herbivory and air pollution: growth and reproduction of an evergreen dwarf shrub, *Empetrum nigrum*. – *Acta Oecologica* 14(6): 771-780.
- Neuvonen, S. 1993: Experiences from a field experiment on the effects of simulated acid rain in Finnish Lapland. – In: Kozlov, M.V., Haukioja, E. & Yarmishko, V.T. (eds.): *Aerial Pollution in Kola Peninsula: Proceedings of the International Workshop, April 14-16, 1992, St. Petersburg*. Apatity, 1993. pp. 70-73.
- Niemelä, E., Länsman, M., Kärki, P., Länsman, T. & Moen, K. 1993: Tenojoen ja Näättämojoen vesistöalueiden kalansaalis- ja kalastustilastot vuoteen 1992. – *Mim.*, RKTL/KTO, Teno station, Raportti 2/93.
- Perttula, H. & Portin, P. (eds.) 1993: Paavo Kallion muisto. Turun yliopiston biologian laitoksen julkaisuja 15.
- Rousi, A. 1993: Paavo Kallio s. 13.4.1914 k. 11.6.1992 in memoriam. – *Academia Scientiarum Fennica, Vuosikirja 1992-93*: 91-95.
- Ruohomäki, K., Hanhimäki, S. & Haukioja, E. 1993: Effects of egg size, laying order and larval density on performance of *Epirrita autumnata* (Lep., Geometridae). – *Oikos* 68(1): 61-66. doi: 10.2307/3545309
- Ruohomäki, K., Haukioja, E., Walter, G.H. 1993: Resource quality and spatial variation in sex ratios of a free-living solitary sawfly, *Dineura virididorsata* (Hym., Tenthredinidae). – *Oecologia* 96: 420-425.
- Saikkonen, K. & Neuvonen, S. 1993: Effects of larval age and prolonged simulated acid rain on the susceptibility of European pine sawfly to virus infection. – *Oecologia* 95: 134-139. Stable URL: <http://www.jstor.org/stable/4220416>

Saikkonen, K. & Neuvonen, S. 1993: European pine sawfly and microbial interactions mediated by the host plant. – In: Wagner, M.R. & Raffa, K.F. (eds.): Sawfly life history adaptations to woody plants. Academic Press, Orlando. pp. 431-450.

Saikkonen, K. & Neuvonen, S. 1993: European pine sawfly and virus interactions. – In: Kozlov, M., Haukioja, E. & Yarmishko, V. (eds.): Aerial Pollution in Kola Peninsula: Proceedings of the International Workshop, April 14-16, 1992, St. Petersburg. Apatity, 1993. p. 374-375.

Shibayama, M., Morinaga, S. & Hakamata, T. 1993: Spectral detection for phenological changes of boreal vegetation. – Research Report Div. Environ. Planning 1993(9): 55-94.

Suomela, J. & Palokangas, P. 1993: Effects of aerial pollutants on plant quality for small northern mammalian herbivores. – In: Kozlov, M., Haukioja, E. & Yarmishko, V. (eds.): Aerial Pollution in Kola Peninsula: Proceedings of the International Workshop, April 14-16, 1992, St. Petersburg. Apatity, 1993. p. 377.

Vieno, M., Komulainen, M. & Neuvonen, S. 1993: Seed bank composition in subarctic pine-birch forest in Finnish Lapland: natural variation and effect of simulated acid rain. – In: Kozlov, M., Haukioja, E. & Yarmishko, V. (eds.): Aerial Pollution in Kola Peninsula: Proc. of the Int. Workshop, April 14-16, 1992, St. Petersburg. Apatity, 1993. p. 361.

Vieno, M., Komulainen, M. & Neuvonen, S. 1993: Seed bank composition in subarctic pine-birch forest in Finnish Lapland: natural variation and the effect of simulated acid rain. – Canadian Journal of Botany 71(3): 379-384. doi: 10.1139/b93-042

Julkaisut vuonna 1994 - Publications in 1994

Väitöskirjat/Doctoral dissertations

Helander, M. 1994: Responses of foliar microfungi to air pollution. – Doc. thesis, Reports from the Department of Biology, University of Turku 40. 24 pp. + 6 articles.

Lehtilä, K. 1994: Implications of plant structure for plant-animal interactions and plant life-history strategies. – Doc. thesis, Reports from the Department of Biology, University of Turku 42. 14 pp. + 6 articles.

Pulkkinen, P. 1994: Aerobiology of pine pollen: Dispersal of pollen from non-uniform sources and impact on Scots pine seed orchards. – Phil. Doc. thesis, Reports from the Foundation for Forest Tree Breeding 8. 23 pp. + 5 articles.

Saikkonen, K. 1994: Interactions among the European pine sawfly, its host and its natural enemies: consequences of environmental changes. – Phil. Doc. thesis, Reports from the Department of Biology, University of Turku 39. 19 pp. + 6 articles.

Pro gradu -tutkielmat/Master's theses

Törvi, M. 1994: Ilmansaasteiden vaikutukset harmaakuvemyyrän (*Clethrionomys rufocanus*) ravinnonvalintaan. – M. Sc. thesis, Department of Biology, University of Turku. 35 + 1 pp.

Müller, G. 1994: Bodenökologische Untersuchungen an der oberen Waldgrenze in Finnisch Lappland (Unter besonderer Berücksichtigung des Standortklimas). – Diploma thesis, Institute of Geography, Westfälische Wilhelms-Universität Münster. 139 pp. + 26 app.

Schulte, M. 1994: Bodenökologische Untersuchungen an der oberen Waldgrenze in finnisch-Lappland unter besondere Berücksichtigung der Stickstoffnachlieferung. – Diploma thesis, Institute of Geography, Westfälische Wilhelms-Universität Münster. 151 pp.

Muut julkaisut/Other publications

Broll, G. 1994: Influence of the soil mosaic on biodiversity at heat sites in the European Subarctic. – Transactions 15th World Congress of Soil Science (Mexico) 4a: 220-231.

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