CV and publication list **23 April 2021**

ANDERS MICHELSEN

Date of birth: April 30, 1961
Place of birth: Copenhagen, Denmark
Anders Michelsen profile at Univ. of Copenhagen
Physiological Ecology, Biology, Univ. of Copenhagen
http://orcid.org/0000-0002-9541-8658
Researcher ID L-5279-2014

✉ Biol. Dept., Universitetsparken 15, DK-2100 Copenhagen Ø, Denmark
✉ Priv:Åvendingen 30B, 2700Brønshøj
andersm@bio.ku.dk
☎ (work) +45 23 39 82 86
☎ (mobile) +45 51 26 89 48

Place of work

Professor at Terrestrial Ecology Section, Department of Biology, University of Copenhagen, Universitetsparken 15, DK-2100 Copenhagen Ø, Denmark

Academic degrees

1992	Ph.D. degree in Botany obtained from the University of Copenhagen, 10th Dec 1992
1989	M.Sc. degree in Biology from the University of Copenhagen, 2nd May 1989

Positions held

2012-	Full professor in Plant Physiological Ecology, Dept. of Biology, University of Copenhagen
1998-2012	Associate professor at the Department of Biology, Physiological Ecology Group, University of Copenhagen. Lektor MSK since 2009.
1995-1998	Assistant professor at Botanical Inst., Dept.of Plant Ecology, Univ. Copenhagen
1993-1995	Post doctoral fellow at Institute of Terrestrial Ecology, Merlewood Research Station, Cumbria, UK
1993	Research fellow at the Botanical Institute, University of Copenhagen
1993	Deputy ass. professor at the Botanical Museum, Univ. of Copenhagen

Appointments and duties

- CO-PI Center for Permafrost (CENPERM), Danish National Research Foundation / Danmarks Grundforskningsfond Center of Excellence, 2012-21
- Board Member of the Arctic Station, Disko, Greenland/ Copenhagen Univ 2013-2021
- Section Head, Terr Ecol Section, Dept of Biology, Copenhagen Univ, 2013-2016
- Leader of the Physiological Ecology Research Group, since 2007
- Member of the board of the Botanical Institute 1999-2002
- Head of Department of Plant Ecology 1999-2002
- Member of Greenland Ecological Monitoring (GEM) coordination group 2006-
- Member of the International Tundra Experiment (ITEX) association 2005-

External grants received, as coordinator

- *RootScan*. Carlsberg Foundation infrastructure grant DKK 35.367,- (2021)
- *High Arctic greening through cryptogamic facilitation (GreenArc)* Det Frie Forskningsråd | Natur og Univers, 2.866.614 DKK (2020-2023)
- *Warm traits.* Hosting post Casper T Christiansen receiving Carlsberg reintegration grant (DKK 617.054,-) and EU Marie-Sklodovska-Curie actions individual fellowship stipend, 200.000,- € (2020-2023)
- *Nitrogen fixation as a key function in contrasting ecosystems: Climatic and molecular controls*, Det Frie Forskningsråd | Natur og Univers, 2.416.251 DKK (2016-2019)
- *Mosses as a gateway of nitrogen into northern ecosystems (MYCOMOSS*). EU post doc stipend to Marie-Sklodovska-Curie fellow Signe Lett, 200.000,- € (2018-2020)
- *Effects of long-term environmental change on carbon fluxes and mycorrhizal diversity in subarctic heath ecosystems.* EU INTERACT Transnational Access 5357€ DKK 40.000,- (2011)

- *Influence of plant-microbial interactions and climate on plant performance and ecosystem C and N pools.* FNU Research grant; 748.800,- DKK (2011-2012).
- *Analytical equipment (GC-MS) for research in physiological ecology.* Carlsberg Foundation; 300.000,- DKK (2010-2011).
- *Nitrogen fixation in the Arctic in a changing climate;* 640.000,- DKK (Faculty Research Grant to post doc (Pernille L. Sørensen), 2008-2010).
- EU stipend to Marie Curie fellow (*MCF-ERICA: Ericoid mycorrhizas and carbon biogeochemistry in subarctic ecosystems),* to post doc (Maria Olsrud) 1.400.000,- DKK, (2006-2010).
- *Environmental controls on plants, microbes and biogeochemical processes in the Arctic.* 792.000,- DKK (FNU rammebevilling 272-06-0230, 2007-9).
- *Effects of climate- and UV-B manipulations on processes and organisms in high arctic terrestrial ecosystems.* 315.000,- DKK (Miljøstyrelsen, 127/01-0205, 2005-6)
- *Spectral calibration for high arctic primary production estimation (SCHAPPE)*; 150.000,- DKK (SNF no 21-03-0454, 2003-4)
- *C and N analyzer for soil and plant analysis*; 503.909,- DKK (SNF no. 21-03-0176, 2003)
- *ECOMASS: Ecosystems research with mass spectrometry*; 850.000,- DKK from SNF (and 200.000,- DKK from Botanical Institute) for an isotope ratio mass spectrometer (SNF no. 1430, 2000).
- Post doc grant *("Experimental studies of belowground processes…")*; 742.000 DKK. (SNF ref. 11-0611-1. 1993-1995).

External grants received, with other researchers

- *Center for Permafrost (CENPERM)* phase II. Danish National Research Foundation/Danmarks Grundforskningsfond 2018-2021. Co-PI. Total 40 mill DKK. My share *of overhead* to BIO 1.000.000,-. DKK.
- *Center for Permafrost (CENPERM)* Danish National Research Foundation/Danmarks Grundforskningsfond 2012-2018. Co-PI. Total 60 mill DKK. My share *of overhead* to BIO 3.300.000,-. DKK.
- *Climaite 3rd phase,* Villum Kann Rasmussen Foundation, 2012-2014, total 13.000.000,- DKK; my share c. 1.000.000,-
- *Nordic Network for Stable Isotope Research (NORDSIR)* NORDFORSK, 2010-2013, 826.290,- DKK
- *Stay and Go.* Network on plant establishment, NORDFORSK, 2010-2012, 875.000,- DKK
- *Climaite 2nd phase,* Villum Kann Rasmussen Foundation, 2009-2012, total 12.500.000,- DKK; my share c. 1.500.000,- DKK (incl. 1 year phd co-funding from Univ. of Copenhagen)
- *Climaite,1st phase* Villum Kann Rasmussen Foundation, 2004-2009, total 25.000.000,- DKK; my share c. 1.400.000,- DKK
- *Equipment for field measurements of photosynthesis, respiration and transpiration in plants*; Danish Natural Science Research Council 2003 (SNF) 397.705,- DKK
- *Multiple environmental changes, effects on arctic organisms and ecosystem processes*, 1999-2002) Nordic Arctic Research Programme (NARP)
- *Biogeochemistry in the Arctic…*", SNF 9901759; and *The Arctic Landscape…*", Danish Natural Science Research Council (SNF) 9501046, 1995-2002)
- *"FITES - Fire in Tropical Ecosystems*", Danish Council for Development Research, 1996-2000)
- Funded by the Swedish Environmental Protection Board (127402) 1996-1997

Scientific peer reviews and evaluations

- Review of research proposals for Natural Environment Research Council, NERC (UK), National Science Foundation, NSF (US), NOW Polar Programme (Netherlands) 2014, 2020; Research Foundation Flanders FWO (Belgium), Canadian Research Council (NSERC-CRC).
- Evaluation of applicants for assistant professorships at Umeå and Lund Universities (Sweden) and research positions at National Environment Research Institute / Aarhus University and full professorships at University of Copenhagen, Denmark (2018, 2020).
- Member of ph.d evaluation committees at University in Lund (Sweden), University of Copenhagen (Denmark) and University of Jyväskylä (Finland).

Review of papers for the scientific journals: *Nature Climate Change, Global Change Biology, Acta Oecologia, Agroforestry Systems, Ambio, Ecology, New Phytologist, Functional Ecology, Geoderma, Oikos, Antarctic Science, Journal of Tropical Ecology, Soil Biology and Biochemistry, Biodiversity and Conservation, Oecologia, Ecosystems, Biogeochemistry, Nordic Journal of Botany, Berry Research, Plant and Soil, Applied Soil Ecology, Arctic, Antarctic and Alpine Research, Fungal Ecology, Plant Ecology, Science of the Total Environment, Ecological Research, PlosOne, Environmental Pollution.*

Scientific conferences

· Responses to multiple manipulations of arctic ecosystems, Abisko, June 1996 (invited speaker)
·Global change and tundra soil biology, Copenhagen, November 1996
·Scenarios for ecosystem responses to global change, ARTERI, Copenhagen, 1996
·Transport and metabolism in arbuscular mycorrhizas, COST 8.21, Risø, November 1996
·2.nd International Conference on Mycorrhizae, Uppsala, Sweden July 1998 (invited speaker)
·GCTE-LUCC Open Science Conference, Barcelona, March1998
·Nutrient constrains on carbon balances in boreal forests and arctic tundra. Abisko, Sweden, June 1999
·Applications of Stable Isotope Techniques to Ecological Studies. Braunschweig, Germany, May 2000
·Applications of Stable Isotope Techniques to Ecological Studies II. Wellington, New Zeeland, April 2004
·Second International Conference on Arctic Research Planning, ICARP II, Copenhagen, November 2005.
·After the Melt – Int. Conference on Ecological Responses to Arctic Climate Change, Aarhus, May 2008
·Climate change. Global risks, challenges, decisions. IARU Science Congress. Copenhagen, March 2009
·Isotopes in Earth System Science. Earth System Science Meeting. NBI, Copenhagen, June 2009 (invited speaker)
Nutrient constraints on carbon cycling. CLIMMANI & INTERFACE Workshop, Iceland, June 2011
·Stable Isotope studies on carbon and nitrogen cycling. Nordic Network for Stable Isotope Research (NORDSIR) Meeting, Holbæk, October 2011 (invited keynote speaker)
·International tundra experiment (ITEX) conference, Uppsala, Sweden 2015 and Parma, Italy 2019

Research and teaching output

Publications: 230 in peer reviewed journals and books since 1990, >250 publications in total. ISI/Web of Science citation index: 208 papers, 8905 times cited (25 Sept 2019); average citations per publication: 42.5; h-index: 51. Google Scholar h-index: 70 (Feb. 2021).

Completed research supervision of 11 post docs, 79 MSc students, and 18 Ph.D. students.
Present number of post docs 2, Ph.D students 2, MSc students 2.

At University of Copenhagen I am teaching basic and high level courses in Advanced Ecology, Plant Ecophysiology, Field Biology, Arctic Biology, Basic Arctic Biology, Introduction to Arctic Ecosystems, and I am coordinator of 4 courses, in: Terrestrial ecosystem processes and Global Change, Methodology and sampling in Environmental Management, Experimental Design and Statistical Analysis, and Biological Research: Design and Analysis.

List of students, ph.d and post docs

Supervised MSc students (79): Jette Lundsbøl Petersen, Charlotte Juhl Vestergaard,Jane Engstrøm Dannesboe, Iben Henriksen (nu Stanhardt), Pernille Lærkedal Sørensen, Susanne König, Mette Thyme, Karen Dahl Jensen, Klaus Steenberg Larsen, Karina Engelbrecht Clemmensen, Anja Hoff Hansen, Lisbeth Rauff, Nathan Russell, Julie Bülow Svendsen, Sita Fabricius, Tina Johnsen, Louise Andresen, Frida Kastrup, Anja Vilsholm, Vivian Danielsen, Jane Kongstad Pedersen, Marie Arndal, Pia Lund Nielsen, Kim Kjærsgaard Nielsen, Christian Lindekrans, Anders Tesgaard, Annebeth Hoffmann, Lasse Kjems, Peter Byskov Vang Dalgaard, Merian Skouw-Rasmussen, Kristine Boesgaard, Lena Folkvard Petersen, Astrid Kappel Nielsen, Sebrina Burchard, Casper Tai Christensen, Sarah Svendsen, Anders Juel, Caroline E Simonsen, Maria Topgaard, Mette Hedegaard, Signe Lett, Michelle Schollert Skovgaard , Nynne Larsen, Hanne Kristine Dyrnum, Therese van Driel, Susanne Munk Andersen, Sisse Pedersen, Kathrine Høyrup, Jesper Mosbacher, Ditte Brogaard Iversen, John Rasmussen, Camille Gry Smenge, Nina Bonke Mikkelsen, Nanna Lundh, Morten Mikkel Rolsted, Nanna Baggesen, Lotte Madsen, Lene Seierø, Julie Andersen, Astrid Emilie Knak Goth, Mette Francke, Emily Pickering Pedersen, Frederikke Høyer, Lisbeth Simonsen, Nor Balder Thane Christensen, Pia Petersen, Aya Tora Permin, Liv Alexa Nobel, Balduin Landl, Mads Bo Wolter Nielsen, Emil Alexander Sherman Andersen, Joseph Gaudard, Julie Pedersen Festersen, Anna Marie Stevnsvig, Elisabeth Larsen Kolstad, Else Pedersen, Kristine Skov, Agnieszka Marta Rzepczynska, Lasse Brandt Warning, Maj Sofie Paornak D Christensen, Simone Windfeldt-Schmidt,

Supervised PhD students (18): Menassie Gashaw, Enrico Graglia, Karl Emmerton, Erik Aude, Lotte Illeris, Michael Jensen, Magnus Olsson, Heidi Sjursen Konestabu, Karina E Clemmensen, Klaus Steenberg Larsen, Pernille Lærkedal Sørensen, Matteo Campioli, Louise C. Andresen, Merete Bang Selsted, Merian Skouw Haugwitz, Marie Porret Merrild, Frida Lindwall, Cecilie Skov Nielsen, Nynne Larsen, Sarah Svendsen

Supervised post docs (11): Carola Gehrke, Jorge Castro, Pernille Lærkedal Sørensen, Louise C. Andresen, Maria Olsrud, Riikka Rinnan, Daan Blok, Merian Skouw Haugwitz, Annelein Meisner, Kathrin Rousk, Marianne Koranda,

Current MSc students (2): Louise Vikjær Bote, Charlotte Amalie Buchard Køhnke,

Current PhD students (2): Emily Pickering Pedersen, Laura Helene Rasmussen

Current Post docs (2): Signe Lett, Casper Tai Christiansen

Guest lecturer

I have contributed and/or coordinated several ph.d courses at: University of Copenhagen, University of Lund, and University of Umeå: *Methods in Plant Ecology; Organic Matter in Soil: Pools and Processes; Experimental Design and Statistical Methods in Biology; Ecosystem Processes; Nutrient Cycling in Terrestrial Ecosystems; Dynamics of Organic Matter in Soil; Plant migration, persistence and adaptation in response to environmental change; Application of stable isotope techniques to study bio-geochemical processes in terrestrial ecosystems.*

I have contributed to courses in Plant Ecophysiology at KVL/LIFE, Copenhagen, and in Stable Isotopes at Geology, University of Copenhagen

Research profile

My field of research is plant physiological ecology, biogeochemistry and plant ecophysiology. The focus of my research is on interactions between plants, microbes, atmosphere and soil, mainly in terrestrial ecosystems. I study above- and belowground processes in non-managed arctic/alpine, temperate and tropical ecosystems, supplemented with experimental manipulations in growth chambers, greenhouses, nurseries and the field.

The aim is to reveal the consequences of environmental changes such as global warming, nitrogen deposition or changed land use on processes involving soils, plants and microbes, from root/leaf level to ecosystem level. Current activities focus on experimental studies of the effects of climate change (global warming) on nutrient and carbon cycling in arctic and temperate ecosystems. For instance, plant performance, nutrient availability, plant nitrogen acquisition and the emission of greenhouse gases from arctic and temperate heath vegetation is studied using long-term climate change related field plots.

As the responsible for advanced isotope ratio mass spectrometers and cavity-ring down laser instruments in our laboratory, stable isotope methodology is frequently used in my research. By the use of stable isotopes (^{13}C and ^{15}N), both at natural abundance and enrichment levels, one of my main research aims is to increase our understanding of plant uptake of soil nitrogen in various forms, in symbiosis and/or competition with soil microorganisms, and to investigate the role of mycorrhizal fungi in plant nutrition, especially in non-managed ecosystems.

My research group is one of the main players internationally in the attempts to reveal the effects of climate change on decisive biogeochemical and physiological processes and key organisms in natural ecosystems. Several long-term ecosystem manipulation experiments in N Sweden and Greenland, led by me, constitute a permanent attraction for post docs, ph.d and master students, both nationally and internationally. My emphasis on the coupling between above-and belowground processes, biogeochemistry and plant physiological ecology in natural or low-management ecosystems in the Arctic is probably unique in a Danish university context.

Anders Michelsen - List of publications 1990-2021

http://orcid.org/0000-0002-9541-8658 Researcher ID L-5279-2014

Publications: 235 in peer reviewed journals and books since 1990, >250 publications in total.
ISI/Web of Science citation index: 208 papers, 8905 times cited (Sept. 2019);
average citations per publication: 42.5; h-index: 51.
Google Scholar h-index: 70 (Feb. 2021).

232. Eusébio, R.P., Enghoff, H., Solodovnikov, A.**, Michelsen, A.**, Barranco, P., Salgado, J.M., Sendra, A. & Reboleira, A.S.P.S. (2021, in press). Temporal and spatial dynamics of arthropod groups in terrestrial subsurface habitats in central Portugal. *Zoology*

231. Clemmesen K E, Durling M. B., **Michelsen, A.**, Hallin S., Finlay R.D., Lindahl B. D. (2021). A tipping-point in carbon storage when forest expands into tundra is related to mycorrhizal recycling of nitrogen. *Ecology Letters* DOI: 10.1111/ele.13735

230. Baggesen N., Li T., Seco R., Holst T., **Michelsen A**., Rinnan R. (2021) Phenological stage of tundra vegetation controls bidirectional exchange of BVOCs in a climate change experiment on a subarctic heath . *Global Change Biol.*

229. Dibbern ME, Dietz R., Søndergaard J., **Michelsen A.,** Sonne C. (2021) Mercury exposure and risk assessment for Eurasian otters (Lutra lutra) in Denmark. *Chemosphere* https://doi.org/10.1016/j.chemosphere.2021.129608

228. Koranda M., **Michelsen A.** (2021) Mosses reduce soil nitrogen availability in a subarctic birch forest via effects on soil thermal regime and sequestration of deposited nitrogen. *Journal of Ecology* 109:1424–1438 https://doi.org/10.1111/1365-2745.13567

227. Kropp, H., Michael M. Loranty, Susan M Natali, Alexander L Kholodov, Adrian V Rocha, Isla H. Myers-Smith, Benjamin W Abbott, Jakob Abermann, Elena Blanc-Betes, Daan Blok, Gesche Blume-Werry, Julia Boike, Amy L. Breen, Sean M.P. Cahoon, Casper T. Christiansen, Thomas A. Douglas, Howard E. Epstein, Gerald V Frost, Mathias Goeckede, Toke T. Høye, Steven Douglas Mamet, Jonathan A. O'Donnell, David Olefeldt, Gareth K. Phoenix, Verity G. Salmon, Anna Britta Kristina Sannel, Sharon L. Smith, Oliver Sonnentag, Lydia Vaughn, Mathew Williams, Bo Elberling, Laura Gough, Jan Hjort, Peter M. Lafleur, Eugenie S Euskirchen, Monique Heijmans, Elyn R Humphreys, Hiroki Iwata, Benjamin M. Jones, Torre Jorgenson, Inge Grünberg, Yongwon Kim, James Laundre, Marguerite Mauritz, **Michelsen A.,** Gabriela Schaepman-Strub, Ken D Tape, Masahito Ueyama, Bang-Yong Lee, Kirsty Langley, Magnus Lund (2020) Shallow soils are warmer under trees and tall shrubs across Arctic and Boreal ecosystems. *Environmental Research Letters* 16, 015001 https://doi.org/10.1088/1748-9326/abc994

226. Pedersen E.P., Elberling B., **Michelsen A.** (2020). Foraging deeply: Depth-specific plant nitrogen uptake in response to climate-induced N-release and permafrost thaw in the High Arctic. *Global Change Biology* 26, 6523-6536 https://doi.org/10.1111/gcb.15306

225. Ravn N R, **Michelsen A.,** Reboleira A.S. (2020) Decomposition of organic matter in caves. *Frontiers in Ecology and Evolution* https://doi.org/10.3389/fevo.2020.554651

224. Kristensen J. A. , **Michelsen A.,** Metcalfe D.B. (2020). Background insect herbivory increases with local elevation but makes minor contribution to element cycling along natural gradients in the Subarctic. *Ecology and Evolution 10*, 11684-11698, https://doi.org/10.1002/ece3.6803

223. Pascual, D., J. Åkerman, M. Becher, T. V. Callaghan, T.R. Christensen, E. Dorrepaal, U. Emanuelsson, R. Giesler, D. Hammarlund, E. Hanna, A. Hofgaard, H. Jin, C. Johansson, C. Jonasson, J. Klaminder, J. Karlsson, E. Lundin, **A. Michelse**n, D. Olefeldt, A. Persson, G.K. Phoenix, Z. Rączkowska, R. Rinnan, L. Ström, J. Tang, R.K. Varner, P.A. Wookey & M. Johansson (2020). The missing pieces for better future predictions in subarctic ecosystems: A Torneträsk case study. Ambio 50:375–392; https://doi.org/10.1007/s13280-020-01381-1

222. Lett S., Teuber L., Krab E., **Michelsen A.,** Olofsson J., Nilsson M.-C., Wardle D., Dorrepaal E. (2020). Mosses modify effects of warmer and wetter conditions on tree seedlings at the alpine treeline. *Global Change Biology* 26:5754–5766 https://doi.org/10.1111/gcb.15256

221. Andersen E.A.S., **Michelsen A.**, Fenger-Nielsen R., Hollesen J., Per Lennart Ambus, Elberling B. (2020). Nitrogen isotopes reveal high N retention in plants and soil of old Norse and Inuit deposits along a wet-dry arctic fjord transect in Greenland. *Plant and Soil* https://doi.org/10.1007/s11104-020-04683-1

220. Li, T., Tiiva, P., Rinnan, Å., Julkunen-Tiitto, R., **Michelsen, A**. & Rinnan, R. (2020) Long-term effects of elevated CO2, nighttime warming and drought on plant secondary metabolites in a temperate heath ecosystem *Annals of Botany* 125, 1065-1075, https://doi.org/10.1093/aob/mcaa037

219. Hicks, L. C., Leizeaga A., Rousk K., **Michelsen A.**, and Rousk J. (2020). Simulated rhizosphere deposits induce microbial N-mining that may accelerate shrubification in the subarctic. *Ecology* 101: e03094. https://esajournals.onlinelibrary.wiley.com/doi/epdf/10.1002/ecy.3094

218. Liu N., **Michelsen A.,** Rinnan R. (2020). Vegetation and soil responses to added carbon and nutrients remain six years after discontinuation of long-term treatments. *Science of the Total Environment* https://doi.org/10.1016/j.scitotenv.2020.137885

217. Ravn N.R., Elberling, B., **Michelsen, A.** (2020) Arctic soil carbon turnover controlled by experimental snow addition, summer warming and shrub removal. *Soil Biology & Biochemistry* https://doi.org/10.1016/j.soilbio.2019.107698

216. Thomas, H.J.D.,Bjorkman, A.D., Myers-Smith, I.H., Elmendorf, S.C., Kattge, J., Diaz, S., Vellend, M., Blok, D., Cornelissen, J.H.C., Forbes,B.C.,. Henry, G.H.R., Hollister, R.D., Normand, S., Prevéy, J.S., Rixen, C., Schaepman-Strub, G., Wilmking, M., Wipf, S., Cornwell, W.K., Beck, P.S.A., Georges, D., Goetz, S.J., Guay, K.C., Rüger, N., Soudzilovskaia, N.A., Spasojevic, M.J., Alatalo, J.M., Alexander, H.D., Anadon-Rosell, A., Angers-Blondin, S., te Beest, M., Berner, L.T., Bjork, R.G., Buchwal, A., Buras, A., Carbognani, M., Christie, K.S., Collier, L.S., Cooper, E.J., Eberling, B., Eskelinen, A.,, Frei, E.R., Grau, O., Grogan, P., Hallinger, M., Heijmans, M.M.P.D., Hermanutz, L., Hudson, J.M.G., Johnstone, J.F., Hülber, K., Iturrate-Garcia, M., Iversen, C.M., Jaroszynska, F., Kaarlejarvi, E., Kulonen, A., Lamarque, L.J., Lantz, T., Lévesque, E.,Little, C.J., **Michelsen, A.,** Milbau, A., Nabe-Nielsen, J., Nielsen, S.S., Ninot, J.M., Oberbauer, S.F., Olofsson, J., Onipchenko, V.G., Petraglia, A., Rumpf, S.B., Shetti, R., Speed, J.D.M., Suding, K.N., Tape, K.D., Tomaselli, M., Trant, A.J., Treier, U.A., Tremblay, M., Venn, S.E., Vowles, T., Weijers, S., Wookey, P.A.,Zamin, T.J., Bahn, M., Blonder, B., van Bodegom, P.M., Bond-Lamberty, B., Campetella, G., Cerabolini, B.E.L., Chapin, F.S. III , Craine, J.M., Dainese, M., Green, W.A., Jansen, S., Kleyer, M., Manning, P., Niinemets, Ü., Onoda, Y., Ozinga, W.A., Peñuelas, J., Poschlod, P., Reich, P.B., Sandel, B., Schamp, B.S.,. Sheremetiev, S.N., de Vries, F.T. (2020) Global plant trait relationships extend to the climatic extremes of the tundra biome. *Nature Communications* (2020) 11:1351 https://doi.org/10.1038/s41467-020-15014-4 .

215. Jung J.Y., **Michelsen A**., Kim M., Nam S., Schmidt N.M., Jung S., Choe Y.H., Lee B.Y., Yoon H.I., Lee Y.K., (2020). Responses of surface SOC to long-term experimental warming vary between different heath types in the High Arctic tundra. *European Journal of Soil Science* 71:752–767 https://doi.org/10.1111/ejss.12896

214. Ghirardo A., Lindstein F., Koch K., Buegger F., Schloter M., Albert A., **Michelsen A.**, Winkler J. B., Schnitzler J-P., Rinnan, R. (2020) Origin of VOC emissions from subarctic tundra under global warming. Global Change Biology 26, 1908-1925 https://doi.org/10.1111/gcb.14935

213. Rasmussen L.H., **Michelsen A**., Ladegaard-Pedersen P., Nielsen, CC, Elberling B. (2020) Arctic soil water chemistry in dry and wet tundra subject to snow addition, summer warming and herbivory simulation. *Soil Biology and Biochemistry* https://doi.org/10.1016/j.soilbio.2019.107676

212. Finderup Nielsen T., Ravn N. R., **Michelsen A.** (2019) Increased CO_2 efflux due to long-term experimental summer warming and litter input in subarctic tundra – CO_2 fluxes at snowmelt, in growing season, fall and winter. *Plant and Soil* 444:365-382 https://doi.org/10.1007/s11104-019-04282-9

211. Natali S.M., Watts J.D., Rogers B.M., Potter S., Ludwig S.M., Selbmann A.K., Sullivan P.F.,. Michelsen A., et. al., 2019. Large loss of CO_2 in winter observed across the northern permafrost region. *Nature Climate Change* 9, 852–857 https://doi.org/10.1038/s41558-019-0592-8

210. Natali S., J.D. Watts, S. Potter, B.M. Rogers, S. Ludwig, A. Selbmann, P. Sullivan, B. Abbott, K. Arndt, A.A. Bloom, G. Celis, T. Christensen, C. Christiansen, R. Commane, E. Cooper, P.M. Crill, C.I. Czimczik, S. Davydov, J. Du, J. Egan, B. Elberling, S.E. Euskirchen, T. Friborg, H. Genet, J. Goodrich, P. Grogan, M. Helbig, E. Jafarov, J. Jastrow, A. Kalhori, Y. Kim, J.S. Kimball, L. Kutzbach, M. Lara, K. Larsen, B. Lee, Z. Liu, M.M. Loranty, M. Lund, M. Lupascu, N. Madani, A. Malhotra, R. Matamala, J. McFarland, A. McGuire, **A. Michelsen**, C. Minions, W. Oechel, D. Olefeldt, F. Parmentier, N. Pirk, B. Poulter, W. Quinton, F. Rezanezhad, D. Risk, T. Sachs, K. Schaefer, N. Schmidt, E. Schuur, P. Semenchuk, G. Shaver, O. Sonnentag, G. Starr, C. Treat, M. Waldrop, Y. Wang, J. Welker,

C. Wille, X. Xu, Z. Zhang, Q. Zhuang, and D. Zona. 2019. Synthesis of Winter In Situ Soil CO_2 Flux in pan-Arctic and Boreal Regions, 1989-2017. ORNL DAAC, Oak Ridge, Tennessee, USA. Dataset. https://doi.org/10.3334/ORNLDAAC/1692

209. Phillips C.A., Elberling B., **Michelsen A.** (2019) Soil carbon and nitrogen stocks and turnover following 16 years of warming and litter addition. *Ecosystems* 22, 110-124 https://doi.org/10.1007/s10021-018-0256-y

208. Li T., Holst T., **Michelsen A.,** Rinnan R. (2019) Amplification of plant volatile defence against insect herbivory in a warming subarctic tundra. *Nature Plants* 5, 568–574 https://doi.org/10.1038/s41477-019-0439-3

207. Mörsdorf MA, Baggesen NS, Yoccoz NG, **Michelsen A.,** Elberling, Ambus PL, Cooper EJ (2019) Deepened winter snow significantly influences the availability and forms of nitrogen taken up by plants in high Arctic tundra. *Soil Biol Biochem* 135, 222-234. https://doi.org/10.1016/j.soilbio.2019.05.009

206. Dietzen C.A., Larsen K.S, Ambus P.L., **Michelsen A.,** Arndal M.F., Beier C., Reinsch S., Schmidt I.K. (2019) Accumulation of soil carbon under elevated CO_2 unaffected by warming and drought. *Global Change Biology* 25, 2970-2977 https://doi.org/10.1111/gcb.14699

205. Goth A., **Michelsen A.,** Rousk K. (2019) Railroad derived nitrogen and heavy metal pollution does not affect nitrogen fixation associated with mosses and lichens at a tundra site in Northern Sweden. *Environmental Pollution* 247; 857-865 https://doi.org/10.1016/j.envpol.2019.01.101

204. Zhang W, Jansson P-E, Sigsgaard C, McConnell A, Jammet MM, Westergaard-Nielsen A, Lund M, Friborg T, **Michelsen A,** Elberling B. (2019) Model-data fusion to assess year-round CO_2 fluxes for an arctic heath ecosystem in West Greenland (69 °N). *Agricultural and Forest Meteorology* 272–273, 176-186 https://doi.org/10.1016/j.agrformet.2019.02.021

203. Thomas H. J. D., I. H. Myers-Smith, A. D. Bjorkman , S. C. Elmendorf, D. Blok, J. H. C. Cornelissen, B. C. Forbes , R. D. Hollister, S. Normand, J. S. Prevéy, C. Rixen, G. Schaepman-Strub, M. Wilmking, S. Wipf, W. K. Cornwell, J. Kattge, S. J. Goetz, K. C. Guay, J. M. Alatalo, A. Anadon-Rosell, S. Angers-Blondin, L. T. Berner, R. G. Björk, A. Buchwal, A. Buras, **A. Michelsen** …. et al. (2019) Traditional plant functional groups explain variation in economic but not size-related traits across the tundra biome. Global Ecology and Biogeography 28:78–95. https://doi.org/10.1111/geb.12783

202. Cruz-Paredes C, Frøslev TG, **Michelsen A**, Bang-Andreasen T, Hansen M, Ingerslev M, Skov S, Wallander H, Kjøller R (2019) Wood ash application in a managed Norway spruce plantation did not affect ectomycorrhizal diversity or N retention capacity. *Fungal Ecology* 39, 1-11 https://doi.org/10.1016/j.funeco.2018.11.002

201. Fenger-Nielsen R., Hollesen J., Matthiesen H., Andersen E.A.S., Westergaard-Nielsen A., Harmsen H., **Michelsen A.**, Elberling B. (2019). Footprints from the past: The influence of past human activities on vegetation and soil across five archaeological sites in Greenland. *Science of the Total Environment* 654, 895–905. https://doi.org/10.1016/j.scitotenv.2018.11.018

200. Mosbacher J.B, **Michelsen A.,** Stelvig M., Hjermstad-Sollerud H., Schmidt N.M. (2019). Muskoxen modify plant abundance, phenology, and nitrogen dynamics in a High Arctic fen. *Ecosystems* 22, 1095-1107 https://doi.org/10.1007/s10021-018-0323-4

199. Bjorkman, AD, Myers-Smith, IH, Elmendorf SC, Normand S, Rüger N, (~120 authors in total) incl **Michelsen, A.,** et al. (2018) Plant functional trait change across a warming tundra biome. *Nature 562, 57-62* https://doi.org/10.1038/s41586-018-0563-7

198. Bjorkman, AD, Myers-Smith, IH, Elmendorf SC, Normand S, Rüger N, (~100 authors in total) incl **Michelsen, A.,** et al. (2018) Tundra Trait Team: A database of plant traits spanning the tundra biome *Global Ecology and Biogeography* 27, 1402-1411 http://dx.doi.org/10.1111/geb.12821

197. Dornelas M., Antão L.H., Moyes F., Bates A.E., Magurran A.E., (~150 authors in total), incl **Michelsen A**., et al. (2018) BioTIME: a database of biodiversity time series for the Anthropocene. *Global Ecology and Biogeography* 27, 760-786 http://dx.doi.org/10.1111/geb.12729

196. Shik J.Z., Rytter W, Arnan X, **Michelsen A.** (2018) Disentangling nutritional pathways linking leafcutter ants and their co-evolved fungal symbionts using stable isotopes. *Ecology* 99, 1999–2009 http://dx.doi.org/10.1002/ecy.2431

195. Pedersen E.P., **Michelsen A**., Elberling B. (2018) *In situ* CH_4 oxidation inhibition and $^{13}CH_4$ labeling reveal methane oxidation and emission patterns in a subarctic heath ecosystem. *Biogeochemistry* 138, 197–213 https://doi.org/10.1007/s10533-018-0441-2

194. Salazar-Tortosa D, Castro J, Villar-Salvador P, Vinegla B, Matias L, **Michelsen A,** De Casas RR, Querejeta JI (2018) The "isohydric trap": a detrimental feedback between water shortage and nutrient acquisition drives differential response of European pines under climatic dryness. *Global Change Biology* 24:4069–4083; https://doi.org/10.1111/gcb.14311

193. Schmidt N.M., Mosbacher J.B, Vesterinen E.J., Roslin T., **Michelsen A.** (2018) Limited dietary overlap amongst resident Arctic herbivores in winter – complementary insights from complementary methods. *Oecologia* 187:689–699; https://doi.org/10.1007/s00442-018-4147-x

192. van Gestel N, Shi Z, van Groenigen KJ, Osenberg CW, Andresen LC, Dukes JS, Hovenden MJ, Luo Y, **Michelsen A,** Pendall E, Reich PB, Schuur EAG, Hungate BA (2018) Predicting soil carbon loss with warming. *Nature 554* http://dx.doi.org/10.1038/nature25745

191. Rousk K., Sorensen P.L., **Michelsen A.** (2018) What drives biological nitrogen fixation in high arctic tundra: Moisture or temperature? *Ecosphere* 9(2): e02117 http://onlinelibrary.wiley.com/doi/10.1002/ecs2.2117/epdf

190. Blok D., Faucherre S., Banyasz I. , Rinnan R., **Michelsen A.,** Elberling B. (2018) Contrasting above- and belowground organic matter decomposition and carbon and nitrogen dynamics in response to warming in High Arctic tundra. *Global Change Biology* 24, 2660–2672; http://dx.doi.org/10.1111/gcb.14017

189. Tang, J. Valolahti H., Kivimäenpää M., **Michelsen A.** and Rinnan R. (2018) Acclimation of biogenic volatile organic compound emission from subarctic heath under long-term moderate warming *Journal of Geophysical Research: Biogeosciences* 123, 95–105; http://dx.doi.org/10.1002/2017JG004139

188. Barthelemy, H., Stark S., **Michelsen, A.,** Olofsson J. (2018). Urine is an important nitrogen source for plants irrespective of vegetation composition in an Arctic tundra: insights from a ^{15}N-enriched urea tracer experiment. *Journal of Ecology* 106, 367–378; http://dx.doi.org/10.1111/1365-2745.12820

187. Rousk K., Sorensen P.L., **Michelsen A.** (2017) Nitrogen fixation in the High Arctic: A source of 'new' nitrogen? *Biogeochemistry* 136, 213–222, http://dx.doi.org/10.1007/s10533-017-0393-y

186. Pedersen E.P., Elberling B., **Michelsen A**. (2017) Seasonal variations in methane fluxes in response to summer warming and leaf litter addition in a subarctic heath ecosystem. *Journal of Geophysical Research: Biogeosciences* 122, 2137-2153; http://dx.doi.org/10.1002/2017JG003782

185. Ravn N.R., Elberling, B., **Michelsen,A.** (2017) The fate of $^{13}C^{15}N$ labelled glycine in permafrost and surface soil at simulated thaw in mesocosms from high arctic and subarctic ecosystems. *Plant and Soil 419, 201-218;* http://dx.doi.org/10.1007/s11104-017-3322-x

184. Nielsen, T.F., Larsen, J.F., **Michelsen, A.,** Bruun, H.H. (2017). Are herbarium mosses reliable indicators of historical nitrogen deposition? *Environmental Pollution* 231, 1201-1207; http://dx.doi.org/10.1016/j.envpol.2017.04.020

183. Ravn, N.R., Ambus, P., **Michelsen, A**. (2017). Impact of decade-long warming, nutrient addition and shading on emission and carbon isotopic composition of CO_2 from two subarctic dwarf shrub heaths. *Soil Biology and Biochemistry* 111, 15-24 http://dx.doi.org/10.1016/j.soilbio.2017.03.016

182. Alatalo J.M., Jägerbrand A.K, Juhanson J., **Michelsen A**., Ľuptáčik P. (2017) Impacts of twenty years of experimental warming on soil carbon, nitrogen, moisture and soil mites across alpine/subarctic tundra communities. *Scientific Reports* 7, 44489 http://dx.doi.org/10.1038/srep44489

181. Holmstrup M., Damgaard C.,Schmidt I.K., Arndal M.F., Beier C., Mikkelsen T.N., Ambus P., Larsen K.S., Pilegaard K., **Michelsen A.,** Andresen L.C., Haugwitz M., Bergmark L., Priemé A., Zaitsev A.S., Georgieva S., Dam, M., Vestergård M., Christensen S. (2017) Long-term and realistic global change manipulations had low impact on soil biota in temperate heathland. Scientific Reports 7, 41388 http://dx.doi.org/10.1038/srep41388

180. Schmidt N.M., Hardwick, B., Gilg O., Høye, T.T., Krogh P.H, Meltofte H., **Michelsen A.,** Mosbacher J. B., Raundrup K., Reneerkens J., Stewart L., Wirta, H., T. Roslin. (2017) Interaction webs in arctic ecosystems: Determinants of arctic change? *AMBIO* 46 (Suppl. 1), 12–25. http://dx.doi.org/10.1007/s13280-016-0862-x

179. Tiiva, P., Tang, J., **Michelsen, A**., and Rinnan, R. (2017) Monoterpene emissions in response to long-term night-time warming, elevated CO_2 and extended summer drought in a temperate heath ecosystem. *Science of the Total Environment 580, 1056-1067* http://dx.doi.org/10.1016/j.scitotenv.2016.12.060

178. Nielsen, C.S., **Michelsen, A**., Strobel, B.W. Wulff, K., Banyasz, I., Elberling, B. (2017). Correlations between substrate availability, dissolved CH_4, and CH_4 emissions in an arctic wetland subject to warming and plant removal. *Journal of Geophysical Research - Biogeosciences* 122, 645–660; http://dx.doi.org/10.1002/2016JG003511

177. Rousk K., Degboe J., **Michelsen, A.** Bradley R., Bellenger J.-P. (2017) Molybdenum and phosphorus limitation of moss-associated nitrogen fixation in boreal ecosystems. *New Phytologist 214, 97-107,* http://dx.doi.org/10.1111/nph.14331

176. Rousk, K., Pedersen, P.A, Dyrnum K., **Michelsen A.** (2017) The interactive effects of temperature and moisture on moss-associated N_2 fixation. *Theoretical and Experimental Plant Physiology 29, 25-36;* http://dx.doi.org/10.1007/s40626-016-0079-1

175. Rousk K., **Michelsen A.** (2017) Ecosystem nitrogen fixation throughout the snow-free period in subarctic tundra: Effects of willow and birch litter addition and warming. *Global Change Biology* 23, 1552-1563 http://dx.doi.org/10.1111/gcb.13418

174. D'Imperio L., Nielsen C.S., Westergaard-Nielsen A., **Michelsen A.,** Elberling B. (2017) Methane oxidation in contrasting soil types: responses to experimental warming with implication for landscape-integrated CH_4 budget. *Global Change Biology* 23, 966-976 http://dx.doi.org/10.1111/gcb.13400

173. Svendsen S.H. Lindwall F., **Michelsen A,** Rinnan R. (2016) Biogenic volatile organic emissions along a high arctic soil moisture gradient. *Science of the Total Environment* 573, 131–138 http://dx.doi.org/10.1016/j.scitotenv.2016.08.100

172. Tang, J., Schurgers, G., Valolahti, H., Faubert, P., Tiiva, P., **Michelsen, A**., and Rinnan, R. (2016) Challenges in modelling isoprene and monoterpene emission dynamics of Arctic plants: a case study from a subarctic tundra heath Biogeosciences 13, 6651-6667 http://www.biogeosciences.net/13/6651/2016/

171. Crowther, T.W., Todd-Brown, K.E.O., Rowe, C.W., Wieder, W.R., Carey, J.C., Machmuller, M.B., Snoek, L.B., Fang, S., Zhou, G., Allison, S.D., Blair, J.M., Bridgham, S.D., Burton, A.J., Carrillo, Y., Reich, P.B., Clark, J.S., Classen, A.T., Dijkstra, F.A., Elberling, B., Emmett, B., Estiarte, M., Frey, S. D., Guo, J., Harte, J., Jiang, L., Johnson, B. R., Kröel-dulay, G., Larsen, K. S., Laudon, H., Lavallee, J. M., Luo, Y., Lupascu, M., Ma, L. N., Marhan, S., **Michelsen, A.,** Mohan, J., Niu, S., Pendall, E., Peñuelas, J., Pfeifer-Meister, L., Poll, C., Reinsch, S., Reynolds, L. L., Schmidt, I. K., Sistla, S., Sokol, N. W., Templer, P. H., Treseder, K. K., Welker, J. M. & Bradford, M. A.. (2016) Quantifying global soil C losses in response to warming. *Nature* **540**, 104–108 http://dx.doi.org/10.1038/nature20150

170. Nielsen, C.S., **Michelsen, A**., Ambus, P., Chamindu Deepagoda, T.K.K., Elberling, B. (2016). Linking rhizospheric CH_4 oxidation and net CH_4 emissions in an arctic wetland based on $^{13}CH_4$ labeling of mesocosms. *Plant & Soil* 412, 201–213; http://dx.doi.org/10.1007/s11104-016-3061-4

169. Jacobsen, D., Laursen, S.K., Hamerlik L, Moltesen, K., **Michelsen, A.,** Christoffersen, K.S. (2016). Fish on the roof of the world: densities, habitats and trophic position of stone loaches (Triplophysa) in Tibetan streams. *Marine and Freshwater Research* 68, 53-64; http://dx.doi.org/10.1071/mf15225

168. Rousk K., Sorensen P.L., **Michelsen A.** (2016) Nitrogen transfer from four nitrogen-fixer associations to plants and soils. *Ecosystems* 19, 1491–1504 http://dx.doi.org/10.1007/s10021-016-0018-7

167. Christiansen C.T., Haugwitz M.S, Priemé A., Nielsen C.S., Elberling B., **Michelsen A.,** Grogan P., Blok D. (2016) Enhanced summer warming reduces fungal decomposer diversity and litter mass loss more strongly in dry than in wet tundra**.** *Global Change Biology* 23, 406-420 http://dx.doi.org/10.1111/gcb.13362

166. Haugwitz M.S., **Michelsen A.,** Priemé A. (2016) The legacy of climate change effects: previous drought increases short-term litter decomposition rates in a temperate mixed grass- and shrubland. *Plant Soil* 408, 183–193 http://dx.doi.org/10.1007/s11104-016-2913-2

165. Rousk K., **Michelsen A.**, Rousk J. (2016). Microbial control of soil organic matter mineralization responses to labile carbon in subarctic climate change treatments. *Global Change Biology 22, 4150-4161* http://onlinelibrary.wiley.com/doi/10.1111/gcb.13296/epdf

164. Mosbacher J. B., **Michelsen A.**, Stelvig M., Hendrichsen D.K. , Schmidt N.M. (2016). Show me your rump hair and I will tell you what you ate – The dietary history of muskoxen (*Ovibos moschatus*) revealed by sequential stable isotope analysis of guard hairs. *PLoS ONE* 11(4): e0152874. http://dx.doi:10.1371/journal.pone.0152874

163. Lindwall, F., Schollert, M., Blok, D., **Michelsen, A.** and Rinnan, R. (2016) Arctic summer warming causes four-fold higher tundra volatile emissions. *Journal of Geophysical Research-Biogeosciences* 121, 895-902 http://dx.doi.org/10.1002/2015JG003295

162. Lindwall, F., Svendsen, S.S., Nielsen, C.S., **Michelsen, A.** and Rinnan, R. (2016) Warming increases isoprene emissions from an arctic fen. *Science of the Total Environment* 553, 297–304 http://dx.doi.org/10.1016/j.scitotenv.2016.02.111

161. Rousk K., **Michelsen A.** (2016) The sensitivity of moss-associated nitrogen fixation towards repeated nitrogen input. *PLoS ONE* 11(1): e0146655. http://dx.doi.org/10.1371/journal.pone.0146655

160. Mosbacher J.B., Kristensen D.K., **Michelsen A.**, Stelvig M, Schmidt N.M. (2016) Quantifying muskox plant biomass removal and spatial relocation of nitrogen in a high arctic tundra ecosystem. *Arctic, Antarctic, and Alpine Research 48, 229-240* http://dx.doi.org/10.1657/AAAR0015-034

159. Blok D., Elberling B., **Michelsen A.** (2016) Initial stages of tundra shrub litter decomposition may be accelerated by deeper winter snow but slowed down by spring warming. *Ecosystems* 19, 155-169 http://dx.doi.org/10.1007/s10021-015-9924-3

158. Valolahti H., Kivimänpää M., Faubert P., **Michelsen A.,** Rinnan R. (2015). Climate change-induced vegetation change as a driver of increased subarctic biogenic volatile organic compound emissions. *Global Change Biology* 21, 3478-3488 http://dx.doi.org/10.1111/gcb.12953

157. Blok D., Weijers S., Welker J. M, Cooper E.J., **Michelsen A.,** Löffler J., Elberling B. (2015). Deepened winter snow increases stem growth and alters stem $\delta^{13}C$ and $\delta^{15}N$ in evergreen dwarf shrub *Cassiope tetragona* in high-arctic Svalbard tundra. *Environ. Res. Lett.* 10, 044008 http://dx.doi.org/10.1088/1748-9326/10/4/044008

156. Vestergård M., Dyrnum K., **Michelsen A**., Damgaard C., Holmstrup M. (2015) Long-term multifactorial climate change impacts on mesofaunal biomass and nitrogen content. *Applied Soil Ecology* 92, 54-63 http://dx.doi.org/10.1016/j.apsoil.2015.03.002

155. Semenchuk P.R, Elberling B., Amtorp C., Winkler J., Rumpf S., **Michelsen A.**, Cooper E.J. (2015) Deeper snow alters soil nutrient availability and leaf nutrient status in high Arctic tundra. *Biogeochemistry* 124, 81-94 http://dx.doi.org/10.1007/s10533-015-0082-7

154. Rousk K., Sorensen P.L., Lett S., **Michelsen A**. (2015). Across-habitat comparison of diazotroph activity in the Subarctic. *Microbial Ecology* 69, 778-787 http://dx.doi.org/10.1007/s00248-014-0534-y

153. Craine, J. M., A. J. Elmore, L. Wang, L. Augusto, W. T. Baisden, E. N. J. Brookshire, M. D. Cramer, N. J. Hasselquist, E. A. Hobbie, A. Kahmen, K. Koba, J. M. Kranabetter, M. C. Mack, E. Marin-Spiotta, J. R. Mayor, K. K. McLauchlan, **A. Michelsen**, G. B. Nardoto, R. S. Oliveira, S. S. Perakis, P. L. Peri, C. A. Quesada, A. Richter, L. A. Schipper, B. A. Stevenson, B. L. Turner, R. A. G. Viani, W. Wanek and B. Zeller (2015). Convergence of soil nitrogen isotopes across global climate gradients. *Scientific Reports* 5, 8280 http://dx.doi.org/10.1038/srep08280

152. Lett S., **Michelsen A**. (2014). Seasonal variation in nitrogen fixation and effects of climate change in a subarctic heath. *Plant and Soil.* 379, 193-204, http://dx.doi.org/10.1007/s11104-014-2031-y

151. Ellegaard M., Tuong Giang N.N., Andersen T.J., **Michelsen A.,** Lam N.N., Hai D.N., Kristensen E., Weckström K., Hoang Son T.P., Lund-Hansen L.C. (2014) Temporal changes in physical, chemical and biological sediment parameters in a tropical estuary after mangrove deforestation. *Estuarine, Coastal and Shelf Science* 142, 32-40 http://dx.doi.org/10.1016/j.ecss.2014.03.007

150. Reuss N.S., Hamerlík L., Velle G., **Michelsen A.,** Pedersen O., Brodersen K.P. (2014). Microhabitat influence on chironomid community structure and stable isotope signatures in West Greenland lakes. *Hydrobiologia 730, 59-77* http://dx.doi.org/10.1007/s10750-014-1821-9

149. Andresen, L.C, Dungait, J.A.J., Bol, R., Selsted, M.B., Ambus, P., **Michelsen A**. (2014) Bacteria and fungi respond differently to multifactorial climate change in a temperate heathland, traced with ^{13}C-glycine and FACE CO_2. PLoS ONE 9(1): e85070. http://dx.doi.org/10.1371/journal.pone.0085070

148. Schollert M., Burchard S.,, Faubert P., **Michelsen A.,** Rinnan R. (2014) Biogenic volatile organic compound emissions in four vegetation types in high arctic Greenland. *Polar Biology* 37, 237-249. http://dx.doi.org/10.1007/s00300-013-1427-0

147. Reinsch S., **Michelsen A.,** Sárossy Z., Egsgaard H., Schmidt I.K., Jakobsen I., Ambus P. (2014) Short-term utilization of carbon by the soil microbial community under future climatic conditions in a temperate heathland. *Soil Biology and Biochemistry 68, 9-19* http://dx.doi.org/10.1016/j.soilbio.2013.09.014

146. Ingimarsdóttir M., **Michelsen A.,** Ripa J., Hedlund K. (2014) Food sources of early colonising arthropods: the importance of allochthonous input. *Pedobiologia* 57, 21-26 http://dx.doi.org/10.1016/j.pedobi.2013.09.004

145. Haugwitz, M.S.; Bergmark, L.; Priemé, A.; Christensen, S.; Beier, C. and **Michelsen, A**. (2014) Soil microorganisms respond to five years of climate change manipulations and elevated atmospheric CO2 in a temperate heath ecosystem. *Plant and Soil* 374, 211-222 http://dx.doi.org/10.1007/s11104-013-1855-1.

144. Mosbacher J. B., Schmidt N.M., **Michelsen A. (**2013) Impacts of eriophyoid gall mites on arctic willow in a rapidly changing Arctic. *Polar Biology* 36, 1735–1748 http://dx.doi.org/10.1007/s00300-013-1393-6

143. Rinnan R., Gierth D., Bilde M.., Rosenørn T., **Michelsen A**. (2013) Off-season biogenic volatile organic compound emissions from heath mesocosms: responses to vegetation cutting. *Frontiers in Terrestrial Microbiology* 4, 224 http://dx.doi.org/10.3389/fmicb.2013.00224

142. Elberling B., **Michelsen A.**, Schädel C., Schuur E.A.G., Christiansen H.H., Berg L., Tamstorf M.P, Sigsgaard C. (2013) Long-term CO_2 production following permafrost thaw. *Nature Climate Change* 3, 890-894 http://dx.doi.org/10.1038/nclimate1955

141. Campioli M., Schmidt N.M., Albert K.R., Leblans N., Ro-Poulsen H., **Michelsen** A. (2013) Does warming affect growth rate and biomass production of shrubs in the High Arctic? *Plant Ecol* 214, 1049-1058 http://dx.doi.org/10.1007/s11258-013-0230-x

140. Arndal M., Schmidt I.K., Nielsen J.K., Beier C., **Michelsen A.** (2013) Root growth and N dynamics in response to multi-year experimental warming, summer drought, and elevated CO_2 in a mixed heathland-grass ecosystem. *Functional Plant Biology 41, 1-10* http://dx.doi.org/10.1071/FP13117

139. Rinnan R., **Michelsen A.,** Bååth E. (2013) Fungi benefit from two decades of increased nutrient availability in tundra heath soil. *PLoS ONE* 8(2) e56532 http://dx.doi.org/10.1371/journal.pone.0056532

138. Scherber C., Gladbach D.J., Stevnbak K., Karsten R.K., Schmidt I.K., **Michelsen A.**, Albert K.R., Larsen K.S, Mikkelsen T.N., Beier C., Christensen S. (2013) Multi-factor climate change effects on insect herbivore performance. E*cology and Evolution **3,*** 1449–1460, *http://dx.doi.org/10.1002/ece3.564*

137. Callaghan, T.V., Jonasson C., Thierfelder T., Yang Z., Hedenas H., Johansson M., Molau U., Van Bogaert R., **Michelsen A.**, Olofsson J., Gwynn-Jones D., Bokhorst S., Phoenix G., Bjerke J.W., Tømmervik H., Christensen T.R., Hanna E., Koller E.K., Sloan V.L.. 2013. Ecosystem change and stability over multiple decades in the Swedish subarctic: complex processes and multiple drivers. *Phil Trans R Soc B.* 368: 20120488 http://dx.doi.org/10.1098/rstb.2012.0488

136. Reuss N.S., Hamerlík L., Velle G., **Michelsen A.,** Pedersen O., Brodersen K.P. (2013) Stable isotopes reveal that chironomids occupy several trophic levels within West Greenland lakes: Implications for food web studies. *Limnology & Oceanography 58,* 1023-1034 http://dx.doi.org/10.4319/lo.2013.58.3.1023

135. Lekberg Y., Rosendahl S., **Michelsen A.,** Olsson P.A. (2013). Seasonal carbon allocation to arbuscular mycorrhizal fungi assessed by microscopic examination, stable isotope probing and fatty acid analyses. *Plant and Soil* 368, 547-555 http://dx.doi.org/10.1007/s11104-012-1534-7

134. Arndal M.F., Merrild M.P., **Michelsen A.,** Schmidt I.K., Mikkelsen T., Beier C. (2013). Net root growth and nutrient acquisition in response to future climate change in two heathland plants. *Plant and Soil.* 369, 615-629 http://dx.doi.org/10.1007/s11104-013-1601-8

133. Michelsen A., Rinnan R., Jonasson S. (2012). Two decades of experimental manipulations of heaths and forest understory in the subarctic. *AMBIO* 41, Supplement 3, 218-230 http://dx.doi.org/10.1007/s13280-012-0303-4

132. Albert K.R., Kongstad J., Schmidt I.K., Ro-Poulsen H., Mikkelsen T.N., **Michelsen A**., van der Linden L., Beier C. (2012) Temperate heath plant response to dry conditions depends on growth strategy and less on physiology. *Acta Oecologia* 45, 79-87 http://dx.doi.org/10.1016/j.actao.2012.09.003

131. Schmidt N.M., Kristensen DK, **Michelsen A.,** Bay C. **(**2012) High Arctic plant community responses to a decade of ambient warming. *Biodiversity* 13, 1-9 http://dx.doi.org/10.1080/14888386.2012.712093

130. Christiansen C.T., Schmidt N.M., **Michelsen A.** (2012) High arctic dry heath CO_2 exchange during the early cold season. *Ecosystems* 15, 1083–1092 http://dx.doi.org/10.1007/s10021-012-9569-4

129. Larsen K.S., **Michelsen A**., Jonasson S., Beier C., Grogan P. (2012) Nitrogen uptake during fall, winter, and spring differs among plant functional groups in a subarctic heath ecosystem. *Ecosystems 15,* 927-939 http://dx.doi.org/10.1007/s10021-012-9555-x

128. Campioli M., Leblans N., **Michelsen A**. (2012). Twenty-two years of warming, fertilisation and shading of subarctic heath shrubs promote secondary growth and plasticity but not primary growth *PLoS ONE* 7(4): e34842 http://dx.doi.org/10.1371/journal.pone.0034842

127. Christiansen, C.T., Svendsen, S.H., Schmidt N.M., **Michelsen A.** (2012) High arctic heath soil respiration and biogeochemical dynamics during summer and autumn freeze-in – effects of long term enhanced water and nutrient supply. *Global Change Biology* 18, 3224–3236 http://dx.doi.org/10.1111/j.1365-2486.2012.02770.x

126. Elmendorf S., Henry G., Hollister R.D., Björk R., Boulanger-Lapointe N., Cooper E., Cornelissen H., Day T., Dorrepaal E., Elumeeva T., Gill M., Gould W., Harte J., Hik D., Hofgaard A., Johnson D.R., Johnstone J.F., Jónsdóttir I. S., Jorgenson, Klanderud K., Klein J., Koh S., Kudo G., Lara M., Lévesque E., Magnússon B., May J., Mercado-Diaz J., **Michelsen A.**, Molau U., Myers-Smith I., Oberbauer S., OnipchenkoV.G., Rixen C, Schmidt NM, Shaver G, Spasojevic MJ, Þórhallsdóttir ÞE, Tolvanen A, Troxler T, Tweedie, CE, Villareal S, Wahren C-H., Walker X., Webber P., Welker J., Wipf S. (2012). Plot-scale evidence of tundra vegetation change and links to recent summer warming. *Nature Climate Change* 2, 453–457 http://dx.doi.org/10.1038/NCLIMATE1465

125. Sorensen P.L., Lett S., **Michelsen A**. (2012). Moss specific changes in nitrogen fixation following two decades of warming, shading and fertilizer addition. *Plant Ecology* 213, 695–706 http://dx.doi.org/10.1007/s11258-012-0034-4

124. Selsted M., van der Linden L., Ibrom A., **Michelsen A.**, Larsen K., Kongstad J., Mikkelsen T., Pilegaard K., Beier, C, Ambus P. (2012) Soil respiration is stimulated by elevated CO_2 and reduced by summer drought: Three years of measurements in a multifactor ecosystem manipulation experiment in a temperate heathland (CLIMAITE) *Global Change Biology* 18, 1216–1230 http://dx.doi.org/10.1111/j.1365-2486.2011.02634.x

123. Albert K.R., Mikkelsen T.N., Ro-Poulsen H., Arndal M.F., Boesgaard K., **Michelsen A.**, Bruhn D., Schmidt N.M. (2012). Solar UV-B effects on PSII performance in *Betula nana* are influenced by PAR level and reduced by EDU. Results of a 3-year experiment in the High Arctic. *Physiologia Plantarum* 145: 485–500 http://dx.doi.org/10.1111/j.1399-3054.2012.01596.x

122. Cazzanelli M., Forsström L., Rautio M., **Michelsen A.**, Christoffersen K.S. (2012). Benthic resources are the key to *Daphnia middendorffiana* survival in a high arctic pond. *Freshwater Biology 57, 541-551* http://dx.doi.org/10.1111/j.1365-2427.2011.02722.x

121. Boesgaard K. S., Albert K.R., Ro-Poulsen H., **Michelsen A**. Mikkelsen T.N., Schmidt N.M. (2012). Long-term structural canopy changes sustain net photosynthesis per ground area in high arctic *Vaccinium uliginosum* exposed to changes in near-ambient UV-B levels. *Physiologia Plantarum* 145, 540-550 http://dx.doi.org/10.1111/j.1399-3054.2011.01564.x

120. Campioli M., Leblans N., **Michelsen A.** (2012). Stem secondary growth of tundra shrubs: impact of environmental factors and relationships with apical growth. *Arctic, Antarctic, and Alpine Research* 44, 16-25 http://dx.doi.org/10.1657/1938-4246-44.1.16

119. Elmendorf S., Henry G., Hollister, Björk R., Bjorkman A., Callaghan T.V., Collier L., Cooper E., Cornelissen H., Day T., Fosaa A.M., Gould W., Grétarsdóttir J., Harte J., Hermanutz L., Hik D., Hofgaard A., Jarrad F., Jónsdóttir I. S., Keuper F., Klanderud K., Klein J., Koh S., Kudo G., Lang S., Loewen V., May J., Mercado J., **Michelsen A.**, Molau U., Myers-Smith I., Oberbauer S., Pieper S., Post E., Rixen C., Robinson C., Schmidt N., Shaver G., Stenström A., Tolvanen A., Totland O., Troxler T., Wahren C.-H., Webber P., Welker J., Wookey P. (2012). Global assessment of experimental climate warming on tundra vegetation: heterogeneity over space and time. *Ecology Letters* 15, 164-175 http://dx.doi.org/10.1111/j.1461-0248.2011.01716.x

118. Faubert P., Tiiva P., **Michelsen A.**, Rinnan Å., Ro-Poulsen H., Rinnan R. (2012). The shift in plant species composition in a subarctic mountain birch forest floor due to climate change would modify the biogenic volatile organic compound emission profile. *Plant and Soil* 352:199-215 http://dx.doi.org/10.1007/s11104-011-0989-2

117. Andresen L.C., **Michelsen A.,** Jonasson S., Ström L. (2011). Seasonal changes in nitrogen availability, and root and microbial uptake of $^{15}N^{13}C_9$-phenylalanine and ^{15}N-ammonium *in situ* at a temperate heath. *Applied Soil Ecology* 51, 94-101 http://dx.doi.org/10.1016/j.apsoil.2011.09.005

116. Kristensen D.K., Kristensen E., Forchhammer M.C., **Michelsen A.,** Schmidt N.M. (2011). Arctic herbivore diet can be inferred from stable carbon and nitrogen isotopes in C_3 plants, faeces and wool. *Canadian Journal of Zoology* 89, 892-899 http://dx.doi.org/10.1139/Z11-073

115. Albert K.R., Ro-Poulsen H., Mikkelsen T.N., **Michelsen A.**, van der Linden L., Beier C. (2011). Interactive effects of elevated CO_2, warming and drought on photosynthesis of *Deschampsia flexuosa* in a temperate heath ecosystem. *Journal of Experimental Botany* 62, 4253–4266 http://dx.doi.org/10.1093/jxb/err133

114. Sorensen P.L., **Michelsen A.** (2011) Long-term warming and litter addition affects nitrogen fixation in subarctic heath. *Global Change Biology* 17, 528–537 http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2486.2010.02234.x/pdf

113. Albert K.R., Mikkelsen T.N., **Michelsen A.**, Ro-Poulsen H., van der Linden L. (2011) Interactive effects of drought, elevated CO_2 and warming on photosynthetic capacity and photosystem performance in temperate heath plants. *Journal of Plant Physiology*168, 1550– 1561 http://dx.doi.org/10.1016/j.jplph.2011.02.011

112. Rinnan, R., **Michelsen, A.,** Bååth, E. (2011) Long-term warming of a subarctic heath decreases soil bacterial community growth but has no effects on its temperature adaptation. *Applied Soil Ecology 47, 217-220* http://dx.doi.org/10.1016/j.apsoil.2010.12.011

111. Haugwitz M.S., Schmidt, I.K., **Michelsen A** (2011) Long-term microbial control of nutrient availability and plant biomass in a subarctic-alpine heath after addition of carbon, fertilizer and fungicide. *Soil Biology and Biochemistry* 43, 179-187 http://dx.doi.org/10.1016/j.soilbio.2010.09.032

110. Andresen, L.A., Konestabo, H.S., Maraldo K, Holmstrup M., Ambus P., Beier C., **Michelsen A.** (2011) Organic matter flow in the food web at a temperate heath under multifactorial climate change. *Rapid Communications in Mass Spectrometry* 25, 1485–1496 http://dx.doi.org/10.1002/rcm.4907

109. Rinnan R., Rinnan Å., Faubert P., Tiiva P., Holopainen J.K., **Michelsen A.** (2011) Few long-term effects of simulated climate change on volatile organic compound emissions and leaf chemistry of three subarctic dwarf shrubs. *Environmental and Experimental Botany* 72, *377-386* doi:10.1016/j.envexpbot.2010.11.006

108. Haugwitz M.S., **Michelsen A.** (2011) Long-term addition of fertilizer, labile carbon and fungicide alters the biomass of plant functional groups in a subarctic-alpine community. *Plant Ecology* 212:715-726 http://dx.doi.org/10.1007/s11258-010-9857-z

107. Larsen K.S., Andresen L.C., Beier C., Jonasson S., Albert K.R., Ambus P., Arndal M.F., Carter M.S., Christensen S., Holmstrup M., Ibrom A., Kongstad J., van der Linden L., Maraldo K., **Michelsen A.**, Mikkelsen T.N., Pilegaard K., Priemé A., Ro-Poulsen H., Schmidt I.K., Selsted M.B., Stevnbak K. (2011) Reduced N cycling in response to elevated CO2, warming, and drought in a Danish heathland: Synthesizing results of the CLIMAITE project after two years of treatments. *Global Change Biology* 17, 1884–1899 http://dx.doi.org/10.1111/j.1365-2486.2010.02351.x

106. Selsted M.B., Ambus P., **Michelsen A.,** van der Linden L., Larsen K.S., Pilegaard K., Mikkelsen T.N., Beier C. (2011) Measurements of carbon dioxide fluxes in a free-air carbon dioxide enrichment experiment using the closed flux chamber technique. *Atmospheric Environment* 45, 208-214 doi:10.1016/j.atmosenv.2010.09.022

105. Albert K.R., Ro-Poulsen H., Mikkelsen T.N., **Michelsen A.**, van der Linden L., Beier C. (2011). Effects of elevated CO_2, warming and drought episodes on plant carbon uptake in a temperate heath ecosystem are controlled by soil water status. *Plant, Cell & Environment,* 34, 1207–1222 http://dx.doi.org/10.1111/j.1365-3040.2011.02320.x

104. Albert K.R., Mikkelsen T.N., Ro-Poulsen H., Arndal M.F., Michelsen A. (2011) Ambient UV-B radiation reduces PSII performance and net photosynthesis in high Arctic *Salix arctica*. *Environmental and Experimental Botany* 72, *439-447* http://www.sciencedirect.com/science/article/pii/S0098847210001516

103. Albert K.R., Mikkelsen T.N., Ro-Poulsen H., **Michelsen A.,** Arndal M.F., Bredahl L., Håkansson K.B., Boesgaard K., Schmidt N.M. (2010) Improved UV-B screening capacity does not prevent negative effects of ambient UV irradiance on PSII performance in High Arctic plants. Results from a six year UV exclusion study *Journal of Plant Physiology* 167, 1542–1549 http://dx.doi.org/10.1016/j.jplph.2010.05.023

102. Faubert P., Tiiva P., Rinnan, Å., **Michelsen A.,** Holopainen J.K., Rinnan R. (2010). Doubled volatile organic compound emissions from subarctic tundra under simulated climate warming. *New Phytologist* 187, 199-208 http://dx.doi.org/10.1111/j.1469-8137.2010.03270.x

101. Andresen, L.A., **Michelsen A.,** Ambus P., Beier C. (2010) Belowground heathland responses after 2 years of combined warming, elevated CO_2 and summer drought. *Biogeochemistry* 101, 27-46 http://dx.doi.org/10.1007/s10533-010-9489-3

100. Kjøller, R., Olsrud M., **Michelsen A.** (2010) Co-existing ericaceous plant species in a subarctic heath community share fungal root endophytes. *Fungal Ecology* 3, 205-214. doi:10.1016/j.funeco.2009.10.005

99. Olsrud M., Carlsson B.Å., Svensson B.M., **Michelsen A.**, Melillo J.M. (2010). Responses of fungal root colonization, plant cover and leaf nutrients to long-term exposure to elevated atmospheric CO_2 and warming in a subarctic birch forest understory. *Global Change Biology* 16, 1820–1829. http://dx.doi.org/10.1111/j.1365-2486.2009.02079.x

98. Andresen L.C., **Michelsen A.,** Jonasson S, Schmidt I.K., Mikkelsen T.N., Ambus P., Beier C. (2010). Plant nutrient mobilization in temperate heathland responds to elevated CO_2, temperature and drought. *Plant and Soil* 328, 381-396*;* http://dx.doi.org/10.1007/s11104-009-0118-7

97. Andresen L.C., **Michelsen A.,** Ambus P., Jonasson S. and Beier C. (2009) Glycine uptake in heath plants and soil microbes responds to elevated temperature, CO_2 and drought..*Acta Oecologia*. 35, 786-796; http://dx.doi.org/10.1016/j.actao.2009.08.010

96. Nielsen, P.L, Andresen, L.C., **Michelsen, A.,** Schmidt, I.K, Kongstad, J. (2009) Seasonal variations and effects of nutrient applications on N and P and microbial biomass under two temperate heathland plants. *Applied Soil Ecology* 42, 279-287. http://dx.doi.org/10.1016/j.apsoil.2009.05.006

95. Campioli, M., **Michelsen, A.,** Demey, A., Vermeulen, A., Samson, R., Lemeur, R. (2009). Net primary production and carbon stocks for subarctic mesic-dry tundras with contrasting microtopography, altitude and dominant species. *Ecosystems* 12, 760-776; http://dx.doi.org/10.1007/s10021-009-9255-3

94. Craine, J. M., A. J. Elmore, M. P. M. Aidar, M. Bustamante, T. E. Dawson, E. A. Hobbie, A. Kahmen, M. C. Mack, K. K. McLauchlan, **A. Michelsen**, G. B. Nardoto, L. H. Pardo, J. Peñuelas, P. B. Reich, E. A. G. Schuur, W. D. Stock, P. H. Templer, R. A. Virginia, J. M. Welker, and I. J. Wright. (2009). Global patterns of foliar nitrogen isotopes and their relationships with climate, mycorrhizal fungi, foliar nutrient concentrations, and nitrogen availability. *New Phytologist* 183:980-992 http://dx.doi.org/10.1111/j.1469-8137.2009.02917.x

93.Olsrud M., **Michelsen A.** (2009). Effects of shading on photosynthesis, plant organic nitrogen uptake and root fungal colonization in a subarctic mire ecosystem. *Botany* 87, 463–474 http://dx.doi.org/10.1139/B09-021

92. Campioli, M., Street, L.E., **Michelsen, A.,** Shaver, G.R., Maere, T., Samson, R., Lemeur, R. (2009) Determination of leaf area index, total foliar N and normalized difference vegetation index for arctic ecosystems dominated by *Cassiope tetragona*. *Arctic, Antarctic and Alpine Research* 41, 426-433 http://www.bioone.org/doi/pdf/10.1657/1938-4246-41.4.426

91. Campioli M., **Michelsen A.,** Samson R., Lemeur R. (2009). Seasonal variability of leaf area index and foliar nitrogen in contrasting dry-mesic tundras. *Botany*. 87: 431–442 http://dx.doi.org/10.1139/B09-016

90. Arndal, M. F., Illeris, L., **Michelsen, A**., Albert, K., Tamstorf, M., Hansen, B.U. (2009). Seasonal variation in gross ecosystem production, plant biomass, carbon and nitrogen pools in five high arctic vegetation types *Arctic, Antarctic and Alpine Research* 41, 164-173 http://dx.doi.org/10.1657/1938-4246-41.2.164

89. Campioli M., Samson R., **Michelsen A.,** Jonasson S., Baxter R., Lemeur R. (2009). Nonvascular contribution to ecosystem NPP in a subarctic heath during early and late growing season. *Plant Ecology.* 202, 41–53; http://dx.doi.org/10.1007/s11258-008-9527-6

88. Sorensen P.L., **Michelsen A.** and Jonasson S. (2008). Nitrogen uptake during one year in subarctic plant functional groups and in microbes after long-term warming and fertilization. *Ecosystems 11, 223-233* http://dx.doi.org/10.1007/s10021-008-9204-6

87. Tiiva P., Faubert P., **Michelsen A.,** Holopainen T., Holopainen J.K., Rinnan R. (2008). Climatic warming increases isoprene emission from a subarctic heath. *New Phytologist* 180, 853-863 http://dx.doi.org/10.1111/j.1469-8137.2008.02587.x

86. Andresen, L.C., **Michelsen, A.,** Ström, L., Jonasson, S. (2008). Uptake of pulse injected nitrogen by soil microbes and mycorrhizal and non-mycorrhizal plants in a species-diverse subarctic heath ecosystem. *Plant and Soil* 313, 283-295; http://dx.doi.org/10.1007/s11104-008-9700-7

85. Sorensen P.L., **Michelsen A.** and Jonasson S. (2008).Ecosystem partitioning of ^{15}N-glycine after long-term climate manipulations, plant clipping and addition of labile carbon in a subarctic heath tundra. *Soil Biology & Biochemistry* 40, 2344-2350 http://dx.doi.org/10.1016/j.soilbio.2008.05.013

84. Rinnan R., **Michelsen A**., Jonasson S. (2008). Effects of litter addition and warming on soil carbon, nutrient pools and microbial communities in a subarctic heath ecosystem. *Applied Soil Ecology* 39, 271-281 http://dx.doi.org/10.1016/j.apsoil.2007.12.014

83. Vestergård M., Henry F., Rangel-Castro I., **Michelsen A.**, Prosser J., Christensen S. (2008). Rhizosphere bacterial community composition responds to arbuscular mycorrhiza, but not to reductions in microbial activity induced by foliar cutting. *FEMS Microbiology Ecology* 64, 78-89 http://dx.doi.org/10.1111/j.1574-6941.2008.00447.x

82. Clemmensen K.E., Sørensen, P.L. **Michelsen, A.,** Jonasson, S and Lena Ström. (2008) Site-dependent N uptake from N-form mixtures by arctic plants, soil microbes and ectomycorrhizal fungi. *Oecologia* 155, 771-783 http://dx.doi.org/10.1007/s00442-008-0962-9

81. Mikkelsen T. N., Beier C., Jonasson S., Holmstrup M., Schmidt I. K., Ambus P., Pilegaard K., **Michelsen A.,** Albert K., Andresen L. C., Arndal M. F., Bruun N., Christensen S., Danbaek S., Gundersen P., Jorgensen P., Linden L. G., Kongstad J., Maraldo K., Prieme A., Riis-Nielsen T., Ro-Poulsen H., Stevnbak K., Selsted M. B., Sorensen P., Larsen K. S., Carter M. S., Ibrom A., Martinussen T., Miglietta F., Sverdrup H. (2008). Experimental design of multifactor climate change experiments with elevated CO2, warming and drought: the CLIMAITE project. *Functional Ecology* 22, 185-195 http://www.blackwell-synergy.com/doi/abs/10.1111/j.1365-2435.2007.01362.x

80. Sorensen P.L., Clemmensen K.E., **Michelsen, A.,** Jonasson, S and Strom, L.. (2008). Plant and microbial uptake and allocation of organic and inorganic nitrogen related to plant growth forms and soil conditions at two subarctic tundra types in Sweden. *Arctic, Antarctic and Alpine Research* 40, 171-180. https://doi.org/10.1657/1523-0430(06-114)[SORENSEN]2.0.CO;2

79. Rinnan R, **Michelsen A**, Bååth E, Jonasson S (2007). Mineralization and carbon turnover in subarctic heath soil as affected by warming and additional litter. *Soil Biology & Biochemistry*, 39, 3014-3023; https://doi.org/10.1016/j.soilbio.2007.05.035

78. Larsen K.S., Ibrom A., Beier C., Jonasson S., **Michelsen A**. (2007). Ecosystem respiration depends strongly on photosynthesis in a temperate heath. *Biogeochemistry 85, 201-213* http://dx.doi.org/10.1007/s10533-007-9129-8

77. Cornelissen, J.H.C., van Bodegom, P.M., Aerts, R., Callaghan, T.V., van Logtestijn, R.S.P., Alatalo, J, Chapin, F.S., Gerdol, R., Gudmundsson, J., Gwynn-Jones, D., Hartley, A.E., Hik, D.S., Hofgaard, A., Jónsdóttir, I.S., Karlsson, S., Klein, J.A., Laundre, J., Magnusson, B., **Michelsen**, A., Molau, U., Onipchenko, V.G., Quested, H.M., Sandvik, S.M., Schmidt, I.K., Shaver, G.R., Solheim, B., Soudzilovskaia, N.A., Stenström, A., Tolvanen, A., Totland, Ø., Wada, N., Welker, J.M., Zhao, X. and M.O.L. Team (2007). Global negative vegetation feedback to climate warming responses of leaf litter decomposition rates in cold biomes. *EcologyLetters* 10, 619-627 http://dx.doi.org/10.1111/j.1461-0248.2007.01051.x

76. Larsen K.S., Ibrom A., Jonasson S., **Michelsen A**., Beier C. (2007). Significance of cold-season respiration and photosynthesis in a subarctic heath ecosystem in Northern Sweden. *Global Change Biology* 13, 1498-1508 http://dx.doi.org/10.1111/j.1365-2486.2007.01370.x

75. Olsrud M., **Michelsen A.,** Wallander H. (2007). Ergosterol content in ericaceous hair roots correlates with dark septate endophytes but not with ericoid mycorrhizal colonization. *Soil Biology and Biochemistry* 39, 1218-1221. http://dx.doi.org/10.1016/j.soilbio.2006.11.018

74. Konestabo S. H., **Michelsen A**., Holmstrup M. (2007). Responses of springtail and mite populations to prolonged periods of soil freeze-thaw cycles in a sub-arctic ecosystem. *Applied Soil Ecology* 36, 136-146; http://dx.doi.org/10.1016/j.apsoil.2007.01.003

73. Rinnan R., Michelsen A., Bååth E., Jonasson S. (2007). Fifteen years of climate change manipulations alter soil microbial communities in a subarctic heath ecosystem. *Global Change Biology* 13, 28-39, http://dx.doi.org/10.1111/j.1365-2486.2006.01263.x

72. Larsen K.S., Grogan, P., Jonasson S., **Michelsen A**. (2007). Respiration and microbial dynamics in two sub-arctic ecosystems during winter and spring thaw: Effects of increased snow depth. *Arctic, Antarctic and Alpine Research* 39, 268-276. https://doi.org/10.1657/1523-0430(2007)39[268:RAMDIT]2.0.CO;2

71. Clemmensen K.E., **Michelsen A**., Jonasson S., Shaver G.R. (2006). Increased ectomycorrhizal fungal abundance after long-term fertilization and warming of two arctic tundra ecosystems *New Phytologist* 171, 391-404.

70. Clemmensen K.E., **Michelsen A**. (2006). Integrated long-term responses of an arctic-alpine willow and associated ectomycorrhizal fungi to an altered environment. *Canadian Journal of Botany* 84, 831-843.

69. Sorensen P.L., **Michelsen A**., Jonasson S. (2006). Nitrogen fixation, denitrification and ecosystem nitrogen pools in relation to vegetation development in the Subarctic. *Arctic, Antarctic and Alpine Research* 38, 263-272. https://doi.org/10.1657/1523-0430(2006)38[263:NFDAEN]2.0.CO;2

68. Hansen A.H., Jonasson S., **Michelsen A.**, Julkunen-Tiitto R. (2006) Long-term experimental warming, shading and nutrient addition affect the concentration of phenolic compounds in subarctic deciduous and evergreen dwarf shrubs. *Oecologia* 147, 1-11.

67. Rinnan R., Gehrke C., **Michelsen A**. (2006). Two mire species respond differently to enhanced ultraviolet-B radiation: effects on biomass allocation and root exudation. *New Phytologist* 169, 809-818.

66. Jonasson S., Castro J., **Michelsen A**. (2006). Interactions between plant, litter and microbes in cycling of nitrogen and phosphorus in the arctic. *Soil Biology and Biochemistry* 38, 526-532.

65. Sjursen H., **Michelsen A**., Jonasson S. (2005). Effects of long-term soil warming and fertilisation on microarthropod abundances in three sub-arctic ecosystems. *Applied Soil Ecology* 30, 148-161.

64. Andresen L.C, **Michelsen A**. (2005). Off-season uptake of nitrogen in temperate heath vegetation. *Oecologia* 144, 585-597.

63. Rinnan R., Keinänen M.M., Kasurinen A., Asikainen J., Kekki T.K., Holopainen T., Ro-Poulsen H., Mikkelsen T.N., **Michelsen A**. (2005). Ambient ultraviolet radiation in the Arctic reduces root biomass and alters microbial community composition but has no effects on microbial biomass. Global Change Biology 11, 564-574.

62. Sjursen H., **Michelsen A**., Holmstrup (2005). Effects of freeze-thaw cycles on microarthropods and nutrient availability in a sub-arctic soil. *Applied Soil Ecology* 28, 79-93.

61. Illeris L., König S.M., Grogan P., Jonasson S., **Michelsen A.,** Ro-Poulsen H (2004). Growing season carbon dioxide flux in a dry subarctic heath: responses to long-term manipulations. *Arctic, Antarctic, and Alpine Research* 36, 456-463. https://doi.org/10.1657/1523-0430(2004)036[0456:GCDFIA]2.0.CO;2

60. Michelsen A., Andersson M., Jensen M., Kjøller A, Menassie Gashaw (2004). Carbon stocks, soil respiration and microbial biomass in fire-prone tropical grassland, woodland and forest ecosystems. *Soil Biology and Biochemistry* 36, 1707-1717.

59. Falkengren-Grerup U., **Michelsen A.,** Olsson M.O., Quarmby C., Sleep D. (2004). Plant nitrate use in deciduous woodland: the relationship between leaf N, ^{15}N natural abundance of forbs and soil N mineralisation. *Soil Biology and Biochemistry* 36, 1885-1891.

58. Jonasson S., Castro J., **Michelsen A**. (2004) Litter, warming and plants affect respiration and allocation of soil microbial and plant C, N and P in arctic mesocosms. *Soil Biology and Biochemistry* 36, 1129-1139.

57. Olsrud M, Melillo JM, Christensen TR, **Michelsen A,** Wallander H, Olsson PA (2004). Response of ericoid mycorrhizal colonisation and functioning to global change factors. *New Phytologist* 162, 459-469.

56. Andersson M., **Michelsen A.,** Jensen M., Kjøller A (2004). Tropical savannah woodland: effects of experimental fire on soil microorganisms and soil emissions of carbon dioxide. *Soil Biology and Biochemistry* 36, 849-858.

55. Grogan P., **Michelsen A.**, Ambus P., Jonasson S. (2004). Freeze-thaw regime effects on carbon and nitrogen dynamics in sub-arctic heath tundra mesocosms. *Soil Biology and Biochemistry* 36, 641-654.

54. Aude E., Tybirk K., **Michelsen A.**, Ejrnæs R, Hald A.B., Mark S. (2004) Conservation value of the herbaceous vegetation in hedgerows - does organic farming make a difference? *Biological Conservation* 118, 467-478.

53. Jensen K.D., Beier C., **Michelsen A.,** Emmett B.A. (2003) Effects of experimental drought on microbial processes in two temperate heathlands at contrasting water conditions. *Applied Soil Ecology* 24, 165-176.

52. Wijk M.T. van, Clemmensen K.E., Shaver G.R., Williams M., Callaghan T.V., Chapin III, F.S., Cornelissen J.H.C., Gough L., Hobbie S.E., Jonasson S., Lee J.A., **Michelsen A**., Press M.C., Richardson S.J., Rueth H. (2003) Long-term ecosystem level experiments at Toolik Lake, Alaska, and at Abisko, Northern Sweden: generalisations and differences in ecosystem and plant type responses to global change. *Global Change Biology* 10, 105-123.

51. Illeris L, **Michelsen A**., Jonasson S. (2003). Soil plus root respiration and microbial biomass following water, nitrogen, and phosphorus application at a high arctic semi desert. *Biogeochemistry* 65, 15-29.

50. Larsen K.S., Jonasson S., **Michelsen A**. (2002). Repeated freeze-thaw cycles and their effects on biological processes in two arctic ecosystem types. *Applied Soil Ecology* 21, 187-195.

49. Menassie Gashaw, **Michelsen A**., Jensen M., Friis I. (2002). Soil seed bank dynamics of fire-prone wooded grassland, woodland and dry forest ecosystems in Ethiopia. *Nord. J. Bot.* 22, 5-17.

48. Menassie Gashaw, **Michelsen A**., Friis I., Jensen M., Sebsebe Demissew, Zerihun Woldu. (2002). Post-fire regeneration strategies and tree bark resistance to heating in frequently burning tropical savanna woodlands and grasslands in Ethiopia. *Nord. J. Bot.* 22, 19-33.

47. Ruess L., Schmidt I.K., **Michelsen A**., Jonasson S. (2002). Responses of nematode species composition to factorial addition of carbon, fertiliser, bactericide and fungicide at two sub-arctic sites. *Nematology* 4, 527-539.

46. Henriksen I., **Michelsen A**., Schlönvoigt A. (2002). Tree species selection and soil tillage in alley cropping systems with Phaseolus vulgaris L. in a humid premontane climate: biomass production, nutrient cycling and crop responses. *Plant and Soil* 240, 145-159.

45. Schmidt I.K., Jonasson S., Shaver G., **Michelsen A**., Nordin A. (2002). Mineralization and distribution of nutrients in four arctic ecosystems: responses to warming. *Plant and Soil* 242, 93-106.

44. Gashaw M., **Michelsen A**. (2002) Influence of heat shock on seed germination of plants from regularly burnt savanna woodlands and grasslands in Ethiopia. *Plant Ecology* 159, 83-93.

43. Cornelissen J.H.C., Callaghan T.V., Alatalo J.M., **Michelsen A**., Graglia E., Hartley A.E., Hik D.S., Hobbie S.E., Press M.C., Robinson C.H., Henry G.H.R., Shaver G.R., Phoenix G.K., Gwynn Jones D., Jonasson S., Chapin III F.S., Molau U., Neill C., Lee J.A., Melillo J.M., Sveinbjörnsson B., Aerts R. (2001). Global change and arctic ecosystems: is lichen decline a function of increases in vascular plant biomass? *Journal of Ecology* 89, 984-994.

42. Emmerton K.S., Callaghan T.V., Jones H.E., Leake, J.R., **Michelsen A**., Read D.J. (2001b). Assimilation and isotopic fractionation of nitrogen by mycorrhizal and nonmycorrhizal subarctic plants. *New Phytologist* 151, 513-524.

41. Emmerton K.S., Callaghan T.V., Jones H.E., Leake, J.R., **Michelsen A**., Read D.J. (2001a). Assimilation and isotopic fractionation of nitrogen by mycorrhizal fungi. *New Phytologist* 151, 503-511.

40. Ruess L., Schmidt I.K., **Michelsen A**., Jonasson S. (2001). Manipulations of a microbial based soil food web at two arctic sites - evidence of species redundancy among the nematode fauna? *Applied Soil Ecology* 17, 19-30.

39. Graglia E., Julkunen-Tiitto R., Shaver G.R., Schmidt I.K., Jonasson S., **Michelsen A.** (2001). Environmental control and intersite variations of phenolics in *Betula nana* in tundra ecosystems. *New Phytologist* 151, 227-236.

38. Jensen M., **Michelsen A**., Gashaw M. (2001) Responses in plant, soil inorganic and microbial nutrient pools to experimental fire, ash and biomass addition in a woodland savanna. *Oecologia* 128, 85-93

37. Grogan P., Illeris L., **Michelsen A**., Jonasson S. (2001) Respiration of recently-fixed plant carbon dominates mid-winter ecosystem CO2 production in sub-arctic heath tundra *Climatic Change* 50, 129-142.

36. Graglia E., Jonasson S., **Michelsen A**., Schmidt I.K., Havström M., Gustavsson L (2001). Effects of environmental perturbations on abundance of subarctic plants after three, seven and ten years of treatments. *Ecography* 24, 5-12.

35. Menassie Gashaw, **Michelsen A**. (2001) Soil seed bank dynamics and above-ground cover of a dominant grass, *Hyparrhenia confinis*, in regularly burned savanna types in Gambella, western Ethiopia. *Kgl. Danske Vidensk. Selsk. Biol. Skr.* 54, 389-397.

34. Schmidt I.K., Ruess L., Bååth E., **Michelsen A**., Ekelund F., Jonasson, S. (2000). Long-term manipulations of the microbes and microfauna of two subarctic heaths by addition of fungicide, bactericide, carbon and fertilizer. *Soil Biology and Biochemistry* 32, 707-720

33. Tybirk K., Nilsson M.-C., **Michelsen A**., Kristensen H.L., Shevtsova A., Strandberg M.T., Johansson M., Nielsen K.E., Riis-Nielsen T., Strandberg B., Johnsen I. (2000). Nordic *Empetrum* dominated ecosystems: Function and susceptibility to environmental changes. *Ambio* 29, 90-97.

32. Ruess L, **Michelsen A**., Jonasson S. (1999). Simulated climate change in subarctic soils: responses in nematode species composition and dominance structure. *Nematology* 1, 513-526.

31. Ruess L, **Michelsen A**., Schmidt IK, Jonasson S. (1999). Simulated climate change affecting microorganisms, nematode density and biodiversity in subarctic soils. *Plant and Soil* 212, 63-73.

30. Michelsen A., Graglia E., Schmidt IK, Jonasson S., Quarmby C, Sleep D. (1999). Differential responses of grass and a dwarf shrub to long-term changes in soil microbial biomass C, N and P by factorial NPK fertilizer, fungicide and labile carbon addition to a heath. *New Phytologist* 143, 523-538.

29. Jonasson S., **Michelsen A**., Schmidt I.K., Nielsen E.V. (1999). Responses in microbes and plants to changed temperature, nutrient, and light regimes in the Arctic. *Ecology* 80, 1828-1843.

28. Christensen T.R., **Michelsen A**., Jonasson S. (1999). Exchange of CH_4 and N_2O in a subarctic heath soil: effects of inorganic N and P and amino acid addition. *Soil Biology and Biochemistry* 31, 637-641.

27. Schmidt I.K., Jonasson S., **Michelsen A**. (1999). Mineralization and microbial immobilization of N and P in arctic soils in relation to season, temperature and nutrient amendment. *Applied Soil Ecology* 11, 147-160.

26. Jonasson S., **Michelsen A**., Schmidt I.K. (1999). Coupling of nutrient cycling and carbon dynamics in the Arctic, integration of soil microbial and plant processes. *Applied Soil Ecology* 11, 135-146.

25. Christensen T.R., Jonasson S., **Michelsen A**., Callaghan T.V., Havström M. (1998). Environmental controls on soil respiration in the Eurasian and Greenlandic Arctic. *Journal of Geophysical Research* 103, (D22), 29015-29021.

24. Michelsen A., Quarmby C., Sleep D., Jonasson S. (1998). Vascular plant ^{15}N natural abundance in heath and forest tundra ecosystems is closely correlated with presence and type of mycorrhizal fungi in roots. *Oecologia* 115, 406-418.

23. Ruess L., **Michelsen A**., Schmidt I.K., Jonasson S., Dighton J. (1998). Soil nematode fauna of a subarctic heath: potential nematicidal action of plant leaf extracts. *Applied Soil Ecology 7*, 111-124.

22. Schmidt I.K., **Michelsen A**., Jonasson S. (1997). Effects of labile soil carbon on nutrient partitioning between an arctic graminoid and microbes. *Oecologia* 112, 557-565.

21. Schmidt I.K., **Michelsen A**., Jonasson S. (1997). Effects on plant production after addition of labile carbon to arctic/alpine soils. *Oecologia* 112, 305-313.

20. Robinson C. H., **Michelsen A.**, Lee J.A., Whitehead S. J., Callaghan T. V., Press M. C., Jonasson S. (1997). Elevated atmospheric CO_2 affects decomposition of *Festuca vivipara* (L.) Sm. litter and roots in experiments simulating environmental change in two contrasting arctic ecosystems. *Global Change Biology* 3, 37-49.

19. Christensen T.R., **Michelsen A**., Jonasson S., Schmidt, I.K. (1997). Carbon dioxide and methane exchange of a subarctic heath in response to climate change related environmental manipulations. *Oikos* 79, 34-44.

18. Graglia E., Jonasson S., **Michelsen, A**., Schmidt I.K. (1997). Effects of shading, nutrient application and warming on leaf growth and shoot densities of dwarf shrubs in two arctic-alpine plant communities. *Ecoscience* 4, 191-198.

17. Michelsen A., Lisanework N., I. Friis. and N. Holst. (1996). Comparisons of understorey vegetation and soil fertility in plantations and adjacent natural forests in the Ethiopian highlands. *Journal of Applied Ecology* 33, 627-642.

16. Jonasson S., **Michelsen A**. (1996). Plant nutrition and nutrient cycling in the Subarctic, with special reference to the Abisko and Torneträsk area. *Ecological Bulletins* 45, 45-52.

15. Jonasson S., **Michelsen A**., Schmidt I.K., Nielsen E.V. and Callaghan T.V. (1996). Microbial biomass C, N and P in two arctic soils and responses to addition of NPK fertilizer and sugar: Implications for plant nutrient uptake. *Oecologia* 106, 507-515.

14. Michelsen A., Schmidt I.K., Jonasson S., Quarmby, C. Sleep D. (1996). Leaf ^{15}N abundance of subarctic plants provides field evidence that ericoid, ectomycorrhizal and non- and arbuscular mycorrhizal species access different sources of soil nitrogen. *Oecologia* 105, 53-63.

13. Michelsen A., Jonasson S., Sleep D., Havström M. and Callaghan T.V. (1996). Shoot biomass, ^{13}C, nitrogen and chlorophyll responses of two arctic dwarf-shrubs to in situ shading, nutrient application and warming simulating climatic change. *Oecologia* 105, 1-12.

12. Jonasson S., Vestergaard P., Jensen M., and **Michelsen A**. (1996). Effects of carbohydrate amendments on nutrient partitioning, plant and microbial performance of a grassland-shrub ecosystem. *Oikos* 75, 220-226.

11. Michelsen A., Schmidt I.K., Jonasson S., Dighton J., Jones H.E. and Callaghan T.V. (1995). Inhibition of growth and effects on nutrient uptake of arctic graminoids by leaf extracts - allelopathy or resource competition between plants and microbes? *Oecologia* 103, 407-418.

10. Michelsen A. and Sprent J.I. (1994). The influence of vesicular-arbuscular mycorrhizal fungi on the nitrogen fixation of nursery-grown Ethiopian acacias estimated by the ^{15}N natural abundance method. *Plant and Soil* 160, 249-257.

9. Lisanework N. and **Michelsen A.** (1994). Litterfall and nutrient release by decomposition in three plantations compared to a natural forest in the Ethiopian highland. *Forest Ecology and Management* 65, 149-164.

8. Michelsen A., Lisanework N. and Friis I. (1993). Impacts of tree plantations in the Ethiopian highland on soil fertility, shoot and root growth, nutrient utilisation and mycorrhizal colonisation. *Forest Ecology and Management* 61, 299-324.

7. Michelsen A. (1993). Growth improvement of Ethiopian acacias by addition of vesicular-arbuscular mycorrhizal fungi or roots of native plants to non-sterile nursery soil. *Forest Ecology and Management* 59, 193-206.

6. Michelsen A. (1993). The mycorrhizal status of vascular epiphytes in Bale Mountains National Park, Ethiopia. *Mycorrhiza* 4, 11-15.

5. Lisanework N. and **Michelsen A.** (1993). Allelopathy in agroforestry systems: the effects of leaf extracts of *Cupressus lusitanica* and three *Eucalyptus* spp. on four Ethiopian crops. *Agroforestry Systems* 21, 63-74.

4. Michelsen A. (1992). Mycorrhiza and root nodulation in tree seedlings from five nurseries in Ethiopia and Somalia. *Forest Ecology and Management* 48, 335-344.

3. Michelsen A. and Rosendahl S. (1990). The effect of VA mycorrhiza, phosphorus and drought stress on the growth of *Acacia nilotica* and *Leucaena leucocephala* seedlings. *Plant and Soil* 124, 7-13.

2. Michelsen A. and Rosendahl S. (1990). Mycorrhizal symbiosis in *Acacia-Commiphora* bushland in Somalia and the significance of VA-mycorrhizal fungi for re-vegetation of degraded semi-arid areas. *Mitt. Inst. Allg. Bot. Hamburg* 23a,

1. Michelsen A. and Rosendahl S. (1990). Propagule density of VA-mycorrhizal fungi in semi-arid bushland in Somalia. *Agriculture, Ecosystems and Environment* 29, 295-301.

Book chapters, peer reviewed

235. Elberling B., Tamstorf M., **Michelsen A**. Arndal M., Sigsgaard C., Illeris L., Bay C., Hansen B.U., Christensen T.R., Hansen E.S, Jakobsen B.H., Beyens L., Rasch M. (2008) Soil and Plant Community-Characteristics and Dynamics at Zackenberg. In Meltofte et al (ed.): High-arctic ecosystem dynamics in a changing climate. *Advances in Ecological Research* 40, 223-248.

234. Albert K., Rinnan R., Ro-Poulsen H., , Mikkelsen TN, Håkansson KB, Arndal MF, **Michelsen A.** (2008) Solar Ultraviolet-B Radiation at Zackenberg: The Impact on Higher Plants and Soil Microbial Communities. In Meltofte et al (ed.) High-arctic ecosystem dynamics in a changing climate. *Advances in Ecological Research* 40, 421-440.

233. Ellebjerg S.M, Tamstorf M., Illeris L., **Michelsen A**., Hansen B.U. (2008) Interannual Variability and Controls of Plant Phenology and Productivity at Zackenberg. In Meltofte et al. (ed.) High-arctic ecosystem dynamics in a changing climate. *Advances in Ecological Research* 40, 249-273.

Theses

Michelsen A. (1989). Mykorrhiza, plantevækst og genplantning i semi-aride områder i troperne. *M.Sc. Thesis, University of Copenhagen*.

Michelsen A. (1992). Plant growth, nutrient cycling, and nutrient uptake in natural forests, plantations and tree nurseries in Ethiopia: The role of mycorrhizal fungi, nodulating bacteria, fine roots and litterfall. *Ph.D. Thesis, University of Copenhagen*.

Other publications, not peer reviewed

Elberling, B. & **Michelsen, A**. (2014) At give den gas i laboratoriet. *Geografisk Orientering*. 44, 22-27

Michelsen A., Blok D., Elberling B. (2014) Potential plant acquisition of nitrogen from thawing permafrost soils pp 94. In: Jensen, L.M., Rasch, M. and Schmidt, N.M. (ed.) 2014. Zackenberg Ecological Research Operations, 19th Annual Report, 2013. Aarhus University, DCE – Danish Centre for Environment and Energy. 130 pp.

Bo Elberling, Hanne H. Christiansen, **Anders Michelsen**, Peter Kuhry, Daan Blok, Carsten Suhr Jacobsen, Christian J. Jørgensen, Ulla Kokfelt, Jordan R. Mertes, Stefanie Härtel, Katrine M.L. Johansen, Daiga Smeke, Ulrich Neumann (2013) Collaboration on permafrost – soil – vegetation studies pp. 81-85. In: Jensen, L.M., Rasch, M. and Schmidt, N.M. (ed.) 2013. Zackenberg Ecological Research Operations, 18th Annual Report, 2012. Aarhus University, DCE – Danish Centre for Environment and Energy. 122 pp.

Casper T. Christiansen, Tora Finderup Nielsen, Niels Martin Schmidt and **Anders Michelsen** (2013) Late winter, spring, summer and autumn trace gas exchange – determining the relative importance of the different seasons at Zackenberg 86-87 In: Jensen, L.M., Rasch, M. and Schmidt, N.M. (ed.) 2013. Zackenberg Ecological Research Operations, 18th Annual Report, 2012. Aarhus University, DCE – Danish Centre for Environment and Energy. 122 pp.

Niels Martin Schmidt, Mads C. Forchhammer, Mikkel P. Tamstorf, **Anders Michelsen** and Kirsten S. Christoffersen (2013) Winter campaign 2013 pp. 87-88 Jensen, L.M., Rasch, M. and Schmidt, N.M. (ed.) 2013. Zackenberg

Ecological Research Operations, 18th Annual Report, 2012. Aarhus University, DCE – Danish Centre for Environment and Energy. 122 pp.

Yoo Kyung Lee, Sungjin Nam, Ji Young Jung, **Anders Michelsen** and Niels Martin Schmidt Responses of soil organic carbon to climate manipulations in Salix arctica heath in Zackenberg, Greenland pp. 90-91 In: Jensen, L.M., Rasch, M. and Schmidt, N.M. (ed.) 2013. Zackenberg Ecological Research Operations, 18th Annual Report, 2012. Aarhus University, DCE – Danish Centre for Environment and Energy. 122 pp.

Riikka Rinnan, Michelle Schollert Skovgaard, Tora Finderup Nielsen, Minna Kivimäenpää **and Anders Michelsen** Biogenic volatile organic compound (BVOC) emissions from Arctic heaths in response to climate manipulations pp. 92-93 In: Jensen, L.M., Rasch, M. and Schmidt, N.M. (ed.) 2013. Zackenberg Ecological Research Operations, 18th Annual Report, 2012. Aarhus University, DCE – Danish Centre for Environment and Energy. 122 pp.

Michelsen A., Burchard S., Faubert P., Rinnan R., Schmidt N.M.,Ro-Poulsen H. (2010). Volatile organic compound emissions in three high arctic heath types, and the influence of climate change. p.105-106. In: Jensen L.M., Rasch M. (eds.) Zackenberg Ecological Research Operations, 15th Annual Report, 2009. National Environmental Research Institute, Aarhus University, Denmark, 134 pp.

Michelsen A., Christiansen C.T., Svendsen S., Schmidt N.M. (2010). Carbon dioxide emission from high arctic dry heath during summer and autumn, and the influence of enhanced precipitation and nutrient enrichment. p. 106-108. In: Jensen L.M., Rasch M. (eds.) Zackenberg Ecological Research Operations, 15th Annual Report, 2009. National Environmental Research Institute, Aarhus University, Denmark134 pp.

Jannik Hansen, Lars Holst Hansen, Kristine Boesgaard, Kristian Albert, Sarah Svendsen, Sonja Hoffmann Hansen, Anders **Michelsen**, Line Anker Kyhn, Kirsten S. Christoffersen and Niels Martin Schmidt (2010) Zackenberg Basic: The BioBasis programme p. 46-81. In: Jensen L.M., Rasch M. (eds.) Zackenberg Ecological Research Operations, 15th Annual Report, 2009. National Environmental Research Institute, Aarhus University, Denmark, 134 pp.

Matteo Cazzanelli, Laura Forsström, Milla Rautio, Anders **Michelsen** and Kirsten S. Christoffersen (2010) Feeding strategies of zooplankton in a high Arctic freshwater ecosystem. p. 112. In: Jensen L.M., Rasch M. (eds.) Zackenberg Ecological Research Operations, 15th Annual Report, 2009. National Environmental Research Institute, Aarhus University, Denmark, 134 pp.

Hansen, J., Hansen L.H., Christensen M.U., **Michelsen A.,** Schmidt N.M. **(**2009). ZACKENBERG BASIS: The BioBasis Programme. p. 40-65. In: Jensen L.M., Rasch M. (eds.) Zackenberg Ecological Research Operations, 14th Annual Report, 2008. National Environmental Research Institute, Aarhus University, Denmark. 116 pp.

Boesgaard K., Mathiesen K., Albert K.R., & Ro-Poulsen H, Schmidt N.M., **Michelsen A. (**2009). Plant and soil responses in ecosystem manipulation experiments**.** p. 88. In: Jensen L.M., Rasch M. (eds.) Zackenberg Ecological Research Operations, 14th Annual Report, 2008. National Environmental Research Institute, Aarhus University, Denmark. 116 pp.

Konestabo S. H., **Michelsen A.** (2008) Effects of climate change on soil microarthropod diversity and ecological function. In: Klitgaard A.B., Rasch M. (eds.) Zackenberg Ecological Research Operations, 13th Annual Report, 2007. Copenhagen, Danish Polar Center, Danish Agency for Science, Technology and Innovation, Ministry of Science, Technology and Innovation, p. 73-74.

Michelsen A., Boesgaard K., Arndal M.F., Tamstorf M.P., Schmidt N.M., Albert K.R., & Ro-Poulsen H. (2008). Effects of manipulations of local climate on carbon dioxide exchange and plant performance in two high arctic heaths In: Klitgaard A.B., Rasch M. (eds.) Zackenberg Ecological Research Operations, 13th Annual Report, 2007. Copenhagen, Danish Polar Center, Agency for Science, Technology and Innovation, Ministry of Science, Technology and Innovation, p. 70-71.

Faubert P., Tiiva P., Rinnan Å., **Michelsen A.,** Holopainen J., Rinnan R. (in press) Biogenic Volatile Organic Compound Emissions from a Subarctic Heath Ecosystem – Responses to Climate Change. EU conference proceedings from ATANS Meeting, Abisko 2008.

Schmidt I. K. Beier C., Kongstad J.,Andresen L. C., **Michelsen A.,** Albert K Ambus P., Selsted M. B., Maraldo K., Holmstrup M., Arndal M. F., Mikkelsen T. N., Ro-Poulsen H., Jonasson S., Karsten, R. J. (2007) Klimaændringer og processer og funktion i terrestriske økosystemer. Flora og Fauna 113, 121-132.

Albert K.R., Arndal M.F., **Michelsen A.,** Tamsdorf M.P., Ro-Poulsen H. & Mikkelsen T.N. (2006). Studying effects of current UV-fluxes on high arctic vegetation (UV-B exclusion experiments). I: Klitgaard A.B., Rasch M. & Caning K. (eds.) Zackenberg Ecological Research Operations, 11th Annual Report, 2005. Copenhagen, Danish Polar Center, Ministry of Science, Technology and Innovation, p. 90-91.

Michelsen A., König S.M., Illeris L., Arndal M.F., Albert K.R., Tamsdorf M.P. & Ro-Poulsen H. (2006). Effects of climate manipulations on processes and organisms in high arctic terrestrial ecosystems. I: Klitgaard A.B., Rasch M. & Caning K. (eds.) Zackenberg Ecological Research Operations, 11th Annual Report, 2005. Copenhagen, Danish Polar Center, Ministry of Science, Technology and Innovation, p. 89.

Tamstorf M.P., Illeris L., Arndal M.F., Rask Pedersen M., **Michelsen A.,** Hansen B.U., Grøndahl L., Albert K.R., König S.M. (2005). Spectral Callibration of High Arctic Primary Production Estimation (SCHAPPE). *In*: Rasch, M. and Caning, K. (eds.) 2005. Zackenberg Ecological Research Operations, 10th Annual Report, 2004. - Copenhagen, Danish Polar Center, Ministry of Science, Technology and Innovation, p. 72-73.

Andresen L. C., **Michelsen A.** (2004). Optager hedeplanter kvælstof om vinteren, og vokser de? URT 28, 122-125.

Rasmussen K., Christensen S., Friis I., Kjøller A., **Michelsen A.**, Nielsen, T.T., Saarnak, C. (2001). Savannebrande i Afrikas Sudan-Guineabælte**.** Miljøproblem eller værktøj i naturressourceforvaltningen? *Den Ny Verden* 34, 7-26.

Jonasson S., **Michelsen A**., Christensen T. R. (1996). Livsprocesser i Arktis - vilkår under forandring? *Naturens Verden*, 361-370.

Friis I. and **Michelsen A.** (1996). Selection of appropriate species and management methods in tree planting - case studies from Ethiopia. In: A. Reenberg, H. S. Marcussen, I. Nielsen (eds.): *The Sahel - International Environmental Convention; Health and environment; Afforestation and environment. Proceedings of the 8th Danish Sahel Workshop, 3-5 January 1996*. SEREIN Occasional Paper No. 3. p. 101-117.

Friis I. and **Michelsen A.** (1993). Ecological effects of fuelwood plantations in Ethiopia. In L. Graudal and H. E. Nielsen (eds.): *Development experience in the Sahel. Proceedings of the third Sahel Workshop*, 7th-9th January 1991, pp. 106-107. Danida Forest Seed Centre, Humlebæk, Denmark.

Michelsen A. (1992). Inoculation with *Glomus intraradices* improves growth of *Acacia nilotica* under non-sterile nursery conditions in Ethiopia. In: Mycorrizas in Ecosystems. Eds. D.J Read, D.H. Lewis, A.H. Fitter and I.J. Alexander. CAB International, Wallingford, UK, 392-393.

Rosendahl S., **Michelsen A.** and C.N. Rosendahl (1992). Studies of the extension of individual mycelia of VA-mycorrhizal fungi in natural vegetation. In: Mycorrizas in Ecosystems. Eds. D.J Read, D.H. Lewis, A.H. Fitter and I.J. Alexander. CAB International, Wallingford, UK, 400-401.

Michelsen A. (1992). The role of nodulating bacteria and mycorrhizal fungi for growth and establishment of trees in Ethiopia and Somalia. In A.M. Lykke, K. Tybirk and A. Jørgensen (eds.): *Sustainable Development in the Sahel. Proceedings of the 4th Sahel Workshop, 6-8 Jan. 1992*, p. 97-98. AAU Reports 29, Aarhus Univ. Press, Aarhus, Denmark.

Michelsen A., Friis I. and Lisanework N. (1992). Aspects of nutrient cycling in three plantations and a natural forest in Ethiopia. In A.M. Lykke, K. Tybirk and A. Jørgensen (eds.): *Sustainable Development in the Sahel. Proceedings of the 4th Sahel Workshop, 6-8 Jan. 1992*, p. 99-101. AAU Reports 29, Aarhus Univ. Press, Aarhus, Denmark.

Michelsen A. (1990). Mykorrhizasvampes betydning ved træplantning i Nordøstafrika. *U-landbrug. Tidsskrift for Ulandsjordbrug* 3, 10-13.

Rosendahl S., Rosendahl C.N., **Michelsen A.** and Søchting U. (1990). VAM-svampes biologi. *Hovedområdet.* Særnr. 1, 16-17.

Alstrup V., Friis I. and **Michelsen A.** (1987). Fuelwood Plantation Mogadishu-Merca, Somalia. Baseline ecological studies; for the Danish Development Agency (Danida). *Institute of Plant Ecology, University of Copenhagen.* 40 p. + 5 appendices.

Course materials

Nachman & **Michelsen, A**. (2005; 2006; 2008; 2009; 2010): Forsøgsplanlægning og statistiske metoder i Biologi, University of Copenhagen, 178 pp.