

Deep Frontier

‘Challenging one last frontier: Understanding and improving deep rooting’

Publication and Dissemination List

Scientific Communication

Papers

Liang, Zhi; Olesen, Jørgen E.; Jensen, Johannes L. and Elsgaard, Lars (2018). Nutrient availability affects carbon turnover and microbial physiology differently in topsoil and subsoil under a temperate grassland. *Geoderma*, 336, pp. 22-30. <http://orgprints.org/33793/>

Liang, Zhi; Elsgaard, Lars; Nicolaisen, Mette; Lyhne-Kjærbye, Annemette and Olesen, Jørgen E. (2018) Carbon mineralization and microbial activity in agricultural topsoil and subsoil as regulated by root nitrogen and recalcitrant carbon concentrations. *Plant and Soil*, pp. 1-18. <http://orgprints.org/33966/>

Presentations

Han, Eusun (2016). The hidden half of the plants for ‘deep-rooted’ organic agriculture: IFOAM Asia Organic Youth Forum, The First Farm, Changzhou, China, 28 October 2018 [[Organic Eprints?](#)]

Dresbøll, Dorte Bodin (2017). Rodudviklingens betydning for planternes forsyning med vand og næringsstoffer. [The importance of root development for plant water and nutrient uptake.]

Speech at: Plantekongres, Herning kongrescenter, 17-18 januar 2017 <http://orgprints.org/32132/>

Han, Eusun, Havmøller, Lisa, Dresbøll, Dorte Bodin, Thorup-Kristensen, Kristian. (2017).

Identification of deep-rooting crop species in arable subsoil by the minirhizotron technique.

Scientific Conference “Innovative Research for Organic 3.0 at the 19th Organic World Congress organized by ISOFAR/OFAI/TIPI, November 2017, New Dehli, India [[Organic Eprints?](#)]

Posters

Han, Eusun., Dresbøll, Dorte Bodin., Thorup-Kristensen, Kristian (2018). Determining deep root activity in arable fields by the core-labelling technique (CLT). 10th symposium for the international society of root research, July 2018, Tel Aviv, Israel <http://orgprints.org/33942/>

Liang, Zhi; Elsgaard, Lars and Olesen, Jørgen E. (2017). Effect of root litter quality on carbon turnover and soil microbiology in topsoil and subsoil horizons <http://orgprints.org/32133/>

Czaban, Weronika., Clement, Corentin ., Eusun Han, Han, Eusun., Dresbøll, Dorte Bodin., Thorup-Kristensen, Kristian (2018). The effect of Intercropping on the Deep Root Development and Nutrient Uptake in a Sugar Beet – Chicory Mixture. 10th symposium for the international society of root research, July 2018, Tel Aviv, Israel <http://orgprints.org/33979/>

Popular Communication

Public media features

P1 Morgen (10 August 2018): <https://www.dr.dk/radio/p1/p1-morgen/p1-morgen-2018-10-08>
(from approximately 1 hour and 19 minutes into the programme)

TV2 News (5 July 2018): Interview with Kristian Thorup-Kristensen

Inför höstbruket 2018: Danmark expanderar sitt lantbruk på djupet (Väderstedt magasin (July 2018): Interview with Kristian Thorup-Kristensen)

Kan et par rødder i Tåstrup sikre dansk landbrugs fremtid (Politiken, 10. juni 2018)
<https://politiken.dk/viden/Viden/art6566032/Kan-et-par-r%C3%B8dder-i-Tastrup-sikre-dansk-landbrugs-fremtid>

Rodforskning åbner for nye muligheder i landbruget (August 2017, Agro) <http://www.agrar-plus.dk/agro/artikel/96040-rodforskning-abner-op-for-nye-muligheder-i-landbruget>

Fremtidens afgrøder skal hente bedre vækst dybere nede (Effektivt Landbrug, 27. juni 2017)

Landbrug i dybden (Weekendavisen, 16 June 2017)

Forskere i røddernes verden – i fire meter høje urtepotter (Dagbladet Høje-Tåstrup Ishøj, 16. juni 2017)

Forskere i røddernes verden – i fire meter høje urtepotter (Lokalavisen Tåstrup, 20. juni 2017)

Kæmpe urtepotter skal sikre fremtidens fødevarer: Kom med forskerne i dybden (Sjællandske Medier On-line, 16. juni 2017)

Den underjordiske verden synliggøres under forskning i rodudvikling (PLENnews, December 2016 - <http://plen.ku.dk/nyheder/nyheder-2016/den-underjordiske-verden-synliggøres-under-forskning-i-rodudvikling/>)

Rødder skal vinde de næste merudbytter (Økologi & Erhverv, 17. juni 2016)

Ti cm rod giver 3hkg mere pr. hektar (Landbrugsavisen, 17. juni 2016)

Articles by Deep Frontier

Root litter chemistry and soil nutrient availability affect subsoil carbon turnover (Deep Frontiers website - 04.12.18 and ICROFS newsletter - 20.12.2018)
<http://projects.au.dk/deepfrontier/news/show/artikel/root-litter-chemistry-and-soil-nutrient-availability-affect-subsoil-carbon-turnover/>

Gå i dybden med rødderne på Rodens Dag d. 4. juni (ICROFS web-nyheder – 15.05.2018)
<http://icrofs.dk/aktuelt/nyheder/nyhed/artikel/gaa-i-dybden-med-roedderne-paa-rodens-dag-d-4-juni/>

Promising results about carbon turnover in deep soil (ICROFS Newsletter – 29.09.2017)
<http://projects.au.dk/deepfrontier/news/show/artikel/promising-results-about-carbon-turnover-in-deep-soil/>

Masser af viden om de dybe rødder graves frem i den kommende vækstsæson (ICROFS Newsletter – 01.02.2017) <http://projects.au.dk/deepfrontier/news/show/artikel/masser-af-viden-om-de-dybe-roedder-graves-frem-i-den-kommende-vaekstsæson/>

Rodens dag - gå i dybden med rødderne (ICROFS web-nyheder - 02.05.2016)
<http://icrofs.dk/aktuelt/nyheder/nyhed/artikel/rodens-dag-gaa-i-dybden-med-roedderne-1/>

Videos

Deep Rooted crop research and Agroecology (PhD student Corentin Clément, University of Copenhagen)
https://www.youtube.com/watch?v=u02fzxa_7XE&t=16s

Dybe Rødder og lagring af kulstof (Professor Jørgen E. Olesen, Aarhus University)
<https://www.youtube.com/watch?v=3lGOsASo3dk>

Rodbakterier i de dybe rodlag (Associate Professor Mette Haubjerg Nicolaisen, University of Copenhagen)
<https://www.youtube.com/watch?v=mnNHZZSXixg>

Testafgrøder i Deep Frontier – Hvorfor teste kruset skræppe (Professor Kristian Thorup- Kristensen, University of Copenhagen) https://www.youtube.com/watch?time_continue=7&v=iLS0-APXeqE

Other publication and dissemination activities

Joint activity between Deep Frontier/KU research group:

Instagram: <https://www.instagram.com/adeeplookbelowground/>

Facebook: <https://www.facebook.com/Adeeplookbelowground-1907797182649573/>

Twitter: <https://twitter.com/Adeeplookbelow?lang=en>

Group visits at the field facilities at Højbakkegård in addition to the open field day 'Day of the Root':
2018

- June 28 Besøg af konsulenter fra AgriNord
- June 27 Fremvisning ved undervisning i kursus om Planteforædling
- June 22 Plant Biology Europe 2018 conference, conference tour to DeepFrontier and other facilities
- June 22 ERFA gruppe fra Lolland Falster. 20 landmand og konsulenter
- June 21 20 konsulenter fra Vestjydske Landboforening
- June 6 Besøg fra Ingelby Farms and Forests
- Nov. 11 15 græsfrø konsulenter fra DLF trifolium
- June 4 Rodens Dag + møde i Udvalget for konkurrencedygtig planteproduktion
- Jan. 4 Besøg fra Norges Life Science Universitet

2017

- Dec. 4 L.E. Jackson Prof. emeritus UC Davis
- Aug. 25 International plant nutrition colloquium 2017
- July 7 Chris Topp, Donald Danforth Plant Science Center
- May Gefion Landboforening – organic crop production advisors Gefion
- April Section from the Department of Geosciences and Natural Resource Management, University of Copenhagen

2016

- Dec. Nordic Beet Research
- Sept. Plants in Populations, Communities and Ecosystems
- Sept. Gefion Landboforening - crop production advisors
- June FlowerNet network meeting