

## Wissenschaftliche Publikationen:

### Artikel in Wissenschaftliche Zeitschriften:

**Joensuu, K.**, Kotilainen, T., Räsänen, K., Rantanen, M., Usva, K. & Silvenius, F., 2024. Assessment of climate change impact and resource-use efficiency of lettuce production in vertical farming and greenhouse production in Finland: a case study. *The International Journal of Life Cycle Assessment*, pp.1-13. <https://link.springer.com/article/10.1007/s11367-024-02343-5>

Rantanen, M., **Joensuu, K.**, Räsänen, K., Silvenius, F., Usva, K., Rikala, K. and Karhu, S., 2023. Life cycle assessment of red raspberry production a comparative case study of open field and tunnel production in Finland. In XIII International Rubus and Ribes Symposium 1388 (pp. 165-170). [https://www.actahort.org/books/1388/1388\\_25.htm](https://www.actahort.org/books/1388/1388_25.htm)

**Joensuu, K.**; Harrison, E.; Hartikainen, H. What to Do with Food Waste? A Holistic Feasibility Framework to Evaluate Different Solutions. *Sustainability* 2022, 14, 13004. <https://doi.org/10.3390/su142013004>

**Joensuu, K.**, Rimhanen, K., Heusala, H., Saarinen, M., Usva, K., Leinonen, I., & Palosuo, T. 2021. Challenges in using soil carbon modelling in LCA of agricultural products—the devil is in the detail. *The International Journal of Life Cycle Assessment*, 26(9), 1764-1778. <https://doi.org/10.1007/s11367-021-01967-1>

**Joensuu, K.**, Hartikainen, H., Karppinen, S., Jaakkonen, A.K. and Kuoppa-aho, M., 2020. Developing the collection of statistical food waste data on the primary production of fruit and vegetables. *Environmental Science and Pollution Research* <https://doi.org/10.1007/s11356-020-09908-5>

Rasi, S., Timonen, K., **Joensuu, K.**, Regina, K., Virkajärvi, P., Heusala, H., Tampio, E. and Luostarinen, S., 2020. Sustainability of Vehicle Fuel Biomethane Produced from Grass Silage in Finland. *Sustainability*, 12(10), p.3994. <https://doi:10.3390/su12103994>

Timonen, K., Sinkko, T., Luostarinen, S., Tampio, E., & **Joensuu, K.** (2019). LCA of anaerobic digestion: Emission allocation for energy and digestate. *Journal of Cleaner Production* 235: 1567-1579. <https://doi.org/10.1016/j.jclepro.2019.06.085>

**Joensuu, K.**, Pulkkinen, H., Kurppa, S., Ypyä, J., Virtanen, Y. 2018. Applying the nutrient footprint method to the beef production and consumption chain. *The International Journal of Life Cycle Assessment*. <https://doi.org/10.1007/s11367-018-1511-3>

**Joensuu, K.**, & Silvenius, F. (2017). Production of mealworms for human consumption in Finland: a preliminary life cycle assessment. *Journal of Insects as Food and Feed* 3: 211 – 216. <http://www.wageningenacademic.com/doi/abs/10.3920/JIFF2016.0029>

**Joensuu, K.**, Sinkko, T. (2017) "Harvesting straw in Poland and Finland: How does it affect greenhouse gas emissions, biodiversity and soil physical quality?", *International Journal of Energy Sector Management*, <https://doi.org/10.1108/IJESM-01-2017-0007> <http://www.emeraldinsight.com/doi/full/10.1108/IJESM-01-2017-0007>

Hytönen, T., Pinho, P., Rantanen, M., Kariluoto, S., Lampi, A., Edelmann, M., **Joensuu, K.**, Kauste, K., Mouhu, K., Piironen, V., Halonen, L., Elomaa, P. (2017). Effects of LED light spectra on lettuce growth and nutritional composition. *Lighting Research & Technology*, 1477153517701300. <http://journals.sagepub.com/doi/abs/10.1177/1477153517701300>

**Joensuu, K., & Saarinen, M.** (2017). Applying soil quality indicators in the context of life cycle assessment in a Finnish case study. *The International Journal of Life Cycle Assessment*, 22(9), 1339-1353.  
<https://doi.org/10.1007/s11367-016-1247-x>

**Joensuu, K. & Sinkko, T.** 2015. Environmental sustainability and improvement options for agribiomass chains: Straw and turnip rape. *Biomass and Bioenergy* 83: 1-7.  
<https://doi.org/10.1016/j.biombioe.2015.08.014>

### **Dissertation:**

Joensuu, K. 2022. Improving the life cycle assessment of agricultural products: Focus on soil quality and nutrient footprint. *Dissertationes Schola doctoralis scientiae circumiectalis, alimentariae, biologicae. Universitatis Helsinkiensis.* <https://helda.helsinki.fi/handle/10138/345767>

### **Buchkapitel:**

Joensuu, K. 2018. Utilization of 2nd class fruits and vegetables. In: Simanovska, J. & Billingham, C. (Eds.) *Food waste not want not – Why food waste is a big deal and how to scale-up preventive action.* Foundation for European Progressiva Studies, Brussels, Belgium. [https://www.feps-europe.eu/attachments/publications/food\\_web.pdf](https://www.feps-europe.eu/attachments/publications/food_web.pdf)

### **Konferenzpublikationen:**

**Joensuu, K.,** Harrison, E., Hartikainen, H., Kymäläinen, M., Kivimäki, S., Pirttijärvi, T. 2020. Climate impact of house cricket (*Acheta domesticus*) production for human consumption. Eberle, U., Smetana, S., Bos, U. (Eds.), 2020. 12th International Conference on Life Cycle Assessment of Food (LCAFood2020), 13-16 October 2020, Berlin Virtually, Germany. DIL, Quakenbrück, Germany., p. 694-696.  
<https://onedrive.live.com/?authkey=%21AP0nfW%5F0%5F6RRXRE&cid=E04FA834AFB66516&id=E04FA834AFB66516%2167672&parId=E04FA834AFB66516%2159394&o=OneUp>

Pulkkinen, H., **Joensuu, K.,** Hietala, S. 2018. Including soil carbon and land use changes to comparison of carbon footprints of beef production systems. *Proceedings of the LCA Food 2018 conference*, Bangkok

**Joensuu, K.,** Hartikainen, H., Karppinen, S., Jaakkonen, A.-K., Kuoppa-aho, M. 2019. Developing statistical food waste data collection on the primary production of fruits and vegetables. Oral presentation at the 7th International Conference on Sustainable Solid Waste Management. 26-29 June 2019, Heraklion, Greece.

**Joensuu, K.,** Harrison, E., Hartikainen, H. 2019. Sustainability of house cricket (*Acheta domesticus*) production for human consumption. Oral presentation at the Sustainability science days 2019: Making Use of Sustainability Science. 9.-10.5.2019, Aalto Univeristy campus, Espoo, Finland.

**Joensuu, K.,** Pulkkinen, H., Kurppa, S., Ypyä, J., Virtanen, Y. 2016. Modelling Nitrogen and Phosphorus Footprints, Case Finnish Beef Chain. Oral presentation at the 10th International Conference on Life Cycle Assessment of Food. 19.-21.10.2016, Dublin, Ireland.

**Joensuu, K.,** Saarinen, M., Sinkko, T. 2013. Soil quality life cycle assessment of organic and conventional turnip rape and cereals. Oral presentation at the SETAC LCA Case Study Symposium 11.-13.11.2013, Rome, Italy.