

OWC2021 Rennes 8. Sept. 2021 Hanne Lakkenborg Kristensen

## Workshop Diversified strip- and inter-cropping systems: what can we gain in modern organic farming?

Moderator: Marian Blom

Presenters: Joonas Mäkinen, UEF, Finland Alessandra Trinchera, CREA, Italy Hanne Lakkenborg Kristensen, AU, Denmark Constantino Valero, UPM, Spain

The main questions are:

What can strip- and inter-cropped vegetable and arable systems look like in space, time and genetic material

- to increase biodiversity and biocontrol
- to increase soil nutrient use efficiency

- when managed with new agronomic technology, e.g. robots and sensors to support the development of strip- and inter-cropping on medium and larger-scale farms?

What are experiences, challenges and barriers in practice and what can we learn from researchers?



## Topic 2 Strip- and intercropping systems to increase yield and N use efficiency

We investigated yields, root growth, nitrogen use efficiency and leaching risk

Five European field trials





## Yields maintained or higher in intercropping systems

Land Equivalent Ratio 0.96-1.42 Nitrogen use efficiency maintained or higher

## Advices to make it work

- Systems design based on crop traits
- Ressource demands complementary
- Management used to control competition
- Cabbage with faba bean, beetroot and onion good
- Leek and celeriac good
- Don't give up! Experience good

