



CORE organic



CORE Organic research themes

'International research flying together since 2004'



CORE Organic Pleiades

CORE Organic Pleiades is a European network of ministries and research councils that supports research in organic food and farming. The CORE Organic Pleiades network is a continuation of the earlier ERA-NET CORE Organic. The current network serves as a platform for policy exchange among 42 partners, encompassing both public institutions and sector representatives, jointly focusing on creating enabling conditions and increasing R&I funding to support the targets for organic food, farming and aquaculture as set out in the European Green Deal. Read more at:

www.projects.au.dk/coreorganicpleiades

Since 2004, the CORE Organic network has funded a variety of research projects within different themes, which include circular bioeconomy, consumers, fruit and vegetables, pigs, human health, cattle, chicken, mixed farming, food systems and landscapes, nature and biodiversity and crop production.





CORE Organic research themes

Read more about the themes and all the projects at www.projects.au.dk/coreorganicpleiades/research-themes

Circular bioeconomy

Natural resources must be utilized sustainably and accommodate future generations, healthy ecosystems and healthy feed and food. Organic agriculture and food systems must, therefore, be based on sustainable and efficient organic cycles and renewable resources.

The future organic consumer

In order for Organic farming to further expand it must meet a variety of consumer demands, e.g. regarding processing methods, organic certification, health and sustainability. Furthermore, consumers are continuously more aware and interested in healthy and nutritious diet compositions. In continuation of this, transparency of origin, climate and environmental impacts and sustainability of food products are of growing importance to consumers.

Fruit vegetables and viticulture

It is important to maintain and strengthen the yield of organic fruit, vegetables and viticulture production in order to remain competitive compared to conventional production. CORE Organic has funded projects that aimed to improve productivity through various methods such as innovative pest and weed management, waste recycling and improvement of soil fertility.

Mixed farming, food systems and landscapes

In order to maintain and improve the sustainability of organic farming it is important to investigate possibilities of alternative production systems. This may entail mixed farming systems and diversification, which can foster more robust and resilient productions while reducing climate and environmental impacts.

Human health

Sickness and poor quality of life have great consequences for both the individual and society. Organic food production differs from conventional production in a number of aspects, which can have direct or indirect effects on public health, food security and the composition of diet. Organic food production is managed in a precautionary and responsible manner which entails opt-out or greatly reduced use of pesticides, artificial fertilisers, antibiotics and additives.

Crop production

Some of the most important issues to be addressed regarding organic crop production relates to sufficient nitrogen supply and weed control. By addressing these issues the crop production can achieve higher and more stable yield.

Nature and biodiversity

Organic farming has a less environmental impact on its surrounding environments compared to conventional farming. This is due to the limited use of pesticides, use of organic fertiliser and more frequent use of cattle pasture. However, in order to conserve and improve ecosystem services and biodiversity it remains important for research to address how organic food systems can improve biodiversity.

Pigs

Animal welfare is key in organic pig production and must the animals have the opportunity to exercise natural behaviour. Therefore, it is important to address breeding methods as well

as paddock, hut and stable conditions in order to meet developmental, physiological and behavioural needs of the pig. In this context, it is also important to address the feed strategies and use of antibiotics in pig production.

Chicken

Organic chickens are generally sold for higher prices than conventional chickens, which makes it vital to ensure a high level of credibility in organic production in order to increase the market share of organic chickens. There is a developmental need which entails breeding of resilient and active breeds. Simultaneously, there is a need for development of innovative production systems, which accommodates the organic principles regarding animal welfare and environmental impact.

Cattle

There are strict requirements to animal welfare in organic cattle production e.g. regarding feed, barn, pasture and use of medication. The CORE Organic network has funded several research projects focused on cow-calf rearing, grazing systems, health and welfare planning and breeding.

