Select species of trees and bushes robust towards pigs and adapted to the climatic conditions on the farm.

Protect the trees in the first years after establishment from weed, mice, rabbits, hares, and deer e.g., with Spiral tree guard and Weed barrier rings.

Fence off the trees for the first 4-5 years to avoid the sows destroying the trees. The piglets can get access after two years.

Farmers in the MIXED network in Denmark have tried out Agroforestry in large-scale organic pig production. The trees were planted in rows in paddocks for lactating sows. The farmers’ aim of establishing an agroforestry system was mainly to improve the conditions for pigs as well as wildlife. Besides improving animal welfare, other aspects were also important for the farmers such as potential improvements of biodiversity, carbon sequestration, nutrient recycling, and farm economy.

When evaluating the agroforestry system, the farmers consider the trees as very beneficial for animal welfare. The pigs use the trees for thermoregulation, and the farmers report fewer problems with heat stress. The trees create good habitats for wildlife and the farmers have seen an increase in e.g., partridges and hares – thus the increased on-farm heterogeneity has been a benefit for biodiversity. Furthermore, the farmers find that the agroforestry system improves the aesthetics on the farm.

Regarding which tree species to plant, the farmers have good experience with poplar, cherry plum, spruce, and aronia, which appear to be robust in systems with outdoor pigs on the locations in Denmark.

Main Recommendations from the practice:
In Denmark MIXED is implemented by Innovation Centre for Organic Farming and Aarhus University in collaboration. The project is working with two groups of farmers practicing MiFAS (Mixed Farming and Agroforestry Systems) in different ways.

Agriculture in Denmark can be characterized as highly specialized, intensively managed and in general very productive. The highest concentration of livestock is in the western part of the country, where soils in general are more sandy and less fertile than in the eastern part of the country.

Many organic farmers in Denmark are taking the potential contributions of the organic system to public goods into consideration. The drivers for the group of farmers that MIXED is working with is specifically to improve biodiversity, c-sequestration, animal welfare and environment.

MIXED partners from Denmark:

AARHUS UNIVERSITY

Innovationscenter for Økologisk Landbrug