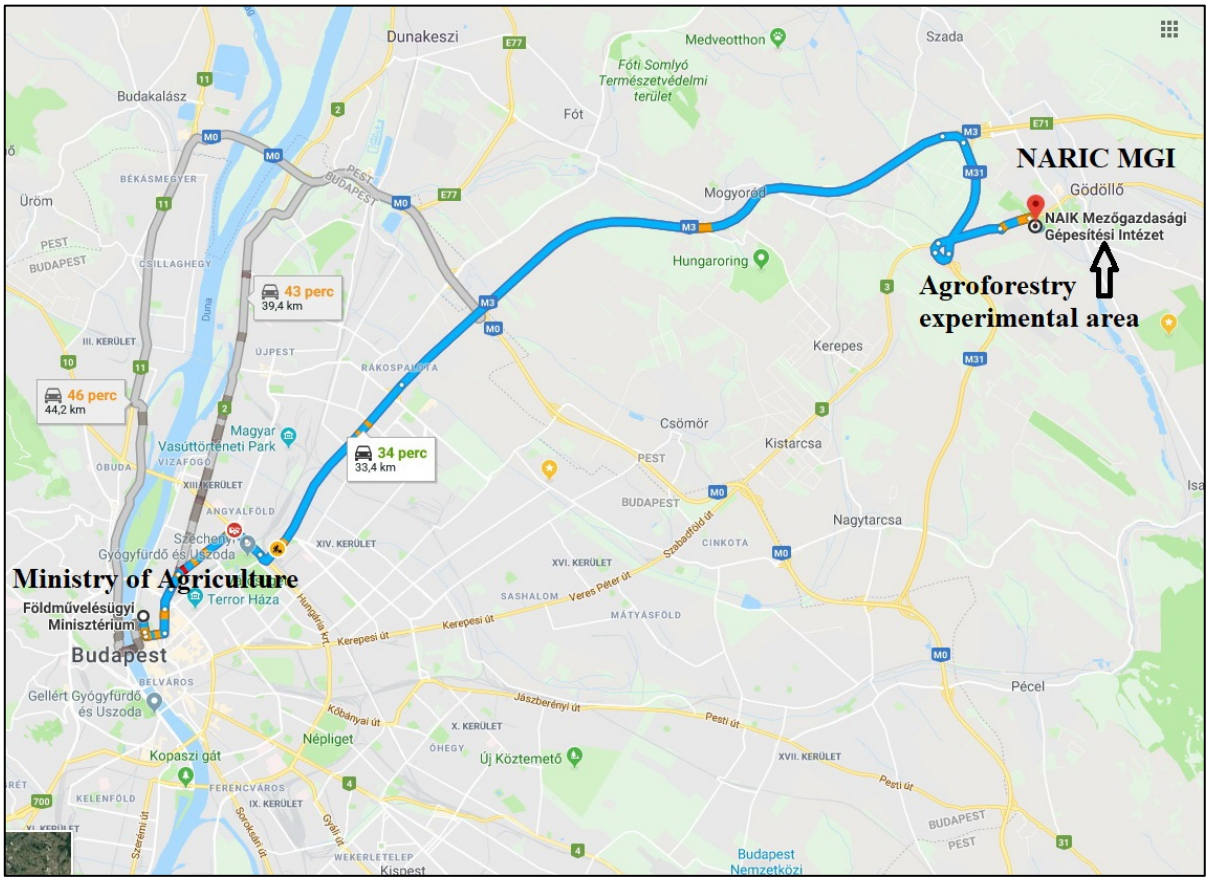
Day 2. Field trip to visit agroforestry demonstration plots in Hungary

13.00 – 15.30 Agroforestry experimental area

NARIC Institute of Agricultural Engineering (NARIC MGI)

2100 Gödöllő, Tessedik Sámuel 4.



The intercropping trial is located in the area of the NARIC Institute of Agricultural Engineering (NARIC MGI) in Gödöllő. From the Ministry of Agriculture (Budapest, Kossuth Lajos tér 11) it takes about 35 minutes to get there (34 km). The experiment was established in cooperation between the two institutes (NARIC MGI and NARIC ERTI).

The experiment formerly was an energy tree plantation with the species of hybrid poplar and black locust. The planting spacing was 3.0 x 0.5 m.

This short rotation energy tree plantation has been converted to an intercropping agroforestry trial for two years. Based on the existing stand we established the current row and in-row spacing:

- The planting spacing for black locust is the following:
  row spacing: 9, 15, 21 meters; in-row spacing: 1, 2, 3 meters
- The planting spacing for hybrid poplar is the following:
  row spacing: 9, 12, 15 meters; in-row spacing: 2, 4, 6 meters

In the experimental area triticale was sowed as companion crop in 2017.

In this experiment we will investigate mainly soil moisture, carbon cycle, light capture and root growth, as these factors are remarkable in researching and mitigating climate change. It is important

to investigate and determine the relation between the trees and the companion crops including agroecology, yield (production) and economy.

The Hungarian National Agricultural Research and Innovation Centre's (NARIC) Forest Research Institute (FRI) Department of Plantation Forestry started to study agroforestry systems and constructed its first trials in 2014. Since then further experiments have been set up and the institution has started to spread the knowledge of agroforestry, its characteristics and specialities, through agricultural and forestry forums and conferences, based on international literature, and examples. The aim is to establish trials across the whole country, to be able to study different sites where profitable plantation forestry and agroforestry technologies can be tested under the ecosystem of Hungary, providing models, and options to forestry and agriculture in marginal areas.

16.00 – 18.00 Excursion – Pilis Park Forestry Company, Valko Forestry Unit

Bus transfer from the Ministry of Agriculture to the demonstration plots

Theme: According to the research continuous cover forest management (CCF) can achieve at least the same economic efficiency as traditional rotation forest management (RF) in Turkey oak stands.

The regeneration problems occurring in poor quality sites in Turkey oak stands made visible the economic differences between the two management systems investigated. Silvicultural regimes in the light of climatic changes.

- RF in Turkey oak stands (clear-cut, artificial regeneration)
- CCF in Turkey oak

Demonstration plots in the area of Valko Forestry Unit (Dány 26C, 28A, 27A, 25B subcompartments)