Fig Research Institute

Dr. İlknur KÖSOĞLU
• Fig Research Institute (FRI) was founded in 1938

• General Directorate of Agricultural Research and Policies

• Ministry of Food Agriculture and Livestock
*Ficus carica*, its name from "Caria", the antic settlement in the Aegean Region
The fig (*Ficus carica* L.) is one of the oldest cultivated fruits and it is widely grown in sub-tropical and mild temperate zones of the world.

It is an economically important fruit species in the Western Aegean region, especially in the Small and Big Menderes Valleys in Turkey.

Sarılıop variety, is well known for its superior dried fruit quality all over the world.
Ficus carica var.
Sarılıop
60% of the world production (120,000 tonne) of dried figs supplied from Turkey (55-60,000 tonne) and 85% of it from Aydıncık.

30 thousand grovers, (small scale family farming)

Production in Aydıncık, 50 thousand hectare 10 million fig trees

$240 million exports value (dried fig)
The suitability of ecological conditions
Perfect adaptation

Extraordinary dried fruit quality

Eco-friendly production (very limited use of chemicals, growing in dry and slopy areas)

Reliable and safe food, functional content
FRI consist of six departments:

- Growing Techniques
- Plant Breeding
- Plant Health
- Food Technology
- Agricultural Economics
• R&D Studying in 325 Decare Area
• Fig Processing Plant
• 2 Greenhouses
• 4 Laboratories
Tissue Culture Laboratory
Plant Physiology Laboratory
- Collect and evaluate data about the fresh and dried fig on the country-wide base

- Collect the genetic resources of fig cultivars and to evaluate them as germplasm
Fig Genetic Collection (273 female and 58 male varieties from different region of Turkey)
• Carry out basic and strategic researches

• Develop the infrastructure for the research and collaborate with the other research organizations in relation to these facilities
• Obtain the scientific literatures, organize the training activities, prepare and distribute the publication.
Develop New Cultivar

Fig breeding by hybridization and mutation

Selection of male cultivar for pollination

Evaluate new varieties for fresh and dried fig consumption
Research Activities

Increase of Fruit Yield and Quality

- Irrigation, fertilization and yield interaction
- Intensive planting and canopy management
- Alternative tillage methods
- Climate change and fig quality
- Postharvest physiology and techniques
- Organic fig production
- Plant propagation
Research Activities

Processing Techniques and Mycotoxins

- Mycotoxins studies different fig processing stage
- Self life, storage and packing studies
- Evaluation alternative fig products
Plant Protection Activities

- Fig endosepsis and healthy caprific fruits
- Fig pest management
- Rosellinia root rot
Research Activities

Base material production and propagation via tissue culture
Biotechnological studies in figs
Forthcoming Research Activities

- Breeding new male and female cultivars
- Research on fig latex, seed and leaf
- Studies on food security and mycotoxin
- Employment possibilities on fig sector
- Alternative packaging methods and self-life
- Determination of internal and foreign market demands
- Drought and stress physiology
- Determination of environmental and industrial effect on fig production
- Fig pest and disease
Many thanks for your attention....