


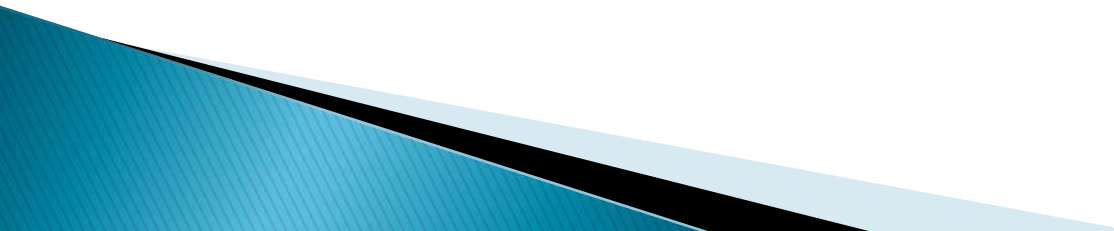
Providing genetic diversity and healthy
plants for the horticulture in Bosnia &
Herzegovina
LABORATORY FOR DETECTION AND
ANALYSIS OF PLANT VIRUSES AND
DISEASES BY USING ELISA AND PCR
METHOD

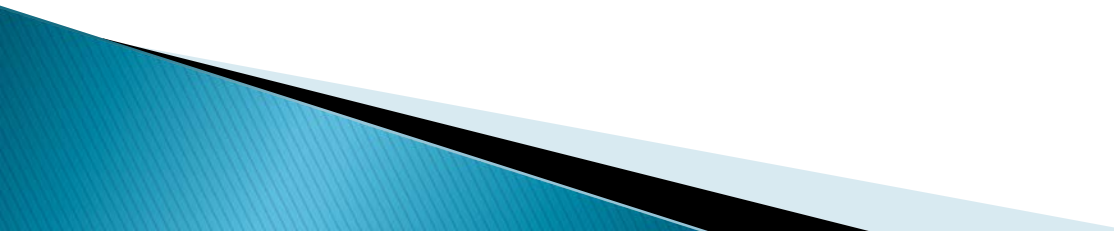
Agromediterranean faculty
Dzemail Bijedic University of Mostar

Project aims

- ▶ Developing capacities and facilities at the cooperating institutes in Mostar and their partner institutes in the region.
 - ▶ Control of health conditions of plant material
 - ▶ Enhance commercial production based on healthy plant material of valuable local plant cultivars
 - ▶ Built of good cooperation with local business
 - ▶ Built of good cooperation with Food Safety Agency of Bosnia and Herzegovina
 - ▶ Recruiting of young staff
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Overall and immediate goal

- ▶ Establishment and development of a laboratory, where it will be possible to detect viruses and diseases in strawberries and grapevine by using ELISA and PCR methods.
 - ▶ Development of rapid, safe, sensitive and standardised methods for the detection of the major viruses and diseases infecting strawberries and grapevine by the certification and quarantine services within Bosnia and Herzegovina
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- ▶ Equipping of one modern laboratory which should meet the following conditions:
 - Control of health conditions of plant material;
 - Adoption of new methods in detection of plant diseases and viruses;
 - Introduction of the procedure for certification of plant material;
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- ▶ Providing and improvement of experts:
 - Exchange of knowledge and experience with Norwegian counterparts;
 - Additional training of teaching staff from Agromediterranean Faculty;

Time schedule for project activities

1st year – 2011

- ▶ Workshop (Sarajevo)
The first workshop held in Sarajevo.
- ▶ **Procurement of the equipment**
- PCR Machine Thermal Cycler – purchased
- ▶ Staff training



2nd year – 2012

- ▶ Workshop (Mostar)
- ▶ Workshop (Sarajevo)
- ▶ **Procurement of the equipment**
- Microstrip Readers for ELISA – purchased
- UV Light Sources – purchased
- Pipette – purchased
- ▶ Fellowship grants to Master students
- ▶ Fellowship grants to Ph.D students



Time shedule for project activities

▶ 3th year – 2013

▶ Workshop (Sweden – Nordic Centre of Genetic Resources)

▶ Procurement of the equipment:

- ELISA washer – purchase in progress
- ELISA Kits (for strawberry and grapevine) – purchase in progress
- ELISA reagents (for strawberry and grapevine) – purchase in progress

▶ Staff training

▶ Fellowship grants to Ph.D students

▶ 4^h year –2014

▶ Procurement of the additional equipment:

- General Chemicals, buffers and reagents for PCR
- Plates
- ▶ Staff training – preparation in progress
- ▶ Workshop in order to evaluate all project activities.

MD scholarships (2012)

- dipl.ing. Agr. Dženan Vukotić (assistant)
“Soil as a factor of sustainable agricultural development in the City of Mostar”
- dipl.ing. agr. Alisa Hadžiabulić (assistant)
“Influence of substrats and growth inhibitors on growth and development of *Begonia semperflorens*”
- dipl.ing.agr. Vedrana Komlen (assistant)
“The contents of fungicide residues in grapes varieties Žilavka and Blatina in a intensive production and small family farms “



PhD 2011 – 2013

- Mr. Sc. Alma Leto
- “Analyses of the content of heavy metals (Cd, Pb, As and Ni) in the most important tobacco soils and tobaccos in BiH”

- Mr. Sc. Jasmina Aliman
- “Pomological characteristics of some cultivars of peach (*Prunus persica* L.) in environmental conditions of submediterranean Herzegovina”

Mr. Sc. Alma Micijevic

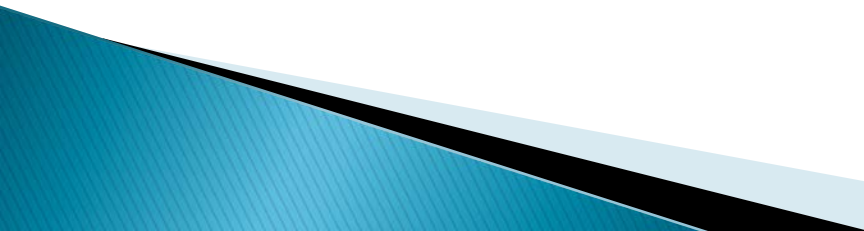
- “Influences of increased quantities of Pb, Fe, Cu and Zn in soils on their presence in fruits of figs and pomegrenade in the area of Mostar municipality”

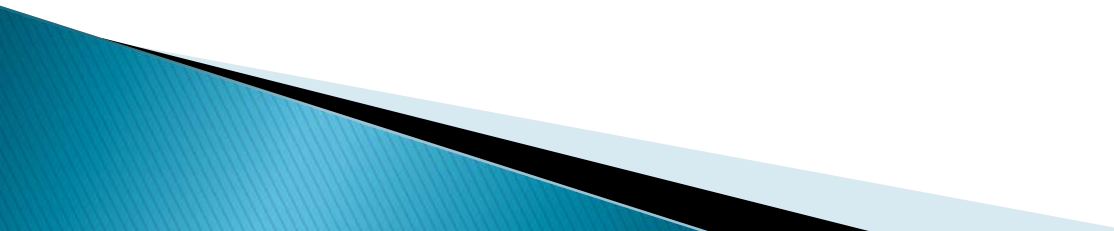
- Mr. Sc. Alma Rahimic
- “Quantity and qualitative characteristics of different parcley cultivars from conventinal and organic production”

Networking:

- ▶ 46th CROATIAN AND 6th INTERNATIONAL SYMPOSIUM OF AGRICULTURE AND XXII CONFERENCE OF AGRICULTURE AND FOOD INDUSTRY 2011
 - ▶ 48th CROATIAN AND 8th INTERNATIONAL SYMPOSIUM ON AGRICULTURE IN DUBROVNIK 2013
 - ▶ 14th CONGRESS OF FRUIT AND VINEYARD GROWERS OF SERBIA WITH INTERNATIONAL PARTICIPATION
 - ▶ 23rd INTERNATIONAL SCIENTIFIC-EXPERTS CONGRESS ON AGRICULTURE AND FOOD INDUSTRY IN SARAJEVO 2013
 - ▶ 24th INTERNATIONAL SCIENTIFIC-EXPERTS CONGRESS ON AGRICULTURE AND FOOD INDUSTRY IN SARAJEVO 2013
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Expected results:

- ▶ primary purpose of the lab would be detection of diseases and viruses in strawberry and grapevine
 - ▶ the second purpose would be improvement of teaching process.
 - ▶ this equipment would be used as control tool for checking health condition of plant material
 - ▶ laboratory would also be used by scientists for their research work
 - ▶ master thesis, doctoral research and student final exams
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- ▶ commercial purpose of the lab
 - ▶ the equipment will be used for lectures and work with student, so that they can to gain knowledge in basic laboratory work.
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THANK YOU FOR YOUR
ATTENTION!!!

