Providing genetic diversity and healthy plants for the horticulture in Bosnia & Herzegovina

Project Reference number: 332160 UF

Biodiversity preservation and genetic identification of grapevine and selected fruit crops in Bosnia and Herzegovina

Faculty of Agriculture and Food Technology
University of Mostar

PROVIDING GENETIC DIVERSITY AND HEALTHY PLANTS FOR THE HORTICULTURE IN BOSNIA & HERZEGOVINA

Lead institutions:

Bioforsk - Norwegian Institute for Agricultural and Environmental Research, Plant Health and Plant Protection Division

University "Džemal Bijedić" in Mostar, Agromediterranian Faculty, Mostar

Faculty of Agriculture and Food Technology University of Mostar

Duration: 2010 - 2015

Project leaders:

Norway:

Dr. Dag-Ragnar Blystad, Bioforsk - Norwegian Institute for Agricultural and Environmental Research, Plant Health and Plant Protection Division

Bosnia and Herzegovina:

Prof.dr.sc. Jure Beljo, Faculty of Agriculture and Food Technology University of Mostar

Prof.dr. Semina Hadžiabulić, University "Džemal Bijedić" in Mostar, Agromediterranian Faculty

WP: Biodiversity preservation and genetic identification of grapevine and selected fruit crops in Bosnia and Herzegovina

Lead in BaH: Faculty of Agriculture and Food Technology University of Mostar

Cooperating partners:

In Norway:

Norwegian Genetic Resource Centre (Aasmund Asdal) and Sagaplant

In BaH:

- Federal Agromediterranean Institute Mostar
- PLANTAŽE ČAPLJINA doo ČAPLJINA Višići
- Faculty of Agriculture Banja Luka
- Association of wine grape growers and wine producers
- Citluk Winery

Biodiversity preservation and genetic identification of grapevine and some fruit crops in Bosnia and Herzegovina

Aims

- collection, maintenance and preservation of autochthonous plant genetic materials
- economic use of these material
- scientific research and education
- Main focus: grape, fig, vineyard peach, pomegranate and sweet cherry

Main points

- Research and commercial use
- Preservation and maintenance of plant genetic resources
- Molecular genetic research
- Analysis of ampelographic characteristics in grapevine
- Pomological description of important Mediterranean crops
- Virus detection in grapevine and fruit crops
- Curricula development
- Involving young researchers

Results

- Institutional development
  - Field collection for practical education
  - Msc, PhD thesis
  - Staff development
  - Study visit to institute for grape breeding in Germany
  - Laboratory development

Plant genetic resources

- 42 varieties of grapevine found
- 10 varieties of fig
- Different genotypes of vineyard peach were identified
- 16 uncultivated pomegranate populations in the area of Herzegovina were identified and labelled. Molecular characterisation
- Field collection of grapevine at Faculty field in Rodoc

Curriculum development

- Results from project (genetic analyses, virus analyses etc) were implemented in modules: **Plant breeding, Fruitculture, Viticulture** and **Plant protection**
- Faculty has implemented new module in year 2012/2013, on Master study: **Breeding of fruit and viticulture**
- New module at doctoral study: Plant Genetic Resources

Master students

- 8 MSc thesis were done

PhD study

- 3 thesis one is due to

Research outcome

- 11 publications
- 1 book

Workshops

- Sarajevo 09.2011
- Mostar 04.2012
- Sarajevo, 10. 2012
- Sweeden, 09. 2013
- Mostar, 09. 2014

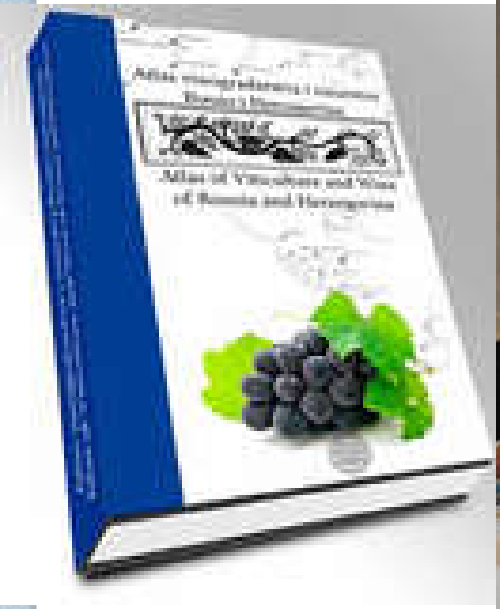
Pomological, chemical and nutritive analysis

- Fig varieties
- Pomegranate: 16 populations
- Vineyard peach – 15 samples

New products

- Microvinification: 8 varieties of grape in 2012 were microvinifacted and 4 in 2013 – done in cooperation with Citluk Winery
- Pomegranate juice – analysis

- Atlas of Viticulture and Wine of Bosnia and Herzegovina was published in 2014



Disemination

- The research results of the project have been presented to external groups at the scientific and professional conferences, seminars, workshops, through publications and brochures
- Research will be continued in sustainable use of collected materials
- In cooperation with winery Citluk and Federal Agromediterranean Institute researcher of the Faculty shall continue to look for the new wines acceptable for the market, combining different varieties


Letter of Appreciation

Plavka

APTF

Sensory analysis of wine

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