## Location and conservation of genetic resources of fruit tree in Shkodra region

Prof Ass Dr Tatjana KOKA

Agriculture University of Tirana

tkoka@ubt.edu.al

**Keywords:** resource: diversity, geographical, tradition, genetic erosion.

## **ABSTRACT**

Shkodra is striped in West North of Albania or cost lowland. Characterization from geographic position more favorable, wet from Adriatic sea (Velipoj zone) from two rivers such is: Kiri river and Buna river, Shkodra lake which location with Montenegro country. Is striped in field which colled Shkodra field, striped in hill and continued until mountain. At all geographical position is ling with climatic condition. Is region with high intensity of rainfall, rainfall in general are sufficient (600 – 1200) port distributed mainly in autumn-winter and summer drought average of 2-3 month. Mainly factors which determination in the location of fruit tree genetic resources for Shkodra region are: Climate, soil, tradit, social economic, processing industry and infrastructure. The study objective is the current condition of the structures of improvement changes, to be made to harmonization with the best plant environment relations, in the framework of market economy to with the frutification. Shkodra zones is more favorable tee growing and development of fruit tree, founded a lot kind and ecotypes which founded in in situ, on farm and in the garden of farmer, for moment don't have bloch or massive for genetic recourse reason during a last years. Are know tradition of varieties such is in fig tree Tivaras, Bajun, Patllixhan, Melacak with diversity in destination, diversity in forms fruit, diversity in leaves forms. Pomegranate tree = Devedishe, Tivarash, wild pomegranate for production, for ecosystem, for industry. 1 form mulberry white mulberry.

### INTRODUCTION

It lies on the western plains, lies to the west of the country from Hoti The bay of Lake Shkodra, north, up near Vlora in the south. The west coast on the Adriatic Sea, to the east and goes up to the foot of the Alps and the mountains of Central and Southern Mountain region. This lowland area is north-south stretch about 20 km. As part of its entering hilly areas and territories. It has small height above sea level. In most of height not exceeding 20 m, and part is below sea level. Slope down from east to west. Many areas is flat. It is formed by river deposits, and is therefore erosion of rivers, and is therefore as erosion of rivers and genetic erosion. Western Plain climate is warm thing that defined by Low relief, proximity to the sea and protection from cold winds, entering from the east. The climate becomes warmer towards. The soft, average annual temperature 15-16 ° C 5-9 ° C in January, July 25 ° C, and rainfall 900 mm - 1700 mm per year, in the very her in the cold half of the year, especially in winter. Soils are the type of ash-brown, the hills of brown. B. Spontaneous vegetation is limited since been replaced by cultivated vegetation. Western Lowland subsection is divided into two: 1. Over Shkodra and 2. Under

Shkodra ,over Shkodra city lies in the very bosom of Hoti up. Lies in the form of a belt along the East coast of Lake Skodra.Introduced areas and areas of increased Koplik. The landscape is hilly and mountainous. Here enters the area of Buna and Drin field .. I found Buna River, 41 km, the only river plain. Due to the small width and multiple solid inflows of plants. Buna has repeatedly changed her bed. Around it are wild pomegranate for ecosystem. Lake Shkodra Shkodra has and surface 368 m², 149 km² within the borders of the country. Here is Shiroka, a tourist spot, with beautiful landscapes and subtropical trees. We ecosystem of a region, the role of agricultural crops is depending on ecological, environmental factors. Highlighted features hilly country, environmental variability, the impact of watershed, climate (temp, precipitation, wind) I bent the complexity related and interdependent with each other. These factors are recognized, studied and exploited by one generation to the next. It is this ecosystem that regulates human demands for food and provides a continuous source of its life a focus of particular ecological. Ecosystem is one that values its genetic prevents erosion and preserves life and genetic resources available. Each country, region or area, refine and analyze those systems, they suit vegetation area to purge needed revenue.

### MATERIAL AND METHODS

The objective of the study was:

Knowing the state of orchard in this region areal structure of fruit species.

Objectiv no 2: Exploration, research and evoluation of genetic resources of fruit species in the region.

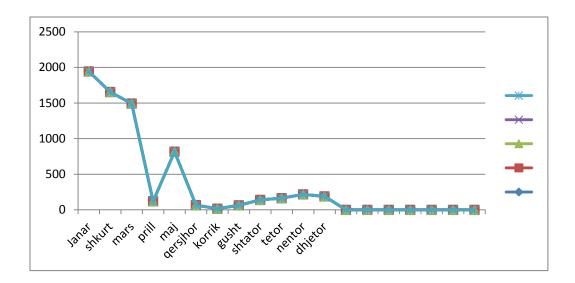
The study is based on the design methodology of work by virtue of both data of the region, analyzing the data, we explore defining geographic areas, coordinate and tradition of the area. Were conducted morphological and phonological assessment of species according to standart IPGRI and molecular analysis is made of several accession of fig. The leaves were analyzed feature form, size, type of leafe, forms of fruit, color fruit, destination, cavity, etc.

### RESULTATE AND DISCUSSION

Factors that determinate this areas:

Climatic factor is very important for region of fruit tree species. Caracterization from wet zone, mainly in autumn-winter, rainfall in general are 600-1200 mm, summer is drought average 3 months. This allows the cultivated variety climatic a great number of species. We have investigated wild forms and cultivated forms, wild forms is small than cultivated forms because is increased in years. Rainfall is favorable for growing a fruit tree in this zone.

Fig no 1 Amount of rains in mm of Shkodra

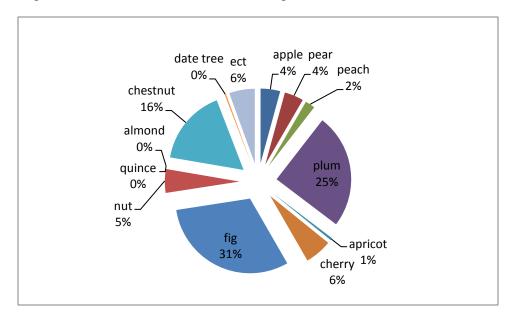


The precipitation regime has its specific features that distinguish this region, characterized by high rainfall intensity, especially in special winter months, precipitation ceilings November-December, March-April

For regionalization of fruit trees, has known interest of minimum temperatures and the number of days with this temperature. As seen from the graph extreme minimum temperatures are too limited to special cases special years, a few days or a few hours by gradation, then immediately after their occurrence time period comes with high temp.

# 2. 2. Biological characteristics of species of fruit trees

Fig no 2Fruit tree structur of Shkodra region



Region real appearance gives statistical interpretation of data, which represent state and structure of the numbers species While Region real appearance gives statistical interpretation of data, which represent state and structure of the species numbers, Fig tree, chestnut have big % for number tree than another species, few pear, plum and nut. Pomegranate tree is including in etc. Are know tradition of cultivation of dry coastal fig, pomegranate.

**The tradition of cultivation.** Each area has its own tradition for augmentation, selection and breeding of species - trees.

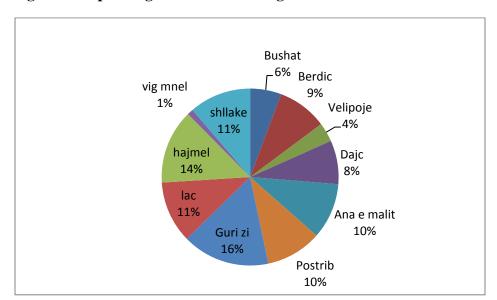
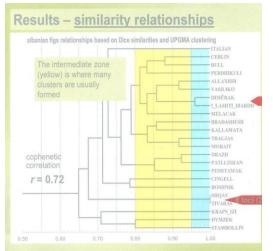


Fig no 3 Stripe of fig in the Shkodra region

From fig we can seen more % of no fig tree founded in some mikrozones, in generally this tree is striped in at all zones, is pleasure fruit and have interes for this region. In this region are investigated and study for morphological traits and fenologhical traits. Shkodra region have Tivaras, Patllixhan, Melacak and Bajun fig germplasm. Tivaras, Patllixhan are consum destinacion, Melacak is for consum and dry fig. Those germplasm is investigated in Bahcallak, Shkodra and in Shirok. In this germplasm have diversity in form leave and form fruit. Tivaras have form leaves is cultivar which introduction from Montenegro but is adapted in this region. Patllixhan is quality cultivars for consum, color fruit is green,and taste is sweet, maturity is in 10-20 August. For fig varieties is realizated molecular analyses,2006 is getting AND in leaves for each varieties



We can founded Devedishe, Tivarash, wild pomegranate, which are characteristic of this region. Before years ago have been block pomegranate in Bahcallek region and now is in only in orchard. Other fruit which founded in this region are some forms of plum (wild and cultivate forms), mulberry only wite mulberry, any orchard founded have kivi fruit, recently starded are cultivated strawberry from new farmer region which exit the market.



## **Socio-economic factors**

Our country has a dense network of towns, whose population is ever-growing and has increased the demand for fresh fruit and processed, possibly to be filled out our production. Development of processing industry. Infrastructure Tourism development perspective Rise in standard of living ee whole. Law operation of market economy: demand, supply, competitive price.

### Conclusion

- Agricultural producers should be encouraged to develop and to market new typical products, there by ensuring new income sources and contributing to the stabilization of agriculture output on family farms.
- Increased market offer of the high quality typical products is of a great importance for preserving positive rural demographics and to boost the development of the area.

As seen areas of Shkodra is a country with rich genetic diversity in fruit trees, mainly in the area of Bahcallek and Oblik. Being extended in the area very west characterized by a greater number of diverse species of higher temperature on request. Can we find forms with particular

#### Recommend

- To increase the security of the genetic resources.
- To increase cultivation of fruit tree becouse has interes not only for production of fresh and dry fruits, but also for industrial processing such as, jams, syrups, etc

To create again block of Devedishe pomegranate for development economy of this region.

To avoid the risk of genetic erosion.

### References

- 1. El-Sese, A.M, (1988) Physiological studies on flowering and fruiting habits of some pomegranate cultivars under Assiut conditions, Assiut Journal of Agricultural Sciences, 19(4):1
- 2. B. Ristevski, M. Kiprijanovski, 1998 State and perspective of the fruit growing in republic of Macedonia,
- 3.Knupffer,H,1992: The European Barley database of the ECP/GR: An introduction, Kulturpflanze 36:135-162
- 4. Shulman Y, Fainberstein L and Lavec S (1984) Pomegranate fruit development of maturation Journal of Horticultural Science, 59 (2): 265-274
- 5. Shqau L, Osmani R, Selimi J, 1989 Arboricultura
- 6. Sotiri, P, Gjermani T, Nini T, 1983, Viticultura
- 7.Osmani R, Koka T, 1996, Buletini shkencave: Rajonizimi I pemtarise ne Shqiperi