

Project Title : Evaluation And Characterization Of Chestnut (*Castanea Sativa* Mill) Genetic Resources

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Supporting Body : GDAR

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Summary : Chestnut is distributed across the Mediterranean region. In numerous papers that discussed, the origin of chestnut (*C. sativa*) it is pointed out that, Turkey is the origin centre of this species and it spread to Europe as a cultivated species from there.

Chestnut is also an economically important species covering large areas in Turkey; and Turkey is one of the important chestnut producer countries. According to FAO statistics the world production of chestnuts, concentrated mainly in China, Korea, Italy and Turkey. Chestnut fruit production is widely spread in Turkey and despite having a marginal economic impact it plays an important environmental role related to its contribution to a sustainable management of mountain and rural areas.

In spite of these, unfortunately, limited studies on improvement cultivars for nut production, genetic variability and disease of chestnut have been carried out in Turkey. As time passed, chestnut blight, caused by *Cryphonectria parasitica*, has become a threat to chestnut production and genetic diversity and this serious disease more spread by using infected scions. More important, there is no any institutional sanitary grafting bud or scion production in Turkey.

The main objective of this study is conservation of variability. To reach this objectives following studies are planned in this project;

- Make survey on chestnut distribution area,
- Evaluation of local varieties in terms of suitability to industry and other usage,
- Collection of chestnut germplasm of fruit varieties aimed at the characterization and assessment of their horticultural potential,
- Start to creation chestnut field gene bank; *ex situ* conservation of chestnut germplasm.

This project will be carried out with the collaboration of researcher from different disciplines in Aegean Agricultural Research Institute and Bornova Plant Protection Station.