

## **RESEARCH IN MAZZARD OR WILD CHERRY (*Prunus avium* L.) IN TURKEY**

Although only 28% of the Turkish land (21.2 million ha) is forested, Turkey stands out with its large diversity of habitats. The country is a merging point of three significant phytogeographical regions including Euro-Siberian, Mediterranean, and Irano-Turanian. Although there are almost 11,000 plant species growing in the whole Europe, Turkey has nearly 10,000 plant different species growing its territory, one third of which is endemic to the country. As a member of the species endemic to Turkey, Mazzard or wild cherry (*Prunus avium* L.) is a 'noble yet neglected hardwood' of both Europe and Turkey with a great ecological and economic significance.

As part of a pioneer study, a series of projects designed to understand the ecology and silviculture of this valuable broadleaved species was initiated in 2003 in the Duzce University Forestry Faculty in Turkey. The first project aimed to study the dormancy and germination behavior of the species as well as the provenance-based variation of these behaviors under various pretreatments. The second phase of the studies focused on vegetative propagation of mazzard cherry with different methods and mediums for forest nurseries. In another project, the post-leaf-out tolerance of young mazzard cherry seedlings to various herbicides registered for use in Turkey was studied to determine an herbicide weed control prescription with crop safety. Finally, a mazzard cherry provenance trial including the one-year old seedlings of various seed sources from the Black Sea Region of Turkey and a superior seed source from Germany was recently laid out in five different locations in the western Black Sea Region. The seedlings of various black cherry (*P. serotina* Ehrh.) seed sources were also included in the provenance trial.

As a follow-up of the previous studies, a new project in mazzard cherry was proposed to a national research funding agency (TUBITAK) in August, 2006. In the proposed study, intensive plantations with mazzard cherry are established on various selected sites in the

western Black Sea Region. With this project, effects of various silvicultural operations in increasing intensity on the survival and growth, quality, photosynthetic production, and nutrition of mazzard cherry seedlings as well as sustainable site productivity will be determined. In accordance with the previous project, the best management scheme(s) will be recommended for intensively managing the superior race(s), which will be determined in future, of mazzard cherry in Turkey.