

Book of Abstracts



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*Hymenonema laconicum*  
Boiss. & Heldr.  
(Asteraceae)

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## The importance of long-living trees in dendrochronological research: case studies from Greece

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Dendrochronology is the scientific method that uses tree-rings for dating past events. It has applications in different disciplines, including dendroarchaeology which studies historical and archaeological wood used for various purposes from a diverse set of contexts.

Within the framework of the Balkan-Aegean Dendrochronology Project: “Tree-Ring Research for the Study of SE-European and East Mediterranean Civilizations” we have collected and examined samples from numerous sites in the Balkans and the Aegean region with the scope to develop a set of continuous and absolute tree-ring chronologies as a solid foundation for the re-interpretation of historic chronologies and as a basis for studying both the environmental and cultural history of our study area. To achieve this goal, we have examined wood samples from long-living trees, historic buildings and archaeological sites.

In Greece, we have developed new chronologies from long-living trees for different species and regions, including Bosnian pine (*Pinus heldreichii*) and Black pine (*Pinus nigra*) from the Northern Pindus National Park, Cypress (*Cupressus sempervirens*) from Crete, Brutia pine (*Pinus brutia*) from the island of Symi and deciduous oaks (*Quercus* spp.) from several sites in the mainland and the islands. These newly developed chronologies, having more than 500 years in some cases, can be used to date historic timber, but also to reconstruct climate, landscape history and past disturbances such as fires.

The development of local reference chronologies is the first step for dating historic timber of local origin. The lack of such chronologies is why dendroarchaeological studies have remained relatively limited and rare despite the high dendrochronological potential of regions with historical and archaeological remains like Greece.

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