



Symposium  
Egejskie  
8th Conference  
in Aegean Archaeology



# SYMPOZJUM EGEJSKIE

## 8TH CONFERENCE

### IN AEGEAN ARCHAEOLOGY

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## BOOK OF ABSTRACTS

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**DENDROCHRONOLOGY AND THE INFORMATIVE POTENTIAL OF CHARCOAL REMAINS**  
**FROM ARCHAEOLOGICAL SITES IN THE EASTERN MEDITERRANEAN**

Charcoal is commonly found at archaeological sites and used primarily for wood identification according to its preserved three-dimensional anatomical structure. Carbonised wood is usually dated by radiocarbon analysis, which supplies dates with a broad error range—sometimes well over 200 years. Dendrochronology, on the other hand, which has the potential to provide a precise year date, is infrequently applied. The successful implementation of traditional dendrochronological techniques depends on the degree of preservation of the charcoal samples, their quantity of fragmentation and the preservation of 50+ growth rings per charcoal piece. Within the framework of the Balkan-Aegean Dendrochronology Project: «Tree-Ring Research for the Study of SE-European and East Mediterranean Civilizations» we have examined charcoal remains from numerous archaeological sites in the East Aegean region. Charcoal pieces dating from Late Bronze Age to Byzantine/Late Roman have been examined at archaeological sites in the Peloponnese and in Crete (Greece), but also at key excavation sites in Turkey. In all cases charcoal wood identification corresponded to local timber, including—but not exclusive to—species that are useful for dendrochronology, such as deciduous oaks (*Quercus* spp.) and several conifers like cedar (*Cedrus* spp.), cypress (*Cypressus sempervirens*), low altitude pines (*Pinus halepensis* and *P. brutia*) and high-altitude black pine (*P. nigra*). Absolute dating was achieved at some of the examined study sites, but the results should be considered with caution, due to the continued scarcity and uncertainty of relevant reference chronologies.

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