

Suberoteca Nacional Albino de Carvalho

Safeguarding our natural and cultural heritage by raising society's awareness of the importance cork and cork oak

Cork is an exquisite biological material. In cork oak (*Quercus suber* L.), cork evolved as a strategy to withstand the hot, dry summers of the Mediterranean climate region, protect the tree from pathogens and allow it to survive wildfires. Cork is periodically harvested from stem and branches during trees lifetime.

The unique phellogen (or cork cambium) of cork oak intensively produces numerous suberized walled and hollow cork cells, arranged in continuous, regular and concentric layers, and resulting in a thick outer bark tissue, the cork, covering stem and branches. The cork tissue is radially crossed by lenticular cells, chemically different, loosely arranged, with large intercellular voids, and organized in channels. Lenticular channels are believed to play the important physiological role of allowing air exchange for cells in the inner living tissues of the stem.



The National Institute of Agriculture and Veterinary, INIAV, I.P. (INIAV) at Oeiras has important cork samples collections to see and to know: It stores more than 3000 cork samples from the first cork quality (growth and porosity) study carried out at national level, that was initiated in 1982 by Albino de Carvalho. It also stores exceptional cork samples from Portugal, Morocco and Tunisia, that are the Vieira Natividade Collection (initiated in 1932). The rest of the cork samples came from diverse regions in Portugal, under several research studies at INIAV, and constitutes a real database of the quality of Portuguese cork.

Come to Oeiras to meet these incredible cork collections!