A. Cristina Figueiredo^{1*}, Luis G. Pedro¹, José G. Barroso¹, Helena Trindade¹, João Sanches², Carlos Oliveira³, Miguel Correia³

¹Universidade de Lisboa, Faculdade de Ciências de Lisboa, DBV, IBB, Centro de Biotecnologia Vegetal, C2, Campo Grande, 1749-016 Lisboa, Portugal, ²Instituto da Conservação da Natureza e das Florestas, DCNFLVT, Apartado 59 CNEMA, Quinta das Cegonhas, 2001-901 Santarém, Portugal, ³Força Aérea Portuguesa – Campo de Tiro, EN 118, 2890-403 Alcochete, Portugal. *acsf@fc.ul.pt

Abstract

The Cupressaceae (cypress or redwood family) members produce a highly valued wood for house construction and for many other purposes. Several genera are grown as ornamentals and the wood in many species of this family is naturally fragrant and has been used as a natural moth-proofing and in perfumes manufacture. *Juniperus communis* cones are also used to flavour gin. Six wild species of the genus *Juniperus* are known in mainland Portugal, Azores and Madeira. *Juniperus navicularis* Gand. is a endemism of Portugal, commonly known as *zimbro* or *piorro*. Of rare occurrence, it is found scattered in sandy places, usually in sheltered woodland or pine forests at low altitude (up to 80m) along the midwest and southwest coast of the mainland Portugal. It is considered a species of high ecological value, for its contribution to soil water and nutrient regulation and acts as a refuge for local flora and fauna. The essential oils isolated from *J. navicularis* leaves, collected at Campo de Tiro, were obtained in a yield of 0.2-0.3% (v/f.w.). α-Pinene (18-35%), α-phellandrene (12-17%), limonene (7-20%), β-myrcene (5-7%) and β-phellandrene (4-6%) were the main components of these essential oils.

Keywords: Juniperus navicularis Gand., juniper, Cupressaceae, essential oil.