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Pinus pinaster Aiton e Pinus pinea L.

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Abstract

The maritime pine (*Pinus pinaster* Aiton) and the stone pine, or Portuguese pine (*P. pinea* L.), are the two dominant species of the genus *Pinus* in Portugal. These species find application in papermaking, the timber industry, resin production, afforestation of dunes and wastelands, and in traditional medicine. The stone pine is also used in culinary, due to the highly valued edible seeds, the pine nuts. The essential oils isolated, in different years, from the needles and branches of six maritime pine trees, and from the same number of stone pine trees, collected in the Mata Experimental do Escaroupim and in Campo de Tiro, were obtained, respectively, in a yield of 0.1-0.2% and 0.1% (v/f.w.). α -Pinene (23-35%), β -pinene (24-37%), β -myrcene (1-10%), δ -3-carene (trace-13%) and limonene (1-11%), were the main components from maritime pine essential oils, whereas those from stone pine were dominated by limonene (70-76%). These results support the possible existence of chemotypes in maritime pine essential oils, and the homogeneity of stone pine essential oils.

Keywords: Pinus pinaster Aiton, Pinus pinea L., maritime pine, stone pine, Pinaceae, essential oil.