

Departamento de Botánica

Extinción Cedrus en la Península

15/02/2022

The presence of Cedrus atlantica on the European continent, including, especially, the determination of the time of its disappearance from the Iberian Peninsula, is one of the most controversial issues in recent decades regarding the successive extinction of conifers in the Western Mediterranean. This work propounds the possibility that C. atlantica and Pinus nigra could have co-habited in the past, mutually excluding each other in the areas with suitable conditions for both species, where, ultimately, the one that was the most competitive would have remained. The niche overlap in the two-dimensional ecological space was analyzed. In addition, the potential



distribution of both species in the Western Mediterranean today and two past periods (Last Glacial Maximum and Mid-Holocene) was modeled to identify their common geographic area of distribution. The species showed very well differentiated niches and a distribution of their habitats virtually segregated by continents since the Mid-Holocene (P. nigra in Europe and C. atlantica in Africa), which responds to differences in climatic affinities. However, the contact of the bordering areas of their distributions in the Baetic mountain range suggests that C. atlantica could have maintained its presence in the Iberian Peninsula until recent times. P. nigra would have displace it in later stages due to its greater prevalence on the continent, so it would have had greater opportunities to occupy the available space.

Puedes leer el articulo completo