

P135

Biometric tools in biodiversity and global change: the case of *Juniperus phoenicea* L. (Cupressaceae) from AndorraMałgorzata Mazur¹, [Angel Romo](#)², Karolina Sobierajska³ & Adam Boratyński³¹ Kazimierz Wielki University, Bydgoszcz, Poland.² Botanical Institute of Barcelona, (Consejo Superior de Investigaciones Científicas-ICUB). Passeig Migdia s/n, 08038 Barcelona, Spain.³ Polish Academy of Sciences (Polska Akademia Nauk), Instytut Dendrologii. 62-035 Kórnik, Poland.Author for correspondence: A. Romo (a.romo@ibb.csic.es)

The isolated populations of *Juniperus phoenicea* found in mountain areas of the Pyrenees have traditionally been assigned to subsp. *phoenicea*. However, the populations occurring in the southern limits of the taxon in the Maghreb have been assigned with little precision both to subsp. *phoenicea* and subsp. *turbinata*. In this context, subsp. *turbinata* has traditionally been considered as a taxon belonging to the plant communities found growing on coastal sands.

In order to verify the taxonomic status of the Pyrenean populations, and to better understand the distribution of subsp. *turbinata*, a biometric study based on morphological characteristics has been carried out. This enables us to clarify the taxonomic position of the Andorran populations, and to elucidate the taxonomy of the remaining Iberian populations situated in mountain and coastal regions, as well as the coastal populations from the Italian peninsula and the coastal and inland Moroccan populations.

The resulting conclusions indicate that the Andorran populations should be included within subsp. *phoenicea* along with the other inland Iberian populations. Subsp. *turbinata*, on the basis of the studied samples, colonizes the Iberian and Italian coastal regions. In Morocco, however, all the studied populations – both along the coast and in the Atlas mountains – correspond to subsp. *turbinata*.

The high degree of morphological variation of the Andorran populations suggest the relict character of those isolated Pyrenean valley stands.

The biogeographical interest of those fragmentary populations is commented on. They are plants that grow in the limits of the taxon's area, and should be included in the priority strategies for conservation of mountain biodiversity. Their dynamism in the global change scenario needs to be taken into account.