

Background: Heathlands are relatively abundant in the landscape of the western Mediterranean region, especially in the Strait of Gibraltar region, where it is locally known as herriza. They are associated with a mild Mediterranean climate regime and with acid, nutrient-poor soils. They harbour a high plant diversity, often viewed as a consequence of the transition between European Atlantic heathland and Mediterranean sclerophyllous shrubland floras.

Aims: To determine whether species-rich Mediterranean heathlands, including the herriza, constitute distinct heathland formations rather than transitional vegetation units between Atlantic heathlands and Mediterranean garrigue shrublands.

Methods: We quantified species richness, endemism and analysed the β -diversity of the woody component of Mediterranean heathland communities throughout its geographic range, with special emphasis on the Strait of Gibraltar region.

Results: Mediterranean heathlands, including the herriza, are not transitional communities between Atlantic heathlands and Mediterranean shrublands. Woody species richness and, particularly, endemic richness was the highest in the herriza.

Conclusions: The high biodiversity values of the herriza are a likely consequence of the ecological singularity of the Strait of Gibraltar region and its known role as a glacial refugium. Despite its treeless feature, the herriza deserves special recognition and protection from both in its European and North African extension.

