

New perennial brome-grass from Iberian Peninsula named after Picos de Europa National Park

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The type specimen of the new brome-grass species, *Bromus picoeuropeanus*.

Credit: Dr Carmen Acedo

Picos de Europa National Park has given its name to a new species of perennial brome-grass, discovered in Spain. *Bromus picoeuropeanus* belongs to a rather underrepresented on the Iberian Peninsula perennial group within the grass genus *Bromus*, with the new species being just the fourth of all recognised wild species living in the Iberian territory.

Having worked on the systematics of *Bromus* for a long time, scientists Dr. Carmen Acedo and Dr. Félix Llamas, members of the Taxonomy and Biodiversity Conservation research group TaCobi of the Spanish University of León, were surprised to collect what seemed a so-far-unrecognised species of the rare for Iberia perennial group. The unlikely discovery of the [new species](#) was described and published in the open access journal *PhytoKeys*, while its type specimen is preserved on Herbarium LEB.

Failing to understand how it was possible that the new species has never been found in the over-studied territory of Picos de Europa National Park, the two researchers traveled back to the classic locality to confirm its presence and study the habitat. Interestingly, while the new species is located in a typical for the National Park habitat, only a single perennial *Bromus* species was previously known from the area.

Eventually, having spent more time studying and collecting samples of different taxa in the Park, the authors discovered several more individuals of the new species dwelling in stony areas at an altitude of 1600—2200m. While herbarium collections from the National Park revealed that samples were also collected some years ago by another botanist, the scarcity of populations of the new species is still striking given the abundance of other brome-grass species.



Detail of the subterranean *Bromus picoeuropeanus* fruit called caryopsis. Credit: Dr Carmen Acedo



The preferred habitat of *Bromus picoeuropeanus* in stony and unstable soils, c. 1900 m elevation. Credit: Dr Carmen Acedo

Unlike its sister species, the Picoeuropean brome-grass is a small rhizomatous herb up to 70 cm high. Another easy-to-recognize difference is its well-developed subterranean vegetative organ, forming a long rootstalk called rhizome, which is an easy distinctive trait.

"Given the inaccessibility of the areas, the mountainous topography and the few grass-loving botanists, this species was ignored until now. Probably the genus *Bromus* has undergone some local speciation on this isolated place, but exactly how this occurred requires further

investigation," explain the authors noting the isolation of the new [species](#) from its relatives in the area.

More information: Carmen Acedo et al, A new species of perennial Bromus (Bromeae, Poaceae) from the Iberian Peninsula, *PhytoKeys* (2019). [DOI: 10.3897/phytokeys.121.32588](https://doi.org/10.3897/phytokeys.121.32588)

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