

Data Papers

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FloraSNevada: a trait database of the vascular flora of Sierra Nevada, southeast Spain

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Abstract. Providing a complete data set with species and trait information for a given area is essential for assessing plant conservation, management, and ecological restoration, for both local and global applications. Also, these data sets provide additional information for surveys or data collections, establishing the starting point for more detailed studies on plant evolution, vegetation dynamics, and vegetation responses to disturbance and management. This data base covers Sierra Nevada mountains (southeastern Spain), a recognized plant biodiversity hotspot within the Mediterranean context. According to previous available data (before this augmented compilation), these mountains host 7% of the 24,000 Mediterranean vascular plants, despite covering just 0.01% of its area. Another characteristic of the Sierra Nevada is the great singularity of its flora, with 95 taxa being endemic to the high-mountain area of Sierra Nevada and surroundings. From these endemic taxa, 70% are endangered by different threats, global warming being a leading cause. We seek to provide a complete and updated database of the flora of the Sierra Nevada mountains (southeast Spain). The goal of the present data set is to compile the names of all the vascular plant taxa inhabiting Sierra Nevada, together with relevant features including taxonomical, morphological–ecological traits, distribution, habitats, abundance, and conservation status. The data were compiled according to all the available information sources on taxonomy, ecology, and plant-species distribution. The resulting data set includes 2,348 taxa belonging to 1,937 species, 377 subspecies, and 34 hybrids, from a total of 756 genera and 146 families represented in the collection. For each taxa, together with taxonomical information (Phylum, Class, Family, Genus, Taxa), we compiled plant traits (life form, spinescence, flower symmetry, flower sexuality, plant gender, androecium:gynoecium ratio, flower color, perianth type, pollinator type, flowering, seed dispersal, and vegetative reproduction), and their environmental association (origin, endemic character, general distribution, substrate, elevation, habitat, local abundance, hygrophilous behavior, and conservation status). All these traits were compiled from all the available information sources, resulting in a complete and updated database for Sierra Nevada vascular flora. This data set provides valuable information on plant traits in an outstanding micro hotspot within the Mediterranean hotspot. This data set can be freely used for noncommercial purposes. This data set is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0). When you use this data set, we request that you cite the data and this data paper.

Key words: *checklist; environmental association; hotspot; Mediterranean mountain; plant traits; Sierra Nevada; Spain; vascular plant species.*

The complete data sets corresponding to abstracts published in the Data Papers section in the journal are published electronically as Supporting Information in the online version of this article at <http://onlinelibrary.wiley.com/doi/10.1002/ecy.3091/supinfo>

DATA AVAILABILITY

Associated data are also available at PANGAEA: <https://doi.org/10.1594/PANGAEA.910792>

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