

# Inventory and characterization of the flora from Barrocal Park, Castelo Branco, Portugal

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## Abstract

The Barrocal Park is a geological park with 40 ha localized in the edge of the city of Castelo Branco, Portugal (39°48'57.36" N, 7°29'32.83" W; 405 m a.s.l.), that shows diverse granite landforms. The Barrocal Granite occurs mainly in the border of the pluton of Castelo Branco that is located within the Central Iberian Zone of the Iberian Massif, central Portugal. Despite its main geoheritage value, the Barrocal park can also be valued for its spontaneous flora. The present study aimed to accomplish the inventory of the spontaneous flora from Barrocal Park. The Köppen-Geiger climate classification of Castelo Branco is Csa. The floristic survey was carried out between February and May 2022. The Barrocal landscape is characterized by fragments of climatophilic forests of *Quercus pyrenaica*, associated with rocky granite outcrops. In the subserial stages, *Adenocarpus lainzii*, *Cistus ladanifer*, *Cistus psilosepalus*, *Cytisus striatus*, *Cytisus multiflorus*, *Halimium umbellatum* and *Lavandula pedunculata* predominate. The results reflect dominancy of dicotyledons over monocotyledons. The plant community comprising of 98 plant species belonging to 81 genera of 34 families. Seven species are endemic to the Iberian Peninsula (*Adenocarpus lainzii*, *Antirrhinum graniticum*, *Asphodelus serotinus*, *Conopodium majus* subsp. *marizianum*, *Cytisus multiflorus*, *Digitalis thapsi* and *Ornithogalum concinnum*). Two species are toxic (*Daphne gnidium* and *Ferula communis* subsp. *catalaunica*). Four species (*Acacia dealbata*, *Cortaderia selloana*, *Opuntia ficus-indica* and *Oxalis pes-caprae*) classified as invasive (Decree-law 92/2019) were detected. *Acacia dealbata* and *Opuntia ficus-indica*<sup>1</sup> occur in the northwest zone of the park in an area previously disturbed by anthropogenic activity (quarrying and rubble deposit).

Keywords: plant biodiversity; spontaneous flora; *Quercus pyrenaica*; invasive plants.

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