SUPPORTING INFORMATION

Phylogeography and genetic differentiation along the distributional range of the orchid *Epidendrum fulgens*: a Neotropical coastal species not restricted to glacial refugia

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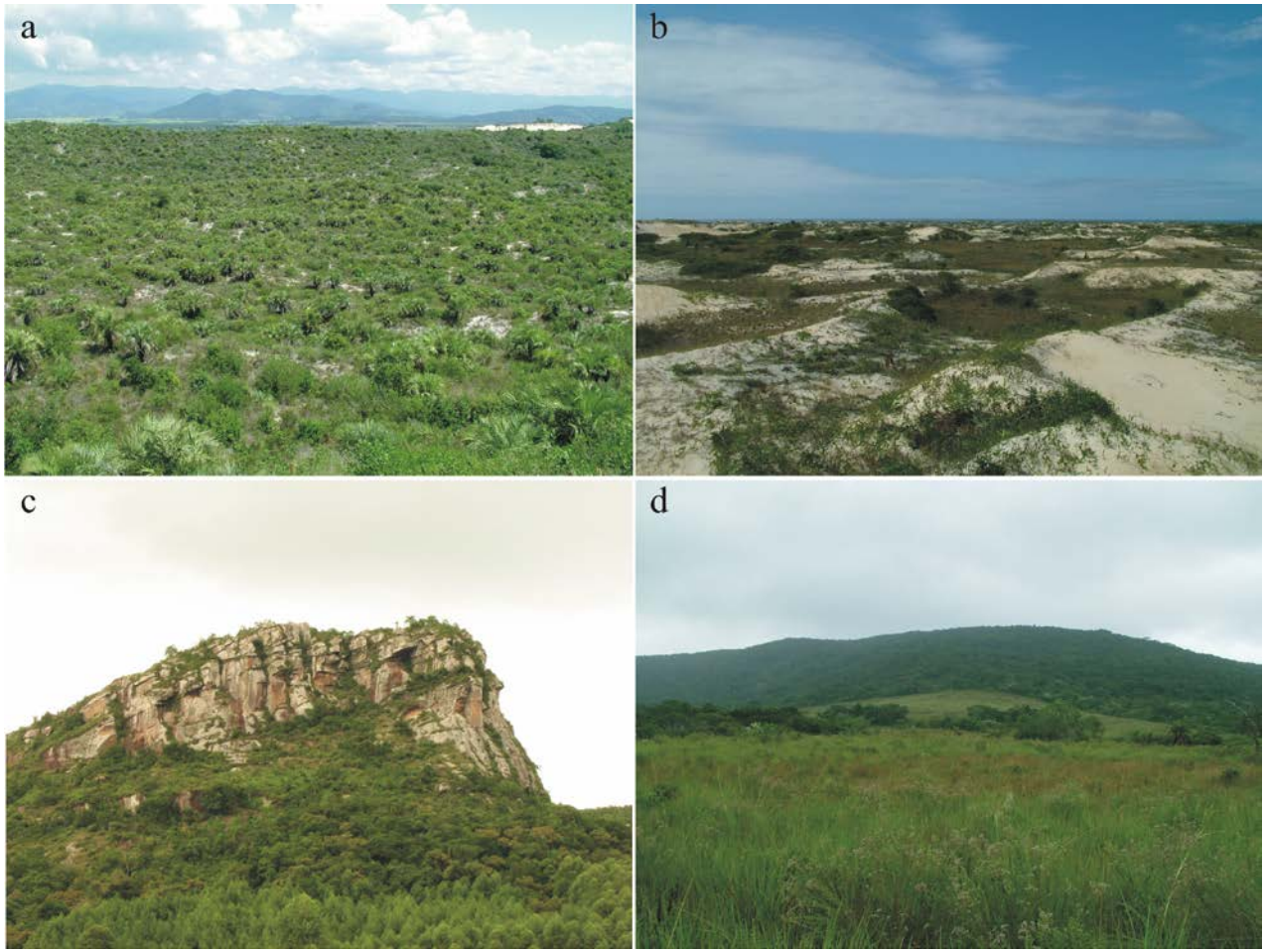
Appendix S1 Overview of the main types of habitats where *Epidendrum fulgens* can be found.

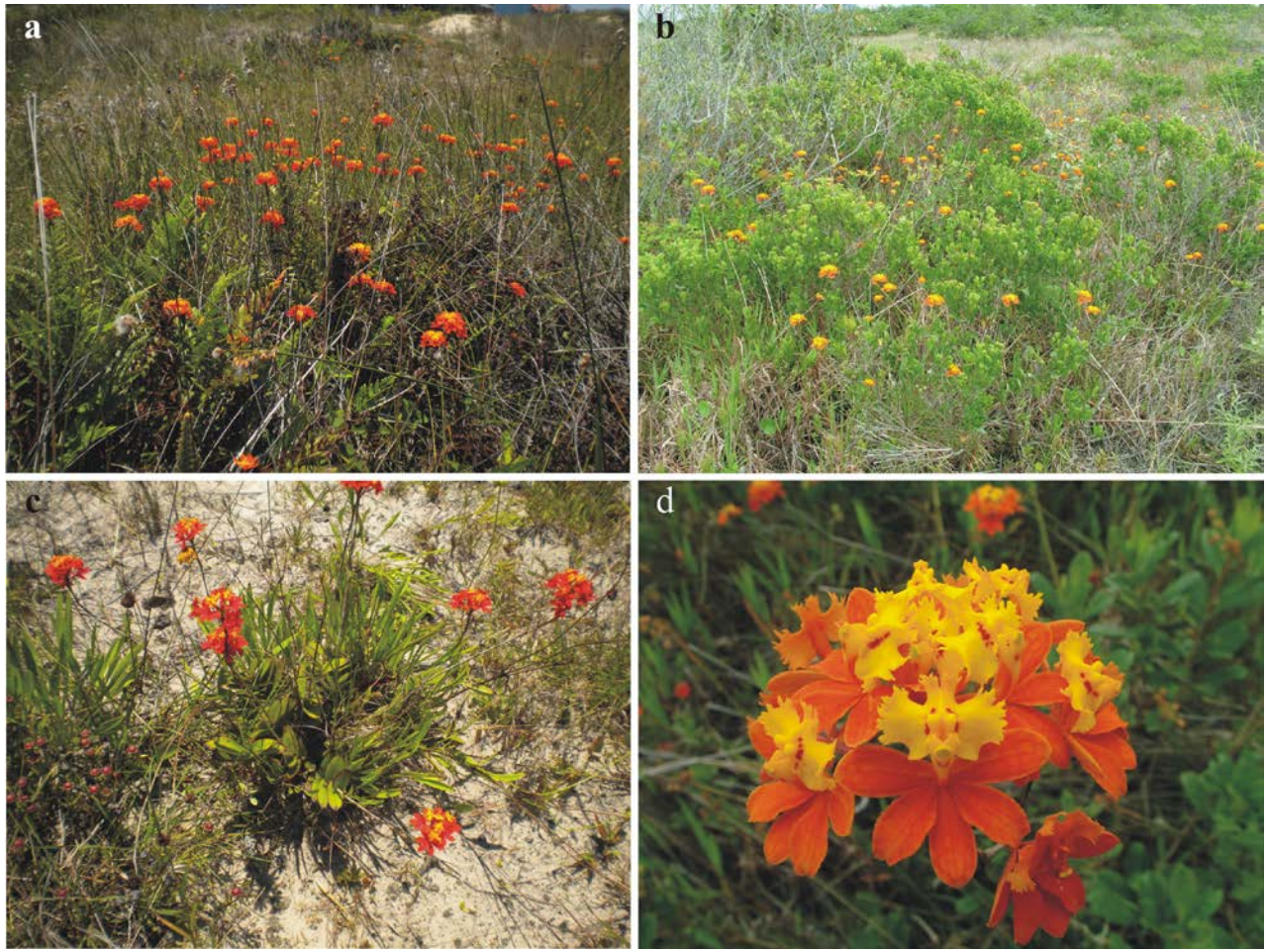
Appendix S2 *Epidendrum fulgens* natural growing conditions and flower morphology.

Appendix S3 Magnitude of ΔK from STRUCTURE analysis as a function of K.

Appendix S1 Overview of the main types of habitats where *Epidendrum fulgens* can be found. (a) Sand dune vegetation of the Imbituba population, formed by Pleistocenic sand deposits, Santa Catarina state, Brazil; (b) Sand dune vegetation from the Superagui population, formed by recent Holocene sand deposits, Paraná state, Brazil; (c) Morro do Cabrito arenitic outcrop, where many Brazilian Atlantic rain forest species have their southern limits, Rio Grande do Sul state, Brazil; Morro São Pedro granitic bedrock, composed of a mosaic of forest and grassland plant communities, Rio Grande do Sul state, Brazil.



Appendix S2 *Epidendrum fulgens* plants growing in grassland (a) and open scrub vegetation (b); many plants can be also found growing direct on uncovered sand (c); (d) detail of flower morphology.



Appendix S3 Detection of the number of groups in the whole nuclear microsatellite data set of *Epidendrum fulgens*. The magnitude of Δ*K* from STRUCTURE analysis as a function of *K* (details in Materials and Methods) was calculated following the simulations described by Evanno *et al*. (2005). The modal value of these distributions indicates the true *K* or the uppermost level of structure, here two genetic clusters.