

**VISANDO DIVULGAR O CONHECIMENTO SOBRE AS ÁRVORES GIGANTES, EM ESPECIAL A PESQUISA DAS ARAUCÁRIAS. ANTECIPAMOS UMA PRÉVIA DO TRABALHO ACEITO NA REVISTA *Scientia Agricola*. Observe a Figura 3 do trabalho para entender o porquê da classe gigante > 1,5 m de diâmetro.**

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**Running title: The last giant Araucaria trees**

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## **The last giant Araucaria trees in southern Brazil**

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**ABSTRACT:** *Araucaria angustifolia* (Bertol.) Kuntze is a native tree species of major importance in southern Brazil. It is a regional symbol due to its iconic shape and stature in the landscape; its wood was once economically important and its seeds are an important source of food for the fauna and are presently used in regional cuisine. Despite its importance and apparent abundance, the species is facing extinction caused mainly by unregulated exploitation and deforestation. This study catalogued the remaining individuals in order to add to the body of knowledge available on *A. angustifolia*, a species that has become rare across its historic range. The circumference at breast height (1.30 m), the total height, and the volume tree were measured (3,529 araucarias). Our cataloguing trees larger in diameter measured *in loco* over three years – a journey of more than 6,800 km. The volumes of these old trees are very large, ranging from 38.2 m<sup>3</sup> to 106.6 m<sup>3</sup>. The largest *A. angustifolia* individual is located in the state of Santa Catarina and measures 3.25 m in diameter. The giant araucarias with > 2.00 m in diameter are rare and only 13 individuals could be found in Southern Brazil; a priority action of governments is to recognize and preserve the monumental trees and a need for a public policy of specific inventories of large trees.

**Keywords:** giant tree, large old tree, monumental trees, cavities trees, araucaria forest

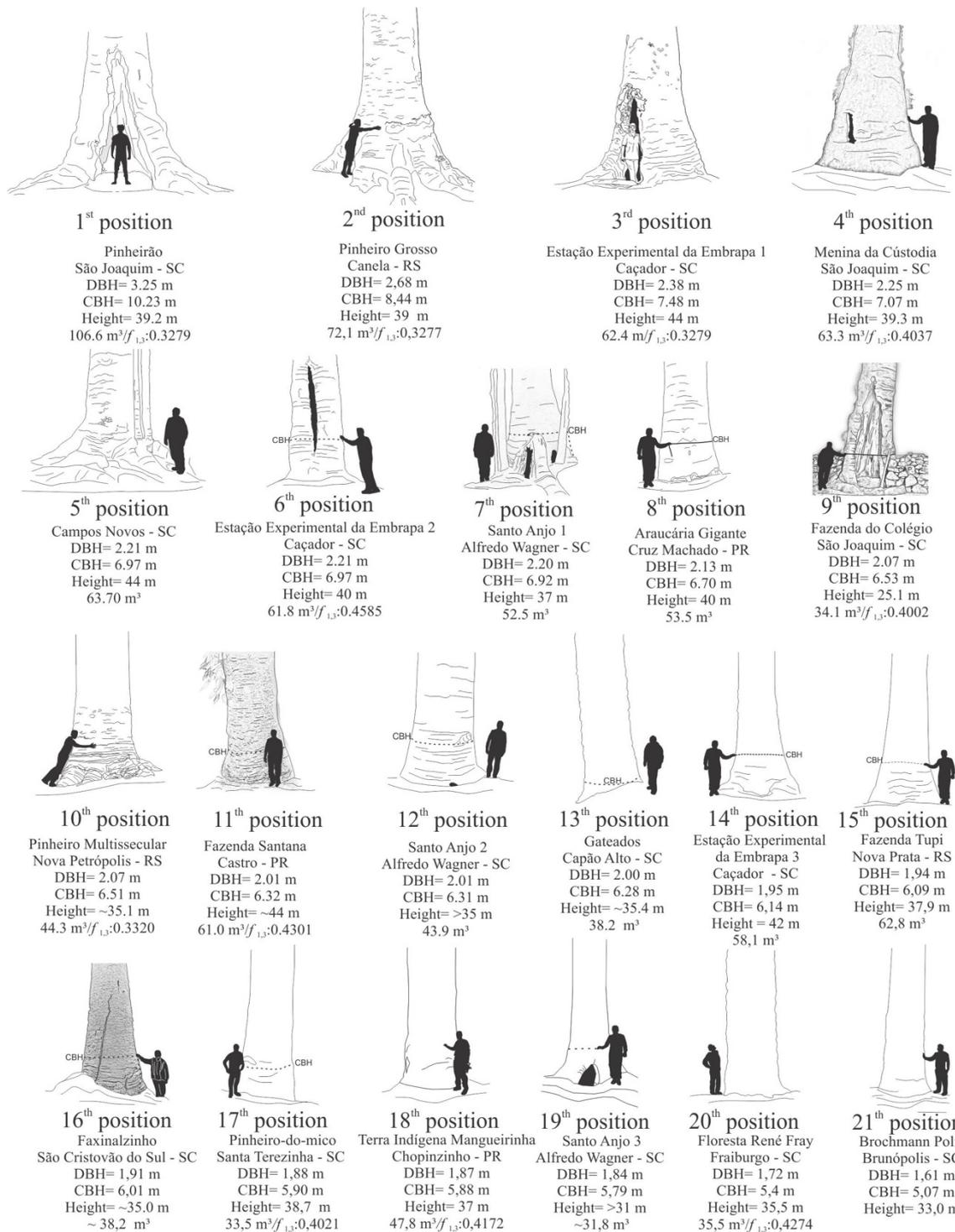


Figure 2 – Basal profiles of giant araucarias in southern Brazil, with their respective locations, dendrometric measurements, and artificial factor ( $f_{1,3}$ ), sorted by diameter size in descending order.

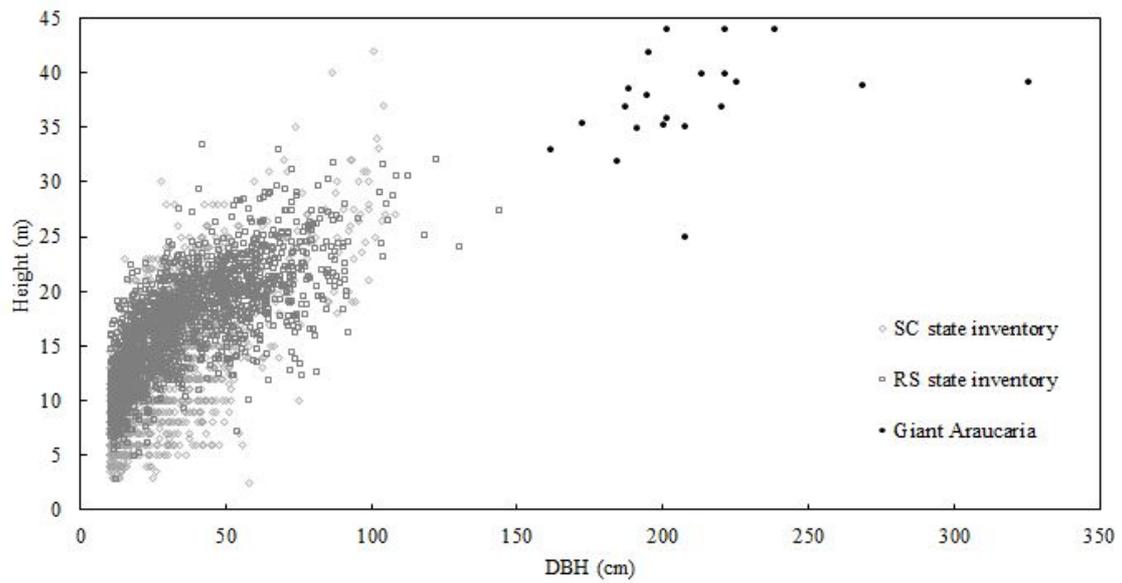


Figure 3 – Araucaria diameter at breast height (DBH) and height relationship showing size distribution of the giant araucarias ( $n = 21$ ) in relation to the individuals sampled in the state inventories of Santa Catarina (SC) and Rio Grande do Sul (RS) ( $n = 3,529$ ). The largest individuals observed in the state surveys are highlighted in black.