

The flora and vegetation in an area of the Caatinga in Taparuaba, Sobral, Ceará state, Brazil

SOUZA Elnatan¹, PEREIRA Marízia², SANTOS Diego¹ & RAMOS Daniela¹

¹Curso de Ciências Biológicas. Universidade Estadual Vale do Acaraú. Av. da Universidade, 850, Sobral, Ceará, Brasil. CEP 62.040-370

²Universidade de Évora, Escola de Ciências e Tecnologia, Departamento de Paisagem, Ambiente e Ordenamento. Colégio Luís António Verney, Rua Romão Ramalho, 59, Évora, Portugal (mariziacmdp3@gmail.com)

The Caatinga, covering about 800.000 km², is the predominant vegetation type of the semi-arid region of Brazil. The Caatinga biome comprises several phytophysiognomies and floristic compositions, with many endemic species, especially in *Fabaceae*, *Cactaceae*, *Euphorbiaceae*, *Bignoniaceae* e *Combretaceae*. Despite considerable advances, the Brazilian semi-arid needs more studies and inventories of biodiversity, especially the Ceará state. On the basis of these considerations, the present study aims to identify the flora and vegetation, in order to characterize the phytophysiognomy in an area of the Caatinga, in locality of Taparuaba, municipality of Sobral, Ceará, Brazil. Field work was conducted in March 2015 and 2016 respectively, in three transects. The life-forms were established in accordance of Raunkiaer's system. The floristic list is composed of 87 species, distributed in 66 genera and 36 families. The flora comprises 22 Brazilian endemic species. The most representative family was *Fabaceae* with 15 species, followed by *Malvaceae* (7) *Convolvulaceae* (6), *Euphorbiaceae* (5) and *Poaceae* (5). The biological spectrum had a high proportion of therophytes (29,9%), chamaephytes (29,9%) and phanerophytes (26,4%). In the area were identified two phytophysiognomies: outcrops communities highlighting succulent phanerophytes (*Pilosocereus chrysostele* (Vaupel) Byles & G.D. Rowley subsp. *ocoronic* P. J. Brown & Esteves and *P. counellei* (F. A. C. Weber) Byles & Schult. f.

and *Lepidaploa chalybaea* (Mart. ex DC.) H. Rob.) and therophytes (*Mitracarpus baturitensis* Sucre), mixed with communities including small trees and shrubs on deeper soil, composed of *Cereus jamacaru* DC., a succulent phanerophyte, and many woody phanerophytes, such as *Cordia oncocalyx* Allemão, *Crateva trapia* L., *Mimosa caesalpinifolia* Benth., *M. tenuiflora* (Willd.) Poir., *Poincianella bracteosa* (Tul.) L.P. Queiroz and *P. pyramidalis* (Tul.) L.P. Queiroz.

Keywords: Semi-arid, life-forms, rock outcrops vegetation, phytophysiognomy