

The flora and communities Carnaubal Palm Forest in the northern region of Ceará - Brazil

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The “dicótilo-palmácea” mixed forest is found in the fluvial plains (floodplains) of watercourses on the Ceará semiarid region (Brazil), distinguishing from the surrounding vegetation (*caatinga*) by the prevalence of larger tree species. In the river's margins, presenting high variability in the extension of the riverbanks, arise floodplains in pedologic complexes mainly composed by neossols and argissols, resulting from the deposition of sediments. In these areas of high fertility soils and subjected to flooding during part of the year, it develops a particular type of riparian vegetation dominated by *carnauba* palm tree (*Copernicia prunifera* (Mill.) H.E. Moore) forming a particular type of riparian forest, designated by *carnaubal* palm forest. We aimed to carry out floristic and phytosociological surveys of *carnauba* palm forests located in the northern region of Ceará. The classical sigmatist method of Braun-Blanquet was applied and classification analysis (*Twinspan*) was performed. The field work occurred in March 2014 and 2016 in eight areas: *Fazenda Pedra Branca* (03° 37' 10" S e 40° 18' 30" W, 104 m asl), *Vale do Rio Bom Jesus* (04° 04' 42" S e 39° 57' 08" W, 200 m asl), *Lagoa do Peixe* (03° 56' 28" S e 40° 23' 23" W, 97 m asl), *Fazenda Peixes* (04° 06' 03" S e 40° 32' 43" W, 114 m asl), *Fazenda Natividade* (04° 02' 50" S e 40° 29' 03" W, 109 m asl), *Fazenda Morro Alto* (02° 53' 42" S e 39° 54' 51" W, 16 m asl), *Fazenda Araticum* (03° 04' 58" S e 40° 09' 36" W, 19 m asl) and *Fazenda Experimental da UVA* (03° 37' 04" S 40° 18' 18" W, 200 m asl). The floristic list consists of 170 species, distributed between 127 genera and 50 families. Twenty seven Brazilian endemic species were identified, from which 8 are exclusive of the *Caatinga* biome. The *Fabaceae* was the most representative family, with the highest number of species (28),

followed by *Poaceae* (17), *Malvaceaea* (14), *Euphorbiaceae* (12), *Asteraceaea* (9), *Convolvulaceae* and *Rubiaceae* (9). The dominant life forms were therophytes (34%), phanerophytes (30%) and chamaephytes (18%). Two communities were identified as a result of the classification analysis using the Twinspan.

Keywords: Semiarid, riparian forest, riparian species, phytosociology.