POLLINATION ECOLOGY OF *ARROJADOA RHODANTHA* (GURK) BRITTON & ROSE (CACTACEAE) IN PETROLINA – PE, BRAZIL

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Arrojadoa rhodantha is native to Caatinga, occurring in the states of Minas Gerais, Bahia, Piauí and Pernambuco in Brazil. This work aimed to study the biology and floral visitors of this cactus in Petrolina, PE. The study was conducted in a hyperxerophilous caatinga area at Embrapa Semiarid, in 20 individuals of *A. rhodantha* where analyzed the morphology, anthesis and flower senescence, floral visitors and pollination system. Flower visitors were observed at intervals of one hour on non-consecutive days, totaling 35 hours of sampling effort. *A. rhodantha* has pink flowers, asepal, gamopetal, tubular, free stamina, with about 340 stamina, anthers with longitudinal dehiscence and stigma included, branched into nine parts. The anthesis occurs before 4:00 a.m. and the stigma is receptive from the button. The floral senescence begins at 10:30 and ends around 11:00. The lifespan of the flowers is approximately seven hours, which are visited by hummingbirds (*Clorostilbon aureoventris*, *Eupetomena macroura*, *Chrysolampis mosquitus*), bees (*Trigona spinipes*, *Friseomelitta doederleini*, Halictidae unidentified, *Plebeia* sp.), flies (Diptera not identified) and butterflies (*Agraulis vanillae*). The peak visitation occurred in the period from 07:00 a.m. to 08h00 a.m., however, the visits were not recorded between 4:00 a.m. and 05:00 a.m. According to the visiting behavior, *C. aureoventris*, *E. macroura* and *C. mosquitus* were considered effective pollinators because they tap the reproductive structures. *A. vanillae* was classified as occasional pollinator, since their visits are rare and the bees *T. spinipes*, *F. doederleini* and Halictidae were considered pollen thieves. As for the reproductive system, it was found that occurred the formation of fruits per pollination (40%) and in natural conditions (35%), demonstrating that *A. rhodantha* is a self-incompatible species, pollinated primarily by hummingbirds.