

Project Update: September 2020

To date, we are monitoring reproductive phenology and fruit visitors through focal observations and camera traps, and conducting germination experiments. Data collection has been conducted, specially for *Melocactus lanssensianus*, which presented continuous fruiting in the last 2 months. We have record that *M. lanssensianus* produce cleistogamic flowers, which are remained inside the cephalium. This is a rare condition among *Melocactus* spp. [1]. Also, we collect fruits from 10 cacti species both in the field and the Cactarium. The seeds were removed and subjected to asepsis conditions. After such procedure, seeds were stored in the recently created Seed Collection of Brazilian Semiárid Cacti, according specialised methodology already described in the literature. In partnership with INSA and FINEP we are developing the memory cards game (Jogo da Memória Cactos do Semiárido). This memory cards game gathers information about 18 cacti species that occur in the Caatinga (Brazilian Semiárid region), including the columnar cactus *Pilosocereus chrysostele* (Near threatened) and the globose cactus *Melocactus lanssensianus* (Endangered). Through this game we aim to address ecological aspects and biodiversity conservation, stimulating in children and young people the conservation importance of plant species and associated fauna (e.g. pollinators, seed dispersers). The figures below show some steps of the work.



Figure 1. Study area – Morro do Pão de Açúcar, Tacima municipality, Paraíba state. Phenological monitoring in individuals of *Melocactus lanssensianus* (August/ 2020), through direct count of fruits. These photos are mine. I agree to post on Rufford's website.

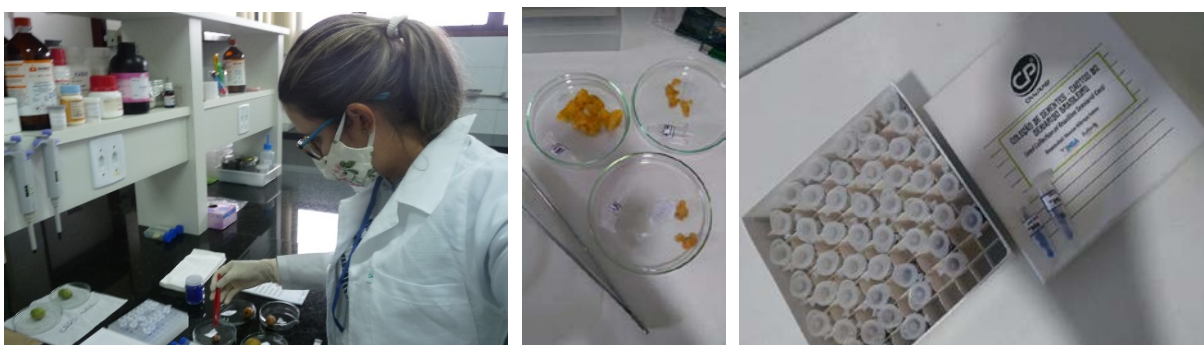


Figure 2. Implementation of Seed Collection of Brazilian Semiárid Cacti (*Coleção de Sementes - Cactos do Semiárido Brasileiro*).

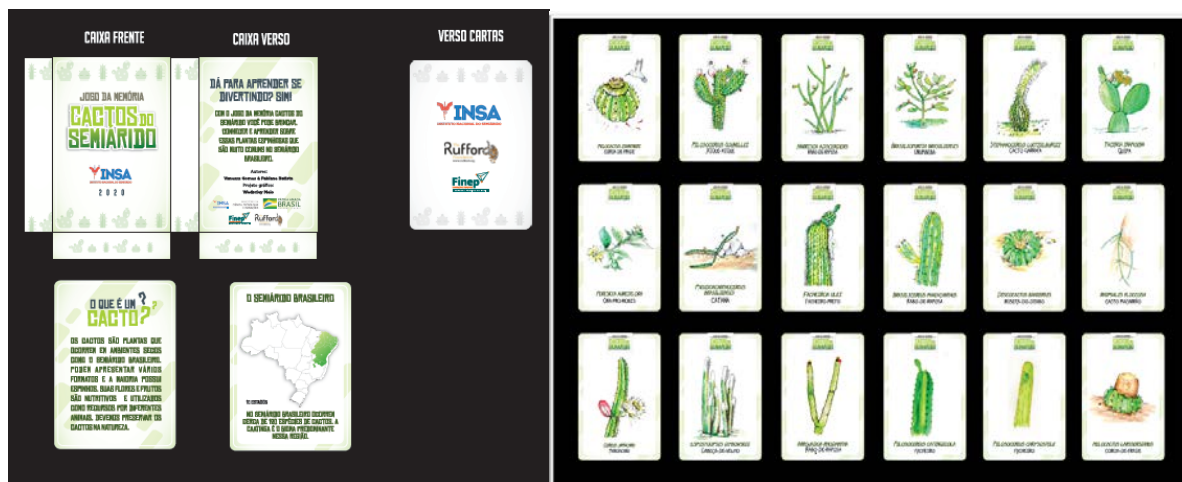


Figure 3. Draft of the memory cards game (*Jogo da memória Cactos do Semiárido*).

Reference

[1] Taylor NP & Zappi DC (2004) Cacti of Eastern Brazil. Royal Botanic Gardens, Kew, London. 511p. (Pp 366-367)