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WHAT'S HAPPENING, UMBUZEIRO? HOW LAND USE INFLUENCE THE NATURAL REGENERATION OF *SPONDIAS TUBEROSA* ARR. (ANACARDIACEAE)

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Spondias tuberosa Arr. is an endemic fruit-bearing tree of the Brazilian semiarid region with great socioeconomic and environmental importance. However, there is a lack of seedling recruitment in their natural environment, which has been attributed to seed predation, the low seed germination and establishment, and the irregularity of rainfall in the region. Furthermore, land use change and overexploitation have been hypothesized to cause a risk of extinction in this species. In this study, we aimed to assess the population structure and the natural regeneration of *S. tuberosa* in Caatinga areas with different land use as well as its influence on emergence of seedlings in greenhouse. We selected individuals in three municipalities in Northeast of Brazil and classified the land use surrounding each tree in agricultural area, degraded caatinga and preserved caatinga. From each tree, we measured the stem diameter, counted seedlings and collected fruits. At the laboratory, we manually unpulped the fruits to obtain the seeds. The seeds were measured and then placed in trays containing vermiculite in greenhouse, following by periodic observation of emergence of seedlings. We found seedlings in all land use options but a great number was found in agricultural areas, probably due abundance of water and absence of wild or domesticated animals in these areas. In all land uses, there is a lack of young individuals, evidencing no natural regeneration. Seeds from agricultural areas were bigger and, consequently, the seedlings have biometry parameters higher than in others land use options. These results show that somehow the species depends on human action to its regeneration. Therefore, we reinforce the importance of cooperation between researchers and local people to develop strategies for *S. tuberosa*'s conservation.

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