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Population structure and allometric assessment of
Umbuzeiro (*Spondias tuberosa* Arruda) in Pernambuco,
Brasil

Bachelor Thesis
by

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ABSTRACT

Population structure and allometric assessment of Umbuzeiro (Spondias tuberosa Arruda) in Pernambuco, Brazil

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Umbuzeiro (Spondias tuberosa Arruda) is an endemic plum tree of northeast Brazil. Its fruit enables additional incomes for smallholders and directly contributes to human and animal diet, wherefore S. tuberosa has a high status for rural population. Despite its ecological and economic value, few attempts have been done in cultivating Umbuzeiro and fruits are mainly collected in nature. On top of that, recent studies report of an insufficient natural regeneration of S. tuberosa in the past decades and concerns of a possible extinction have been rising. Meanwhile, several threats have already been identified and factors like grazing have been discussed. The objective of this study was to assess and compare abundance, allometry and seed infestation of S. tuberosa on a grazed and an undisturbed area. Therefore, Umbuzeiros were measured in abundance and allometry. Tree cores were taken for age determination, seed infestation was determined and vegetation was analysed in order to conclude on the grazing intensity. The areas revealed differences in vegetation and coverage ratios and Umbuzeiros distinguished in abundance, habits and wood features. In both areas, seed infestation was 100% and there was no Umbuzeiro found that could be considered as young. Exact age determination failed because of tree habits and indistinct, irregular or absent growth rings in the wood.

UMBUZEIRO, SPONDIAS TUBEROUSA, GRAZING, POPULATION STRUCTURE, SEED INFESTATION, AGE DETERMINATION