ASPECTS OF THE BIOLOGICAL INVASION OF *NICOTIANA GLAUCA* GRAHAM (SOLANACEAE) IN THE BRAZILIAN SEMI-ARID[1]

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Abstract

The species *Nicotiana glauca* Graham is originally found in Argentina and Bolivia, however it is spontaneously distributed in different regions of the globe, especially those dominated by dry forests. The studied area is located in the Eastern Axis of the Project of Integration of the São Francisco River with the Hydrographic Basins of the Northern Northeast (PISF), in the Municipality of de Custódia, PE (8º7'38.5" S and 37º26"54.3" W, 512 m de alt.). The site was intensely modified for the construction of a 180-meter long canal, about two years ago. The vegetal suppression area of the canal has about 200 m and is mono-dominated by *N. glauca* along its entire extension. The population structure was evaluated through the parcels system. The numbers of fruit per plant and seeds per fruit were also counted, and the propagules' germinability was evaluated. The density estimated for *N. glauca* was 37,280 individuals/ha. The average diameter of the caulis at soil level and the average height of the population were 1.08±1.01 cm and 0.73±0.89 m respectively. The average number of fruit/plant was 2,120.9±939.6, and the average number of seeds/fruit was 643.9±49.9. The germination percentage was 95%. *N. glauca* presented elevated abundance in the study area, much higher than the one found for the autochthon species of Brazilian dry forests. Part of this reproductive success was probably due to the expressive amount of fruit and seeds produced by the species, associated to high germination rates. The ecological characteristics observed for *N. glauca* favour recruiting in intensely degraded areas, which makes other areas in the region susceptible to the invasion of the species.

KEYWORDS: Semi-arid, biological invasion, degradation

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