Editor's Comment:

Please find bellow my comments:

- Table 2: The observation that 53.1 is not statistically different from 2.5 (the same for 47.6 vs. 4.7, 34.8 vs. 1.5 and 33.1 vs. 1.3, etc) after ANOVA test is surprising. I ask the authors for an explanation (standard deviation?). In this scenario, is this data useful to explain the biological question addressed?

- Table 3: It seems that ANOVA was performed to disclose differences between M. tenuiflora and P. pyramidalis in each date. This comparison doesn't seem relevant. It is expected that different species have different morphology and growth dynamics and such differences are not related with the ecological problem under study. Please explain the rationale.

Author's Feedback:

Sorry for not writing our ideas clearly. Please, feel free to further questioning our feedback.

1. Regarding data in Table 2, please, see the correction at the end of the fourth paragraph in the Material and Methods section, and the second paragraph of the Results and Discussion section.

Now, these paragraphs are as follow, respectively:

> "Experiment one evaluated the effects of two levels (absence and presence) of cattle ma-nure and two levels (absence and presence) of joint seeding of four native trees (Mimosa tenuiflora, Poincianela pyramidalis, Anadenanthera macrocarpa and Tabebuia aurea) on tree seedling establishment (natural or that resulting from joint seeding of the four native trees), based on percentage of seed germination and seedling survival with two replicates, accord-ing to a randomised completely blocked design in 2x2 factorial and in five blocks (10 treatment groups) in an area protected from grazing. The 0.5m2 square plots were subdivid-ed in time (May 6, July 15 and, November 18 2006, March 18 2007 and March 22 2008) and data were collected in the 0.25 m2 inner area of each plot. There were six other blocks (i.e.: treatment groups) located in an adjacent grazed area, in which the 2x2 factorial design is also employed with the date introduced as a sub-plot similarly randomised respectively. Data sets (total number of seedlings) from the grazed and non-grazed plots were analysed independently, and no formal comparisons were made, but their differences stricken.",

> And

> "No effect of manure addition was detected on tree seedling emergence or persistence in seeded plots, whether grazing was allowed or not. Under both grazing conditions, seeds of the four native trees germinated in all plots in which seeds were sown, but the mean total number of tree seedling decreased from May to November 2006 (Table 2). Tabebuia aurea was characterised by its relatively high initial number of germinated seeds (half or more of the observed tree seedlings per plot), although the number of its seeds sown per plot was a quarter of M. tenuiflora's. Mimosa tenuiflora strategy was unique because some of its seeds were left to germinate in the moist season of the following year, while no seed of the other three tree species remained in the soil or showed to be able to germinate after the first few months they were sown. This all-in-one-event strategy was already reported for T. aurea by

[13]. The soft tegument of the seeds of this species certainly explains this all-in-one-event strategy, as well as that observed for P. pyramidalis and A. macrocarpa, while that of parceling germination in two or more years, now observed for Mimosa tenuiflora, characterises legume species with seeds with hard tegument, and results in longer persistence of propagules in seed bank [14]."

Then, we think that data in Table 2 are now more understandable than before: comparisons were made between the mean total number of seedlings 53.1 and 47.6 in May 2006 when no sheep and goat grazing was allowed, and both are accompanied by an 'a', indicating no statistical difference between them.

We explained this pattern in the "**" footnote of that table. We corrected it, and now "**" footnote is as follow:

"**Means of the total number of seedlings in the same column and corresponding to the manure levels in the "No sheep and goat grazing" level, followed by the same letter, do not differ by the ANOVA F test (P>5%). The same is true for the other grazing level.

2. Considerations on the rationale of growth comparisons between species

Which species shows to grow higher and with a better developed canopy so that the established seedling can protect the soil from direct sun radiation and from wind and water erosion? Also, a thick 'stump' means that a young tree may successfully thrive in harsh environments conditions.

On the other hand, some authors consider that a low growth rate should be advantageous to the establishment of P. pyramidalis seedlings. However, this did not show sufficiently advantageous to guarantee the establishment of its seedlings in degraded Caatinga sites, as it was briefly highlighted in the manuscript.