Review bg-2015-358 Second

This article present results which seems interesting but its general organization make it difficult to appreciate. It seems to be a study with a high potential but it cannot be presented as it is now. I suggest major revisions before acceptance in BG.

You remove one question from the introduction but you are still discussing it. I think the ecological interpretation of your result is interesting but should be made with more detail or should be removed completely (as you seem to decide in the introduction).

When answering the first question in the discussion (assessing "the potential of VEGNET and HPs to detect the vertical structure of forest stands at different successional stages") you say : "This finding in fact is not new, and it has been demonstrated previously in the literature for other TDFs across the Americas including the SRNP-EMSS". You should then change your question or precise it is just a confirmation. You can also consider removing the first question in the introduction and keep only the second one.

I think you should add at the end of the introduction a question on the ecological significance of your results. You show some interesting changes of structure in the forest due to liana presence and it should be discuss with more details. Then I think it should also be announced in the introduction. You present the article as a methodological one while interesting ecological interpretation might be made out of it.

Results should be reorganize according to the questions of the introduction

The discussion is too superficial.

Point(4) of the conclusion is not needed.

Line 48- 50 I don't understand the transition. First info might not be interesting or should be explained in more detail.

Line 49 Cite (Phillips *et al.* 2005)

 Line50 to 65 consider reorganizing to get a more relevant introduction

Line 63 don't understand the (?)

Line 90 Cite (Ledo *et al.* 2016)

Line 95 Lefsky TLS ?

Line 101 really biomass distribution ?

Line 105 hemispherical photographs instead of the first HPs

Line 163 repetition

Line 189 "more later" is not English

Line 190-192 I don't really understand

Line 195 over total number of stem

Line 203 you can remove "we used 11 E plots and 17 I plots, with 12 of those 203 plots being LL and the other 16 plots being HL. Altogether,"

Line 302-305 precise the angle from the vertical taken into account in the ring 4 OF THE Gap Light analyzer

Line 357 (Table1) makes no sense here.

Line 368 (Table2) makes no sense here.

Line 360 – 362 "In terms of the effect of the liana abundance, the univariate analysis suggests that plots with LL showed lower values of L/TBA in comparison with HL plots. » Isn't it circular?
 I thought liana load was determined by L abundance and then L/TBA was necessarily hight in HL plot than in LL plots by definition.

Line 410-412 Unclear, do you suggest to use the strength of the correlation between Hmas and TBA to distinguish between plot rich and poor in liana respectively? Is that true only for intermediate stage of succession?

Line 444-447 Reformulate: "lianas deploy leaves in the canopy and create large amounts of tangles in both the ground and mid canopy, in order to reduce the amount of light available as well as the amount of incoming solar radiation available for photosynthesis for other plant species".
Stated like that it seems wrong or at least highly over-interpreted. There is no evidence of intention in tangle constitution by lianas… Moreover liana leaves deployment is probably linked with their role in energy supply for the liana itself.

Line 456-459 The sentence is not precise enough. You should mention which parameters were useful and why. Hypotheses on why the other parameters did not provide relevant information may also be interesting.

Line 465 "It is surprising that we did not find differences in the PAI values between stands that did and did not have" I don't understand the sentence.

Table 1 Stem density should be mentioned with unity (stem/ha ?),

The two interesting result here are the interactions between liana abundance (condition if I well understood) and stage for TBA and DBH.

The lower TBA and DBH at intermediate stage with HL make me think of the condition of an earlier succession. It could be interpreted using results from Schnitzer et al (2000,2010,2011), van der Heijden et al (2013), Tymen et al (2016).

The higher TBA in early HL plots may come from a higher stem density, thic could also be discussed more deeply.

Table 2

High Liana abundance reduces canopy openness and increase LAI without direct relation on PAI. How canopy openness can be reduce without increasing PAI?

PAI and PAVD decrease with succession in LL plots, that is very strange, it has to be discussed

Cx variation should be interpreted.

Figure 1

Nice figure!

Figure 2

The values of the first eigenvalues could be mentioned somewhere. Why did you choose to take two?