I was happy to read the manuscript entitled “Native pioneer trees can be important phorophytes: Their control for biodiversity conservation on an oceanic island also harms native epiphytes and lianas” (peerj-119098) submitted to PeerJ. This manuscript presents a valuable dataset on epiphyte and liana communities associated with a single pioneer tree species, which serves as a model. Comprehensive datasets on epiphytes and lianas remain rare, especially those that focus on well-defined host trees. Moreover, this was a fluid and easy-to-read manuscript, with clear study proposals, development, and conclusions, and the authors deserve merit for that. However, I have some minor concerns and suggestions for some points in the text, which can be found below:

Major comments:

1. My major concern is regarding the inclusion of a linear regression model in the manuscript. While the study presents important descriptive and qualitative insights into the richness and diversity of epiphytes and lianas associated with native phorophytes, I believe the manuscript would benefit significantly from the inclusion of a more quantitative analytical approach. Specifically, I suggest that the authors explore the use of linear regression models to examine the relationships between richness and diversity metrics (as response variables) and tree characteristics, such as tree size and age (as predictors) This approach would provide a more rigorous test of the influence of host trees (i.e., phorophyte) traits on epiphyte and liana communities and offer a clearer understanding of the strength and direction of these associations. Including such analyses would also enhance the analytical depth of the study and enable more robust interpretations of the patterns observed in the field. In addition, probably there is a hierarchical structure in the data (e.g., trees sampled in Brise Fer and Mount Camizard locations), so the authors might also consider using linear mixed-effects models to account for potential non-independence among samples, using location as a random effect.

Specific comments:

2. Line 124: “parallel host specificity”. I miss the definition of this concept, and I recommend that the authors define that
3. Lines 172 – 173: “In all, 219 woody plants were sampled, including 73 trees of each category.”. Is this the number of sampling units in the analysis?
4. Lines 209 – 212: Good statement here
5. Lines 2019 – 220: “In all, 81% (1,805 of 2,229 individuals) of all epiphytes and lianas observed…” Observed in how many trees? Authors should also provide the number of evaluated trees once that they represent the sampling units of the study
6. Line 231: “The final dataset used for analysis included the respective taxa classified as morphospecies”. Authors could inform here the total number of epiphytes evaluated (it’s 2229 individuals, right?) and the number of studied trees (phorophytes)
7. Lines 233 – 243: I suggest that the authors consider performing linear regression models using richness and diversity metrics of epiphytes and lianas as response variables, and tree size and age as predictors. This type of analysis could provide valuable quantitative insights into how tree characteristics influence epiphytes and lianas communities. Including such models could enhance the robustness of the analytical framework and clarify the strength and direction of these relationships
8. Line 259: “Epiphyte or liana were observed on 116 of 219 (53%) sampled potential phorophytes”. I think that this information should appear earlier in the manuscript, once they represent the number of studied phorophytes (i.e., they are the sampling units of the study)
9. Figure 4, 5 and 6: Please provide panels a) and b) for Brise Fer and Mount Camizard locations to enhance data representation
10. Table 2: All tests were significant, this is right? If yes, authors could provide a statement in the text claiming it
11. Lines 314 – 315: “Our study also aligns with previous findings that tree age and sizes strongly influence phorophytic function”. Good statement here, but this could be examined properly using a linear regression
12. Lines 363 – 368: Excellent statement!
13. Lines 417 – 418: “…where epiphytes and lianas remain a particularly diverse and also largely overlooked component of native plant diversity…”. This is true

and may be a general pattern regarding epiphyte communities, once they remain understudied in most ecosystems worldwide, despite their significant ecological roles and high diversity (e.g., see Silva et al., 2025 which examined epiphyllous bryophytes within the Brazilian Atlantic Forest). I encourage the authors to further highlight the novelty and relevance of their focus on epiphytes and lianas within this broader research context. Please see:

Silva et al., 2025. Diversity patterns and knowledge gaps of Atlantic Forest epiphyllous bryophytes: a highly neglected group. Annals of Botany, 135, 1047–1058. https://doi.org/10.1093/aob/mcaf007

I am available if the authors want to clarify any doubts

Best regards,

Jean M. Freitag Kramer