Assessment of master thesis " Reproductive strategies of flowering plants in Afromontane grasslands along an elevational gradient on Mount Cameroon" by Dominik Anýž.

The aim of the thesis was to assess reproduction strategies and pollen limitation of ten zoogamous plant species at three elevations in montane grasslands on Mount Cameroon and test the effect of elevation on the selfing rate. Due to combination of failures in the experiment and the Covid pandemic, the comparison among elevations could be performed only in 4 species. The study is mostly well executed, the data are analyzed in a simple way (appropriate for the chaotic dataset) and written. The text suffers from small technical issues such as sometimes having first names on some references in the text, switching between I and we in the text and few incomplete sentences plus some strange phrases. Overall the text is however clear. Other comments are provided below and require an answer from the student.

Overall the thesis fulfilled the aims and demonstrated the ability of Dominik to plan, perform, analyze and present research.

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Comments with questions

Introduction is mostly well written. The only problem is the last paragraph – the reasons for the study are not well justified. Why it is so interesting to do this in Africa – how is it different from other regions? **Please explain.**

The text also states that The reason for this (selfing being an "evolutionary dead end") is lack of genetic diversity (among other things) – what are the other things? **Please explain.**

The methods of execution are not fully clear. Most importantly, the text says that "to ensure having as many replicates per plant as possible. For each plant species, we aimed to test no less than 40 replicates" – the first sentence talks about replicates at the level of within individuals. Is this what you see as 40 replicates in the second sentence? – I would rather want to see individual plants as replicates. **Can you comment on the real strategy of replicating the study and the possible consequences of this decision for the results?**

Plants from outcrossing were selected at least 100 m far away – this is probably further than most pollinators usually fly. **What are the implications of this for comparison of outcrossing and control. Discuss.**

Data analyses states that "values contained integers which the individual species ratios produced" – ratios are for sure not integer numbers.

The plan of the study was to sample some elevations in one year and some other in the second year and compare the patterns among the elevations. I do not think this is a good strategy, as the results of the study may be year specific. **What is known on such a year specificity from the literature and why this could be the case?**

In the discussion, you say that Hypericum plants did not produce any seeds in 4000 m. You suggest that the plants dispersed there from lower elevations, but discuss possibility of such a dispersal in Asteracerae and by endozoochory. This does not apply to Hypericum. **Do you have any suggestions on dispersal ability in Hypericum?**